## FIELD CHANGE IDENTIFICATION GUIDE

## 3-1 POLICY

a. The Naval Ship's Technical Manual, Chapter 400, which establishes the policy for alterations and modifications to electronic equipment, defines alterations as any change in design, material, number, location, or relationship of the component parts of an assembly regardless of whether it is undertaken separately from, incident to, or in conjunction with, repairs.
b. Field changes to electronic equipments are developed for the purpose of improving the equipments performance, operational characteristics, or maintenance features; or correcting safety deficiencies. Field Changes are approved only after determining that the effort and cost involved is warranted by the improved results achieved. Recommendations for field changes may originate from any of several sources including the Fleet, naval shipyards, contractors, project managers, and equipment project engineers. Regardless of the manner in which field changes are initiated, final approval is given by the responsible Systems Command after coordination with other Commands and project managers, as appropriate.
c. Field changes are the means by which approved and authorized alterations or modifications are made to electronic equipments. These changes are mandatory and shall be accomplished on equipment affected in accordance with instructions contained in the field change bulletin.

## 3-2 OBJECTIVE

a. The objective of this guide is to provide a current list of electronic equipment field changes under the technical control of the Naval Sea Systems Command and the Naval Electronics Systems Command. It includes information which enables technical personnel to determine the applicability and accomplishment status of field changes.
b. This guide does not indicate availability of either the field change or technical manual correction material within the supply system.
c. The availability of publication material regarding field changes, can be ascertained by referring to "NAVY STOCK LIST of FORMS and PUBLICATIONS", NAVSUP Publication 2002.
d. In similar manner, kit availability can be ascertained from the Navy Management Data List (NMDL) published by Department of Defense.

## 3-3 DEFINITIONS

a. Field Change - an authorized modification or alteration made to Navy electronic equipment.
b. Field Change Kit - consists of a publication package and may or may not include parts.
c. Field Change Bulletin - a publication which provides a list of the material supplied and/or required step-by-step instructions to accomplish a field change, and instructions for recording and reporting its accomplishment.
d. Interim Change - a temporary correction to a technical manual or other publications, normally consisting of published instructions for making minor pen-and-ink corrections, but may also include insert pages and artwork. Interim changes in this guide are identified by the letter "T", followed by a dash (-) and the assigned change numbers and publication number; for example, T-2 NS0967-LP-035-0012. (NS indicates NAVSEA cog number and NE indicates NAVELEX cog number.)
e. Permanent Change - a revision for permanent incorporation into a technical manual or other publication. It supersedes and incorporates interim changes which have not been previously covered by a permanent change. Perma-
nent changes in this guide are identified by the letters CH (or Chg.) followed by a dash and the assigned number and publication number; for example, $\mathrm{CH}-3$ NSO967-LP-042-0073 or Chg. 3 NS0967-LP-042-00i3.
f. Publications Material - the instruction] information required to accon:plish a field change and the data required to correct applicable manuals, drawings, charts, and other equipment systems publications.
g. Publications Package - a collection of publications material in a single cover or envelope.

## 3-4 FIELD CHANGE TYPES AND CLASSIFICATION

Field changes are identified by number and applicable equipment designation. They are classified by type and class designations which appear in the main body of the field change bulletin.
a. Types of Field Changes. Field changes are designated as Type I, Type II, Type III, or Type IV. The type designation affords an abbreviated method of indicating material and publication matter contained.in a field change kit. It is not intended that Planned Maintenance System (PMS) documentation be included as part of the Publications material or publications package. If corrections are needed, updated PMS, identified to the appropriate field change, will be provided directly to the ship for use and incorporation as part of the ship's authorized PMS package. PMS documentation will be updated and distributed in accordance with OPNAVINST 4790.4.
(1) A Type I Field Change Kit consists of a publications package, containing field change bulletins, publications correction material and all parts, material, and special tools required to accomplish the change to one equipment and to revise existing equipment nameplates, publications, and charts.
(2) A Type II Field Change Kit consists of only the publication
material required to accomplish the field change to the equipment(s) and to revise the existing equipment publication and charts. The Type II field change information may be in the form of a publications package or may be promulgated by means of a published article. Type II field changes may require that parts le requisitioned from stock.
(3) A Type III Field Change Kit consists of a publication package, containing field change bulletins and publications correction material, and only a portion of the parts, materials, and special tools required to accomplish the field change to one equipment and to revise existing nameplates, publications, and charts.
(4) A Type IV Field Change Kit consists of only the publications material required to accomplish the field change to the equipment(s) and to revise existing equipment publications and charts. The Type IV field change information will be in the form of a publications package, but may be promulgated in advance by means of a published article. Type IV field changes do not require the use of parts, materials, or special tools.
b. Classes of Field Changes. There are three class designations (A, B, and C) for field changes, one of which is assigned to each field change kit. They provide an abbreviated method of indicating the funding and installation re-sponsibility.
(1) A Class A field change is approved for forces afloat or station personnel accomplishment; no installation funding is required.

## NOTE

Approval of Class A field changes for forces afloat accomplishment indicates only that the work content is within their technical capability. The Class A designation applied to certain field changes does not constitute installation authorization, nor limit
accomplisiment to forces afloat; authorization and level of accomplishment are considered to be a forces afloat prerogative. On this basis, no NAVSEA installation funding (for industrial assistance in accomplishing Class A changes) is provided or budgeted.
(2) A Class $B$ field change requires Fleet installation funding. Changes to shipboard equipment are approved for accomplishment by Naval Shipyards, tenders or repair facilities under conditions stated in the field change bulletin, when authorized by type commanders. Changes to NAVSEA-cognizant technical training equipment at Navy training activities are approved for accomplishment and funded for installation by the Chief of Naval Education and Training.

## NOTE

Except for Class B Field changes presently under procurement, in the supply system, or in Fleet installation planning stage, this type of field change will no longer be issued.
(3) A Class C field change normally requires industrial assistance for installation, and requires the appropriate Systems Comonand installation funding. This class of field change includes, but is not limited to, changes of an operational improvement nature which are to be authorized and accomplished by SHIPALT in the Fleet Modernization Plan. Changes to NAVSEA-cognizant technical training equipment at Navy training activities are approved for accomplishment and funded for installation by cognizant Navy Program/ Project/Ship Logistic Managers.

## 3-5 INSTRUCTIONS REGARDING ACCOMPLISHMENT

a. Accomplishment of applicable field changes is essential to the proper functioning, identity, and logistic support of electronics equipment.
b. Record of Accomplishment: Personnel accomplishing a field change shall record its completion by stamping (or imprinting) the number of this field change on the Field Changes Accomplished Plate (COG I S/N 0264-LP-085-000). If the Record of Field Changes Card, NAVSEA 537 (COG I S/N 0105-LF-601-0000), is used, record the accomplishment of this field change on the card in addition to stamping (or imprinting) the field change numb ber on the Field Changes Accomplished Plate.
c. Report of Accomplishment (Shipboard Equipment): Personnel accomplishing a field change shall report its completion by completing a copy of the Ship's Maintenance Action Forms (2-Kilo), OPNAV $4790 / 2 \mathrm{~K}$, in accordance with Volume 2 of the Ship's 3-M Manual, OPNAVINST 4790.4.
d. Report of Accomplishment (ShoreBased Equipment: Personnel accomplishing a field change shall report its completion in accordance with the $3-\mathrm{M}$ Manual for the Naval Security Group (NAVSECGRUINST 4790.4); the 3-M Manual for Shore Naval Communications (COMNAVTELCOMINST 4790.1A); or as otherwise directed in the Field Change Bulletin.

## 3-6 USE OF THE GUiDE

a. Equipment designations are arranged alphanumerically. Periodically, the FCIG will be updated by the issuing of revised pages.
b. Field change data is arranged in the guide in the following manner:
(1) Field Change Number,
(2) Field Change Title,
(3) Correction Material - interim changes, permanent changes, and revisions to existing equipment publications, supplementary publications, and new publications.
(4) Field Change Type and Class (e.g. 1-A means Type 1, Class A).
(5) Modifying Activity - dependent upon type and class: "FA" indicates that the change is authorized for accomplishment at the organizational level, or higher (i.e.), Intermediate or Depot leve1); "YF" indicates that the change is authorized for accomplishment only at the Intermediate or Depoi level, depending on the specific terms as specified in the Field Change Bulletin. The number following the "FA" or "YF" is the estimated manhours needed to accomplish the change.
(6) Field Change Bulletin Publication Stock Number.
(7) National Stock Number assigned to a particular field change kit. NSN's ending with C and Cl-C4 have been cancelled. "None" indicates Type l field change not converted to NSN, or Type 2 not requiring NSN. (NSN's are not currently being entered into the FCIC.)
(8) Equipment Identification Code (EIC) - used in newer inserts as a means to functionally identify systems and subassemblies.
(9) Current data entered into the FCIG in place of both the NSN and EIC is the date status of the Field Change Bulletin. "Prelim" indicates that the Field Change Bulletin is in its preliminary (or draft) status. A numeric month-year date (e.g., 08-77 is August 1977) indicates that the Field Change Bulletin is final and stocked with that issue date.
(10) Serial - numbers or applicable conditions of specific equipments affected by a particular field change.
(11) Identity - information applicable to each field change for use in determining its accomplishment.

## 3-7 ABBREVIATIONS

a. Except for those listed below, the abbreviations used in this FCIG were taken from Military Standard Abbrevia-
tions for Use on Drawings, Specifications, Standards and in Technical Documents MIL-STD-12.

CH Permanent Change to Technical Manual
EIB Electronics Information Bulletin
EIC Equipment Identification Code
FA Forces Afloat
FC Field Change
FCB Field Change Bulletin
NS NAVSEA
NE NAVELEX
T Interim Change
YF Yard Forces
() Series

## 3-8 CORRECTIONS

A. Recommendations for correction of errors and the addition of pertinent information to this guide should be reported to the Technical Data and Publications Section (SEC 6181C), Naval Ship Engineering Center, via Comment Sheet or other suitable correspondence. Include in the correspondence:
(1) Designation of affecteri
equipment.
(2) Location of error by page and line.
(3) Description of error and indication of what correction should be made.

1-18 PERISCOPE: Replace Patching Diagram Plate on Cover of Unit 10.

Correction Material: Chg. I did 2 Aug 78 to TM, NS0924-LP-062-3010 did 1 Sep 76; and Chg. I did 2 Aug 78 to TM, NS0924-LP-062-3060 did I Sep 76.

1-A FA. I NS0924-LP-062-3120* EIC LEOG,
LEOJ
SERIAL: Type 18B and Type 18D Periscopes, all serial numbers.
IDENTITY: On the front cover of the Patch Panel (Unit 10), verify that the plate shows one patching diagram. The original plate contained four patching diagrams.
NOTES: *ACN I/l in EIB 006 applies.
1-23211: Provision for Variable Muting for Associated Loudspeakers and Handset

Correction Material: None
A FA.I NS98354 2N5820-311-
SERIAL: All
IDENTITY: R-209, a variable 5000 ohm, 2 watt pot, is mounted behind front panel.

1-23211.A: Same as 1.23211
1-23211-B: Same as 1-23211

1-23496: Elimination of Audio Feedback
Correction Material: T+1 to NS95006
A FA-I NS98928 None
SERIAL: All
IDENTITY: Presence of R-405 and filing of trailing edge of impulse cam.

1-23497: Addition of Wiring of Power to Antenna Coupler CU-255/UR

Correction Material: T-1 to NS900,777
B FA-1 NS98322 None
SERIAL: All
1DENTITY: Connect white and red wire between pin $\mathbf{D}$ of J. 101 and term 19 of term board E-101, and white and black wire between pin $F$ and term 18 reviewed from rear of unit.

## 1-23500: Cancelled

2-23500: Elimination of Audio Feedback.
Correction Material: T-2 TO NS95393
A FA.I NS98857
SERIAL: All
IDENTITY: Presence of R-205 and K-202.
1-AM-215/U: Installation of Tube Retaining Clips Correction Material: T-1 to NS900,995
A FA.1.5 NS98163 F5895-311.
SERIAL: All open bridges
IDENTITY: All installed on open bridges and pilot houses.
2-AM-215/U: Removal of Station Selector Switch Electrically
YF-1 NS98759
None

SERIAL: Channel selector switch does not function
1-AM-215A/U: Same as 2-AM-215/U
1-AM-215B/U: Same as 2-AM-215/U

1-AM-413/G: Replacement of 5Y3 Rectifier Tube VI07 With Solid State Rectifiers Type iN561 Correction Matesial: T-1 to NS0967-151-4013
2-A YF-2 NS0967-151-4020
None
SERIAL: All (Shore)
IDENTITY: Loosen the two fasteners on front panel of amplifier and allow front panel to swing open on its hinges. Observe that the 5 Y 3 rectifier tube socket XV-107 has been removed. Two solid state rectifiers can be seen mounted on (4) terminal studs secured to a 2 -inch by $1-3 / 4$ inch by $1 / 16$ inch aluminum plate covers, the chassis hole previously oocupied by rectifier tube socke! XV-107.

1-AM.413A/G: Same as I-AM.413/G
1-AM-413B/G: Same as I-AM-413/G
1-AM.413C/G: Same as 1-AM-413/G
1-AM-413D/G: Same as 1-AM-413/G
1-AM-420/U: Overload Protection, Provide 2-A FA-0.5

None
SERIAL: All
IDENTITY: 6 amp line fuses F103 and F104 replaced with 2 amp fuses.

2-AM-420/U: Replacement of Capacitor C-123
Cosrection Material: T-3 to NS91517
2-A FA.C.5 NS981235
None
SERIAL: All
IDENTITY: Absence of capaciter C.123, replace by two 300
Kohm capacitors.
1-AM-421/U: Same as I-AM-420/U
1-AM-1365/URT: Improvement of Operation Correction Material: T-1 to NS93563 2-A FA-0.5 NS981330 None
SERIAL: 1 through 306, except 303
1-AM-2123A(V)/U: Lowering of 5 MHz Output Levels Correction Material: T- to NS0967-225-9010 II-A FA-2 EIB 907

EIC QR0F000
IDENTITY: This field change may be identified by the presence of an 8.2 k resistor as the value of A 1 A 6 R 1 in each 5 MHz power amplifier ( $\mathrm{P} / \mathrm{N}$ C5141-987) module.

1-AM-2289/FSA-17: Installation of Mounting Bracket for Connectors J1 and J2

Correction Material: None
1.A FA-1.5 NSO967-153-2010

None
SERIAL: 1-36
IDENTITY: Markings on the cabinet near the 50 pin connec-
tors should be Jl and J2, markings on the chassis should be Pl and P2.

## 1-AM-2505/URA-31: Pending

1-AM-2865/SYA-1(V): Pulse Amplifier - Incorporation of Factory Field Bulletin and Unit Field Change

Correction Material: Incorporated in Technical Manual
2-A FA-1 NS0967-950-0020 None SERIAL: All
IDENTITY: Fietd change number stamped on the Field Change Accomplished plate.

1-AM-3377/SYA-4(V): Pulse Amplifier; Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: None
2-A NA NS0967-950-0020 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-AM-3377/SYA-4(V): Wiring Change in -15 VDC Power Control Relay

Correction Material: None
2-A FA-2 NS0967-950.0020 None
SERIAL: A1 thru A20
IDENTITY: Change number stamped on the Field Change Accomplished plate.

3-AM-3377/SYA-4(V): Improve Thumb Screw Retaining Hardware

Correction Material: None
2-A FA. 1 NS0967-950-0020 None
SERIAL: A! thru A8 and A 10
IDENTITY: Field change number stamped on the Field Change Accomplished plate.

4-AM-3377/SYA-4(V): 28 V Wiring Sequence Improvement
Correction Material: T-1, NS0967-950-1013 to NS0967-9501010
2.A FA-1 NS0967-950-1030

SERIAL: All
IDENTITY: Presence of -28 volts at TP22 on the card in slot Jl04 with the card in slot J 105 removed.

5-AM-3377/SYA-4(V): Under Development (10-72)
6.AM.3377/SYA-4(V): TACS/TADS Hardware Change

Correction Material: T-2, NS0967-950-1014 to NS0967-950. 1010

1-A FA-3 NS0967-950-1050
EIC P80\$000
SERIAL: All serial numbers
IDENTITY: Remove the access panel above the A5 power control panel and disconnect connector A4-P10. Remove cards from Al.J83 and A2-J83 and check for continuity between A4-P10-79 and A1-J83-69, between A4-P10-80 and A2-J83-69, between A4-P10-67 and A1-J83-70, and between A4-P10-68 and A2-J83-70. If continuity exists between these four sets of points, this field change has been accomplished.

1-AM-3712/SRC-16: Same as 3-AN/SRC-16

2-AM-3712/SRC-16: Same as 12-AN/SRC-16(XN-1)
1-AM-3712A/SRC-16: Same as 12-AN/SRC-16(XN-1)
1-AM-3729/SR: Audio Amplifier; Reduction of Excessive Heating

Correction Material: T-1, NS0967-105-8011 to TM, NS0967-105-8010
2.A FA-0.5 NS0967-105-8030 None SERIAL: Equipments not modified at factory
IDENTITY: Noting the presence of a 15 -ohm resistor in. stalled in series with pin 4 of connector J 3.

## 1-AM-3799/SRC-23(V): Same as 12-AN/SRC-16(XN-1)

2-AM-3799/SRC-23(V): Incorporation of Factory Modification Bulletins

Correction Material: Included in Technical Manual
II-A FA-18 EIC QD6E000
SERIAL: All units built under contract NObsr 95244
IDENTITY: Refer to factory modifications $30,31,33,34,36$, 37, 38, 39, 41, 42, and 43.

1-AM.4385/UYA-1O(V): Same as 18-OA-7639/UYA-1(V) except
SERIAL: AI thru A5
1-AM-4469/UGA-4: Incorporate Slow Attack Time Capability (modifies equipment to AM-4469A/UGA-4(V))

Correction Material: Ch. 1, NS0967-053-2001 to NS0967. 053-2000

1-A FA-2 NS0967-053-2030
SERIAL: All equipment serial numbers
IDENTITY: The added printed circuit module located between R44 and R14 indicates accomplishment of this field change.

1-AM-4534/UYA-4(V): Incorporation of HAC Maintenance Bulletins as a Unit Field Change Correction Material: None 4-A FA NS0967-238-7340 EIC FU09000 SERIAL: Refer to table 1 of field change
IDENTITY: Observing field change number $I$ on Field Change Accomplished plate.

2-AM-4534/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: Delineated in the applicable maintenance bulletins

2-A FA.15.5 NS0967-238-7530 E1C P80D000
SERIAL: Serial numbers as shown in table 1 of field change IDENTITY: Observing field change number 2 on Field Change Accomplished plate.

3-AM-4534/UYA-4(V): Correct Timing of Unblanking Signal Correction Material: Incorporated in the Revised TM II-A FA-1.0 NS0967-562-6080

EIC QM06000 SERIAL: C-25, G1-G6, H1, 11-15 and 17
IDENTITY: This field change can be identified by using a card exsender and ohmmeter to check for zero ohms resistance between TP15 of the (i537645) P.C. card A16J24 and
pin 21 of the (1500381-100) P.C. card in A16J21. (Refer to the card location decal on the inside surface of the right hand front door for card locations.)

## 4-AM-4534/UYA-4V): LVPS Change

Correction Material: Included in revised technical manual 1-A FA-3 NS0967-238-7820
SERIAL: C25, G1 thru G6, H1, 11-110, K1, K2
IDENTITY: Remove Hyperion Power Supply, 390034 located in area 9 and area 10 of all unisc listed under Serjal, except the MOD Test Set TS-2460/UYA-4(V) which has the power supply located in area 12, and note the presence of C-27 a 68 ufd, 15 volt capacitor between pins 6 and 10 of J5.
NOTES: Field change bulletin did 23 Jan 73 supersedes field change bulletin did 14 Mar 72.

5-AM A534/UYA.4(V): Resistor Change to Isolator Logic Gate Card (1537552-100)

Correction Material: T-1, NS0967-238-7101 to NS0967-2387100

1-A FA-12 NS0967-238-7870 EIC QM06000
SERIAL: Serial numbers Al thru A4, Bl thru B3, BSCl, Cl thru C25, G1 thru G6, H1, 11 thru 110
IDENTITY: Verify the new value of R1, R29, and R57 on the isolator logic gate card 1537552-100. The new value of this resistor is 3.9 K . Location for this card in the equipment is areas A2, A3, A4, J9 or J22.

## 6.AM.4534/UYA-4V: TACS/TADS Hardware Changes

Correction Material: T-4, NS0967-238-7124 to NS0967-2387120

1-A FA. 40 NS0967-238-7990 EIC QM06000
SERIAL: All serial numbers
IDENTITY: Remove the 1537643-100 cards from A876 and Al6J20 of the central Pulse Amplifier/Symbol generator and inspect for incorporation of the card modifications indicated in step 4 of the procedure.

7-AM-4534/UYA-4(V): Capabitity to Generate Dashed Lines Correction Material: None
I-A FA-16 NS0967-238-7840 EIC QM06000
SERIAL: Al thru A4, BI thru B3, CI thru C24, and BSCl IDENTITY: Refer to the card location decals, located on the inside surfaces of equipment cabinet doors, and checking for the following: Two input gate cards ( $\mathrm{P} / \mathrm{N} 1550381$ ) should be installed in card slots A8J5 and A16J21.

8-AM-4534/UYA-4(V): Standardization of Power Supplies
Correction Material: None required
1-A FA-4 NSO967-238-7860 EIC QM06000 SERIAL: G1 and G2
IDENTITY: Inspecting the front panel of the 390034.011 Power Supplies located in areas A9 and A10 of the equipment affected for elongation of the front panel mounting holes.

9-AM-4534/UYA-4(V): Correct Counter Enable Reset 11-A FA.11 EIB 861

EIC QM06000
SERIAL: Serial numbers A1 thru A3, B1 thru B3, C1 thru C25, EI, Gl thru G6, H1, 11 thru 110, JI, KI, K2, Ml and BSCI

IDENTITY: Use a card extender and ohmmeter and make the following continuity checks: A8J2-TP18 to A8J4-18-OPEN; A8J2-TP18 to A8J4-18 . SHORT.
10.AM-4534/UYA-4V): Elimination of Double Pulse Output From 1537642 Card

Correction Material: T.4, NSO967-238-7115 to NSO967-2387110; T-1, NS0967-238-7771 to NS0967-238-7770

1-A FA-2 NS0967-238-7960
SERIAL: Serial numbers Al thru A3, B1 thru B3, Cl thru C25, BSC-I, D1, E1, G1 thru G6, H1, 11 thru $110, \mathrm{~J} 1, \mathrm{~J} 2, \mathrm{KI}$, K2, Ll thru L31, M1 thru M3, N4
IDENTITY: Remove delayed clock generator card, 1537642, from slots A 7 J 6 and A15J20 (for AM-4534 symbol generator) or from slot ASJ6 (for AM. 4968 symbol generator) and note that card is marked '1537642-101.' Also note that components C1, C2, Q2, R4 and R6 have been removed.
NOTES: See EIB 922 for corrections to this field change bulletin.

11-AM-4534/UYA-4(V): Under Development (07-77)
12-AM-4534/UYA-4(V): Reset Counter Enable with P1S. (EIB 965).

Correction Materja): EIB 965
4•A FA-6 ElB 965
EIC QM06
SERIAL: All AM-4534 and AM-4968/UYA-4(V) Puise Am-plifier-Symbol Generators installed in conjunction with MU. 605/UYA-4(V) Refresh Memory Unit.
IDENTITY: Verify continuity (short) between A8J2-TP18 and A8J4-18 and between A16J24-TP18 and A16J22-18. Verify continuity (open) between A8J2-TP16 and A8J4-18 and between A16J24-TP16 and A16J22-18.
NOTES: Prerequisite Field Changes: 9-AM-4534/UYA-4(V) or 3-AM-4968/UYA-4(V).

1-AM-4968/几YMA(V): Incorporation of HAC Maintenance Bulietins, Group 1, as a Unit Field Change

Correction Material: None
4-A FA-1 NS0967-238-7360 EIC FU09000
SERIAL: As indicated in table 1 of this field change
IDENTITY: Observing field change number 11 on the Field Change Accomplished plate.

2-AM-4968/UYA-4(V): Same as 5-AM-4534/UYA-4(V) except SERIAL: A1, Bl
IDENTITY: Verify the new value of R1, R29, and R57 on the isolator logic gate card 1537552-100. The new value of this resistor is 3.9 K . Location for this card in the equipment is Areas A2, J9. A3, J22.

3-AM-4968/UYA-4(V): Same as 9-AM-4534/UYA-4(V) except SERIAL: Al thru A4 and B1
IDENTITY: A6J2-TP18 to A8J4.18 - OPEN; A6J2-TP16 to A6J4-18-SHORT.

4-AM-4968/UYA-4(V): Same as 10-AM-4534/UYA.4(V) except
SERIAL: A1 thru A4, BI
5•AM-4968/UYA-4(V): Same as 12-AM-4534/UYA-4(V)

1-AM-6382/UYA-4(V): TACS/TADS Hardware Changes Correction Material: To be supplied
1-A FA-40 NS0967-LP-483.4030 EIC P806000 SERIAL: Serial numbers A1, A2, B1, B2, Cl thru C3, D1 thru D3
IDENTITY: Use card extenders and ohmmeter to make the following continuity checks - Location: Left-hand card box, Check Point: A2A1J8-62 to A2A1J4.45, Indication: Short Location: Right-hand card box, Check Point: A7A1J18-62 to A7A1522.45, Indication: Short.

2-AM-6382/UYA-4(V): ODA Width Change and Address Stacking

> Correction Material: None required
1.A FA. 65 NS0967-483.4020

EIC QM06000
SERIAL: A1, A2, B1, B2, C1 thru C3, D1, D2, and HAC 10 IDENTITY: Remove data register assembly (1579977) and check for incorporation of the card modifications indicated in the procedure.

3-AM-6382~UYA-4(V): Under Development (12-74)

4-AM-6382/LIYA-4(V): CPA/SYM Gen Clock Synchronization

Correction Material: To be provided

## 1-A FA-8 NS0967-LP-483.4040

SERIAL: A1, A2, B1, B2, Cl-C3, D1-D3
IDENTITY: In the AM-6382/UYA-4(V), check continuity (zero ohms) between A2A1J15-11 and A2A1J10.25 and between A7A2J11-37 and A7A1316-25, and check continuity (open) between A2A1J10-3 and A2A1J10-25 and between A7AlJ16-4 and A7A1J16-25.
5.AM-6382/LYA-4(V): Correct 1/O Cable Noise

Correction Material: Changes to TMs required (To be Sup plied)

1-A FA-12 NS0967-LP.483-4050
SERIAL: El thru E7
IDENTITY: Gain access to areas A2 and A7 and verify that there are no terminal lugs containing 12 wires connected to A2-E10. A2-E12, A7-E10, and A7-E12.

6-AM-6382/\!YA-4(V): Provide Circle and Ellipse Display Capability.

Correction Material: To be provided.
1-A FA-40 SE687-AB-FCB-010
E1C QM06 SERIAL: All serial numbers
IDENTITY: Verify that the following four (4) printed circuit boards have been installed: Logic boards ( $\mathrm{p} / \mathrm{n}$ 16:0000-126) in slots A2A1A4, A2A2A4, A7A1A22, and A7A2A22.
NOTES: Concurrent Field Changes: 1-AM-6382/JYA-4(V)
and 11-OJ-194(V)/UYA-4(V)
7-AM-6382/UYA-4(V): Reduce Power Supply Overvoltage Sensitivity

Correction Material: To be provided
1-A FA-1 NS0967-LP-483-4060
SERIAL: AM-6382: A1, A2, B1, B2, Cl-C3, D1-D3, El-E11. CV-2834: A1-A7, B1-B3, Cl, D1, D2. OU.91(V)1: Al-A4, B1, Cl. OU-91(V)2: Al-A4, Bl, B2, C1, C2. OU-91(V)3: A1, B!. OU-91(V)6: A1. OU-91(V)10: A1. SM-441(V)4: G1.

IDENTITY: Capacitor C12, of the 5.75V Regulator Card in Power Supply PP-6909/UYA-4(V), should be 15 uF; 20VDC (type CSR13E156KM).

1-AM-6675/URT: Operational and Safety Improvements.
Correction Material: To be provided.
1-C YF-13 NE0967.LP.578-2020 EIC Q748
SERIAL: All serial numbers.
IDENTITY: Verify that PP bias knob has been removed and that a fuse for T1 PRIMARY has been installed on the front panel (fuse should be identified as Tl PRIMARY on the front panel).

1-AM-6691A/WSC-1(V): Installation of Air Leakproof Connector Adaptors in AM-6691A/NSC-1(V).

Correction Material: Chg. to TM NE0967-LP-614-0010.
1-A FA.1 NE0967-LP-614-0050 E1C QP45
SERIAL: All serial numbers. (Accomplishment will be on a as-needed bases.)
IDENTITY: Verify that air-leakproof connector adaptors have been installed on the three RF ports of the diplexer.

1-AN/APA-125A: Modification to Decrease the 150 NM Sweep to 70 NM and to Assign a New Nomenclature to the Indicator

Correction Material: To be supplied at a later date
1-A FA-1 NS0967-266-6150
SERIAL: All MATCU-owned equipment. (Only MATCUowned equipment affected.)
IDENTITY: Presence of 70 NM sweep position on the indicator.

1-AN/ARC-1: Dynamotor Interference, Reduction
Correction Material: T-1 to AN16-30ARCl-3; T-1 to AN08-30ARC1-3

A FA-2 NS98778 None
SERIAL: $1-8911$
IDENTITY: C-801 changed to $10,000 \mathrm{mmfd}$. An $8,200 \mathrm{mmid}$ cap. installed bet. hi-voltage brush terminals and dynamotor 'thru' volt.

2-AN/ARC-1: Guard reception, modif
Correction Material: T-1 to NS900, 145

## NS98215

## SERIAL: All

IDENTITY: Several capacitors and one resistor added to G.C. RF amp strip. C-253X in parallel with C-253 at pin 1 of $\mathrm{X}-123$. Guard channel strip must be removed to identify.

3-AN/ARC-1: 115 VAC Operation Adaptation to AN'ARC1X

Correction Material: Ch. 1 to AN36-30ARCl-3
C FA-2 NS98543 FS820-302-

SERIAL: BUSHIPS
IDENTITY: PP-1092/U installed.

1-AN/ARC-1A: Same as 3-AN/ARC-1 except
Corsection Material: Ch. 1 to AN 16-30ARCl-7

## 2-AN/ARC-1A: Same as 2-AN/ARC-1

1-AN/BRA-4: Replace Resistors R-115 and R-123 in Oscillator Sub-Assemblies Z-151 to Z-156

Correction Material: T-2 to NS93023
1-A FA-3 NS98984 None
SERIAL: 2-22
IDENTITY: R-115, 105K resistor replaced with 473 K resistor and R-123, 155K resistor replaced with 154K.

1-AN/BRA-8B: Auriliary Floating Wire Antenna Modification. Nomenclature changed to AN/BRA-8C.

Correction Material: AN/BRA-8C TM, NS0967-565-4010
3-A FA. 40 NS0967-LP-208-4020 EIC Q10J
SERIAL: AN/BRA-8B VLF/LF Buoy Antenna Groups on hulls SSBN 608 thru SSBN 659.
IDENTITY: Verification of accomplishment is determined by ensuring proper electrical connection of floating wire end seal assembly in buoy and by establishing positive signal response with floating wire in water. In addition, a visual inspection of the nest area, where the buoy is located, will show modification to the doors adding a cutout in both doors allowing 140 ft . of RG 284/ U buoyant cable from the buoy to protrude through the opening and extend over the side.
NOTES: SHIPALT SSBN 1359 must be accomplished prior to or concurrent with this field change. (Refer to NAVSHIPS Dwg. SSBN-409.4491181.)

1-AN/BRA-18: Installation of Ball Check Valve
Correction Material: See Note
J-B FA-8 See Note
F5827-T15. 7020
SERIAL: All except SSN-637 and SSBN classes IDENTITY: FC-1 stamped on the master nameplate. NOTES: No correction material or NA VSHIPS bulletin published scparately. Sections 3.4 .2 and 3.4 .3 of NA VSHIPS 0967-325-8010 give installation instructions and are provided in kit only.

1-AN/BRA-24A: Antenna Mount MT-4632/BRA-24A Installation

Correction Material: Ch. 1, NS0967-301-2012 to NS0967-301-2010

3-C FA-12 NS0967-301-2020 EIC Q808000
SERIAL: All serial numbers. Serial numbers F1 thru F6 and GI thru G16 were corrected by an identical production change.
JDENTITY: Presence of antenna mount between static seal and housing proper of AN/BRA-24A. This increases the overall height by approximately 5 inches.

1-AN/BRN-4: Same as 1-AN/SRN-14
1-AN/BRR-3: Replacing Connectors J607, J608, J609 and J610 with Connector J618

Correction Material: Ch. 2 to NS93716, Ch. 1 to NS93716.61. Ch. I to NS93716.42

I-A FA-2 NS981479 2N5820-06A.
6248

IDENTITY: One nine pin connector replaces four coaxial connectors for the loop antenna cable.

2-AN/BRR-3: Change in Value of Resistor R930
Correction Material: T- to NS93716
2-A FA. 4 NS0967.063-6070 None SERJAL: All
IDENTITY: Proper recording of the field change number on the Field Change Accomplished plate.

3-AN/BRR-3: Installation of Three-Wire Power Connector for Chassis Grounding through the Lime Cord

Correction Material: None required
2-A FA-I NS0967.063-6080 EIC QB06000 SERIAL: Equipment serials I thru 34
IDENTITY: Presence of a three-pin connector as J60S.
4-AN/BRR-3: Resistor R-626 Replacement
Correction Material: T. to NS0967.063-6010
2-A FA-1 EIB 881 EIC QB06000
SERIAL: All
IDENTITY: Note the wattage value of resistor R-626. If the component is a 5 W resistor, the change has been installod.

5-AN/BRR-3: Coherent FSK Demodulator Modification Correction Material: Supplementary Technical Manual I-A FA- 24 NS0967-LP-063-6090 Q806000 SERIAL: All serial numbers
IDENTITY: Note the field change plate mounted on the receiver and the presence of the coherent FSK demodulator.

6-AN/BRR-3: Under Development (02-77)
1-AN/BRR-3A: Sarne as 2-AN/BRR-3
2-AN/BRR-3A: Same as 4-AN/BRR-3
3-AN/BRR-3A: Same as 5-AN/BRR-3
4-AN/BRR-3A: Under Development (02-77)
1-AN/BST-1: Replace PPE Cables in SECT Launchers Correction Material: None
II-A FA-20 NE0967-376.9150
EIC QE08000
SERIAL: SSBNs only. Cables W11 thru W20 of the AN/ BST-1 SECT installations on all SSBNs must be inspected visually to determine if PPE cables are present, since hull numbers which have PPE cables are not accurately known.
IDENTITY: PPE cables have molded connectors which are covered with a black, opaque, molding compound. Replacement cables are molded with a clear, transparent, yellowish molding compound.

2-AN/BST-1: Replace Depth Sensing Elements (DSE) Mark 4 and Mark 5 MOD 0 with MOD 1

Correction Material: Included in technical manual
1-A FA-4 NE0967-376-9160 EIC QE09000 SERIAL: Mark 4, serial number BI-B41 (MCN 20!-241, P/N 1845691), Mark S, serial number Bl-B8 (MCN 201-208, P/N 2138517). (NOTE: The MCN is a Manufacturer's Control Number which appears on each unit.)

SER1AL: A1 through A9 and B1 through B99

IDENTITY: Namepiate of DSE will indicate that it is a Mark 4 MOD I or Mark 5 MOD 1 unit rather than a MOD 0 unit.

3-AN/BST-1: Replace Timer Unit, Mark 26 MOD 0 with Mark 26 MOD I

Correction Material: Included in technical manual
I-A FA-1 NE0967-376-9170 EIC QE09000 SERIAL: All timers Mark 26 MOD 0, serials $1-108$ (MCN 201-308), Contract N00039.C-70-1504. (NOTE: The MCN is a Manufacturer's Control Number which appears on each unit.) IDENTITY: Modified timer nameplate data indicates Mark 26 MOD 1. Also a readily visible warning nameplate is installed on the front of the timer.

4-AN/BST-1: Replace Cadmium-Plated Bolts in Buoy Base Plate and in Antenna Cover with Monel Bolts

Correction Material: Included in technical manual
II-A FA-3* NE0967-376-9180 EIC QE09000
SERIAL: Buoy Mark 9 MOD 0, serial numbers B-1 through B90. (See Tab A for cross-reference sheet on buoy numbers.) IDENTITY: Monel parts are silver grey, smooth, and slightly shiny when new. Cadmium-plated paits are dull gold color, like gold anodized aluminum, when new, nusty when old.
NOTES: *Assuming buoy is in the shop.
S.AN/BST-1: Replace Tïlt Switch on Buoy Transmitter Mark 68 MOD 0

Correction Material: Included in technical manual
II-A FA-2* NE0967.376-9190
EIC QE09000
SERIAL: Buoy serial numbers B-1 through B-58, however tilt switches will have been repiaced in many of these buoys.
IDENTITY: Original tilt switch was made of a grayishbrown, laminated melamine. (NOL P/N 243342) new switch is white, molded delrin, has the same number with revision letter 'K' (or later).
NOTES: *Assuming buoy is in shop and opened for annual maintenance.

6-AN/BST-1: Replace Antenna, Emergency Transmitter, Mark 41 MOD 0 with Modified Antenna Correction Material: Included in technical manual II-A FA.I* NE0967-376-9200 EIC QE09000 SERIAL: Buoy Mark 9 Mod 0, serial numbers B-1 through B79. (See Tab A for buoy serial number cross-reference.)

IDENTITY: Repiacement antenna base is stamped with a $1 / 4$ inch high ' $M$ '. See attached photographs.
NOTES: *Assuming buoy is in shop and opened for annual maintenance.

7-AN/BST-1: Replace Cadmium-Plated Explosive Bolt Safety Shield with Stainless Steel Safety Shield

Correction Material: Included in technical manual
II-A FA-I* NE0967-376-9210
EIC QE09000
SERIAL: Launcher Mark 129 MOD 0
IDENTITY: Monel and stainless steel parts are silver-gray, smooth, and slightly shiny when new. Cadmium-plated parts are dull gold color, like goid anodized aluminum, when new. Additionally new parts are stamped as follows: Stainless Steel Safety Shield - 2501992 Rev G (or later); Monel Wrench Plate - 2498350 Rev E (or later); Stainless Steel Base - 2498352 Rev F (or later).

NOTES: *Assuming the launcher is open for annual maintenance.

8-A.N/BST-1: Remove Safepins, Safepin Monitor Switches, and Cables and Associated Circuitry

Correction Material: T-1, NE0967-376-9014 to NE0967-376-9010; T-1, NE0967-376-9034 to NE0967-376-9030; T-1, NE0967-376.9045 to NE0967-376-9040

Ii-A FA-2 NE0967.376-9220 EIC QE09000 SERIAL: Launcher Spring Assembly Safepin, Safepin Monitor Switch, Safepin Monitor Cable (WI4, W15, WI9, and W20).
IDENTITY: Safepins, safepin monitor switches, safepin monitor cables have been removed, safepin monitor cable receptacles in the hull feed-thrus have been capped and safepin portion of control unit verification control has been blanked out.

9-AN/BST-1: Modify Detonator Resistance Test Set Mark 532 MOD 0 to Measure Greater Range of Resistance

Correction Material: T.1, NE0967-376-9102 to NE0967. 376-9100

II-A FA. 2 NE0967-376-9230 EIC QE09000
SERIAL: All serial numbers (Bl thru Bll) Test Set Mark 532 MOD 0
IDENTITY: Remove test set, remove back panel, locate resistors on terminal board on back of rotary switches. Check RI (9-19) Il0 ohms, R5 (6-16) 147 ohms, R9 (2-12) 2.15 ohms, RIO (3.13) 2.26 ohms.

10-AN/BST-1: Modificazion to Hull Penetrator Cable W3, P/ O Electrical Check Test Set MK531, MOD 0

Correction Material: T. to NE0967-LP-376.9090
1-A FA NE0967-LP-376.9240 EIC QE09000
SERIAL: Perform modification on Hul? Penetrator Cable W3 which is supplied as part of electrical check test set MK531 MOD 0, all serial numbers
IDENTITY: The original hull penetrator cable W3 is a single piece of cable approximately 5 feet long. The modified cable consists of two lengths of cable, one approximately 6 feet long and the other approximately 1 foot long. The two pieces of the modified cable can be joined with the Portsmouth M24231/3-001 and M2431/13-001 connectors.

11-AN/BST-1: Addition of Test Band to Gauge of Pressure Switch Test Set Mark 526 Mod 0

Correction Material: Revised TM's, NS0967-LP-376-9030 dtd 1 May 75, NS0967-LP-376.9040 dtd 1 Apr 75, and NS0967.LP.376-9050 did I Feb 76

1-A FA-I NS0967-LP-376-9250 None SERIAL: Pressure Switch Test Set Mark 526 Mod 0 serial numbers Bl thru B12 and C1 thiu C20.
IDENTITY: Installation of green segment labeled 'Mark 8' on test gauge face.

## 1-AN/CRT-3: Operating Frequency Change

 Correction Material: T-1 to AN16-30CRT3-21-A FA•1.5 NS0967-190-5010 2N5820-3024110

## SERIAL: All on ships

IDENTITY: Switchplate reads new frequency 8364 KC .
NOTES: Stock number less crystal 9N5955-267-6155.

2-AN/CRT-3: Replacement of Radioactive Knobs and Dials on T-74/CRT-3

NS98 1803 2N5820.763.
1133
IDENTIIY: Absence of the radioactive luminous material on the selector switch knob, selector switch nameplate, and the operating instruction plate.

1-AN/FCC-3: Resistor in Receiver Change
Correction Material: T.l to NS91901

## 1-A FA-9 NS98419

SERIAL: 1-69
IDENTITY: Two 10K watt wirewound resistors are installed
in the ' $\mathbf{B}$ ' power supply as filter resistors.
2-AN/FCC-3: Resistor in Frequency Converters Replacement Correction Material: T-i to NS91903
1-A FA-9 NS98420
SERIAL: I-103
IDENTITY: R2635 in plate circuit of V-2604B is 240 K
3-AN/FCC-3: Modification of DC Amplifier Circuit in Transmitter

Correction Material: T-1 to NS91901
1-A FA-9 NS98421
SERIAL: 1-40
IDENTITY: Neon glow lamp between pin 1 of V-03A and pin 7 of V.03B.

4-AN/FCC-3: Change Wide Band Channels to Narrow Channels

Correction Material: None
A FA-2 NS98955
None
SERIAL: When designated by CNO
1-AN/FCC-7: Same as 1-AN/FCC-3 except
SERIAL: 1-4

2-AN/FCC-7: Same as 2-AN/FCC-3 except
SERIAL: 1-9
3-AN/FCC-7: Same as 3-AN/FCC-3 except
SERIAL: 1-29

1-AN/FCC-8: Same as I-AN/FCC-3 except
SERIAL: 1-14

2-AN/FCC-8: Same as 2-AN/FCC-3 except
SERIAL: 1-14

1-AN/FCC-16: Additional Wiring for Transmitters T-711/FC and Receivers J-109

Correction Material: T-1, NS0967-226-0011 to TM, NS0967-226-00IO (formerly NS94057)

2-A FA-4 NS0967-226.0030 None SERIAL: All
IDENTITY: Inspection of jacks number J-309 in the transmitters and J-109 in the receivers. The field change places jumpers between terminals 2 and 3 of these jacks.

2-AN/FOC-16: VFTG Terminal Equipment; Modification of Transmitter Drawer T-70( )/FCC-16

2-A
None

## SERIAL: All

IDENTITY: Field change number stamped on Field Change Accomplished plate.

1-AN/FCC-37: Adds Low Level Interface Capability
Correction Material: Included in Supplement to NS0967. 432 -4010

3-A FA.50 NS0967.432-4040 EIC Q3F5000
SERIAL: All serial numbers
IDENTITY: New component boards added to TK-201 and LK-401 have a switch designated S1.

1-AN/FCC.38: Adds Low Level Interface Capability Correction Material: Included in Supplement to NS0967. 432-4010

3-A FA-87 NS0967.432-5040 EIC Q3F6000 SERIAL: All
IDENTITY: Added component boards to TK-201 and LK401 have a switch designated S1.

1-AN/FCC-39: Same as 1-AN/FCC-38 except
EIC Q3F7000
1-AN/FCC-56: Adds Low Level Interface Capability
Correction Material: Included in Supplement to NS0967. 432-4010

3-A FA-S0 NS0967.432-6040 EIC Q3F8000
SERIAL: All
IDENTITY: New component boards added to TK-202 and LK 402 have a switch designated S1.

1-AN/PCC-66: Pilot Light Addition to Panel Front
Correction Material: T- to NS0967-279-4010
2.A FA-I EIB 873

SERIAL: All serial numbers
IDENTITY: Presence of pilot light on the face of the test panel.

1-AN/FCC-69: Same as 1-AN/FCC. 66 except
Correction Material: T. to NS0967-292-5010

1-AN/PCC-70. Same as 1-AN/FCC-66 except
Correction Material: T- to NS0967-292-50IO

1-AN/FGA-12: Replace Top Rack Adapter, Rheostat Mig. Door, Rheostat Door and Sub-Panel Guard, and Rheostat Mig. on Control Monitor C-8043/FGA- 12

Correction Material: None
I-A FA-6 NS0967-228-9030
SERIAL: 1A through 6A; all others corrected by production change
IDENTITY: Rheostat door, guard, and mounting vented by 25, 63, and 56-1/2 inch dia. holes, respectively, and top rack adapter equipped with an exhaust fan.

1-AN/FGA-18(V): Hubbing Repeater TH-83/FGC
Correction Materjal: Chg 1, NS0967-302-1013 to NS0967-

302-1010
1-A FA-16 NS0967-302-1030
IDENTITY: Patch Board will be installed on top of unit, instead of at bottom as in the original

1-AN/FGC-5: Continuity Circuit Modification

## A FA-8 NS98242 F5820-325

7445
SERIAL: All
IDENTITY: New switches, S-1401 and S-1402, are installed with nameplates, $\mathrm{S}-1401$ is mounted in revr signal dist near left-rear corner. S-1402 is mounted in signal xmtr dist near left-rear corner.

1-AN/FGC-11: Conversion to AN/SGC-2 TTY
Correction Material: TM for AN/FGC-1!, NS91523
A FA-8 NS98975 F5815-6426917
SERIAL: All on ships
IDENTITY: (a) Typing unit BP22/247 converted from pulling to holding magnet selector; from type arrangement No. 247 to No. 210; automatic carriage seturn and line feed feature added, and the mechanical stop is omitted; (b) MU- 27 motor unit (governed) is replaced with MU-4 motor unit (synch); (c) Keystop arrangement converted from 'LE'; (d) New nameplate converts set to 'AN/SGC-2.'

1-AN/FGC-60(V): Modification for Low Level Operation
Correction Material: Use the following TM Supplements: NE0967-437-8010 for AN/FGC-60/1, 8020 for AN/FGC-60/ 9, 8030 for AN/FGC-60/19, 8040 for AN/FGC-60/22, 8050 for AN/FGC-60/23A, 8060 for AN/FGC-60/24, 8070 for AN/FGC-60/25, 8080 for AN/FGC-60/44, 8090 for AN/ FGC-60/50, 8100 for AN/FGC-60/53, 8110 for AN/FGC-60/ 53A, 8120 for AN/FGC-60/2000, 8130 for AN/FGC-60/2390.
1-A FA-25 NE0967.437-8140
EIC Q30R000

SERIAL: All serial numbers of each of the following AN/ FGC-60(V) models: AN/FGC-60/l; AN/FGC-60/44; AN/ FGC-60/9; AN/FGC-60/50; AN/FGC-60/19; AN/FGC-60/ 53; AN/FGC-60/22; AN/FGC-60/53A; AN/FGC-60/23A; AN/FGC-60/2000; AN/FGC-60/24; AN/FGC-60/2390; AN/ FGC-60/25
IDENTITY: Replacement of the or - 130 volt VU meter with a "low-level" or - 3-volt VU meter on the front panel of the voice frequency carrier terminal.

1-AN/FGC-73(V): Heading Monitor Thru BT
Correction Material: T-3 to NS94492
2-A FA-2.5 NS0967-982-6020
SERIAL: All

2-AN/FGC-73(V): Modification of OA-4042/FGC-73(V) Console, Routing Set and C-4248/FGC-73(V) Reperforator Console

Correction Material: T-3, NS0967-982-0013 to TM, NS0967-982-0010 (formerly NS94472)

2-A FA.3 NS0967-982-0020
SERIAL: All
IDENTITY: Presence of a 20 -position switch and a pushbutton switch mounted on the front panel of Patch Drawer and
in the OA-4042/FGC-73(V) and by a toggle switch mounted on the side of the C-4248/FGC-73(V).

3-AN/FGC-73(V): Provide Technical Explanation and Manual Revision

Correction Material: T-3, NS0967-216-30!1 to TM, NS0967-216-3010 (formerly NS94472)

2-A FA-1 NS0967-982-0020 None SERIAL: All known equipment used for Navy Communications
IDENTITY: Field change number stamped on Field Change Accomplished plate.

4-AN/FGC-73(V): Provide Information Necessary to Accomplish NOT Function Programming in OA-4042/FGC-73(V) Correction Material: None
2-A FA-45 NS0967-982-0020 None
SERIAL: All
IDENTITY: Patch input in AI Minilock, Position no. 4 in OA-4042.

5-AN/FGC-73V): Programming 'NOT' Functions and 'PATCH BACKS'

Correction Material: None
2.A NS0967-982-0020 None

SERIAL: All (when applicable)
IDENTITY: Equipment not affected - operational change only.

6-AN/FGC-73(V): Emergency Code Bypass Operation
Correction Material: T-3, NS0967-216-3011 to TM, NS0967-216-3010 (formerly NS94472)
SERIAL: All
IDENTITY: Pushbutton installed adjacent to Reset Button.
7-AN/FGC-73(V): Punch Control Drawer - Replacement of Resistors R-1 and R-4 and Installatiot of Capacitor C-3

Correction Material: T.4, NS0967-216-3012 to NS0967-2163010

2-A YF-2 NS0967-216-3110
SERIAL: All
IDENTITY: Inspection of the punch control drawer for presence of the 11 -watt resistors, R1 and R4, and capacitor C3.

8-AN/FGC-73(V): Incorporates Standby Console OA-8140./ FGC-73(V) and Accessories to Supplement and Update AN/ FGC-73(V) Systems

1-A FA-30 NS0967-2!6-3090
SERIAL: 23 sets to be modified for OA-8140/FGC-73(V) and JANAP-128
IDENTITY: Addition of OA-8140/FGC-73(V) Console and IB140397 and IB140398 Drawers with P.C. Boards for JANAP-128 only.

9-AN/FGC-73(V): Modification Kit No. I (Provides Remote Readers, Tape Flow Monitor and Format Checks, Crescent Code for Security and Precedence and ZCZC Garble Protection)

1-A FA-75 NS0967-216-3120 None
SERIAL: B1 thru B14

IDENTITY: The OJ-105/FGC-73C(V) console will have the Display Panel, T.F.M. and Reader Control Assembly located in the rear of the local reader, connectors and printed circuit boards for the Crescent Code, printed circuit board for the ZCZC Garble, and provisions for three Remote Readers.

10-AN/FGC-73(V): Modification Kit No. IA (Provides Remote Readers, Tape Flow Monitor and Format Checks, Crescent Code, and ZCZC Garble Protection)

Correction Materia): None
1-A FA-7S NS0967-216.3130
SERIAL: AN/FGC-73(V) using Consoles OA.4042/FGC73(V) and OA-8140/FGC-73(V)
IDENTITY: Nomenclature changed to AN/FGC-73B(V), OA-4042/FGC-73(V) to OJ-104/FGC.73B(V), and C-4248/ FGC-73(V).

11-AN/FGC-73(V): Modification Kit No. 2 Format Stripper MX-8173/FGC

## Correction Material: None

1-A FA.12 NS0967-216-3140
EIC F29P000
SERIAL: All C-4248B/FGC-73(V) and C-4248C/FGC-73(V) Consoles
IDENTITY: The Stripper Assembly is housed and operates in Reperforator Console C-4248B/FGC-73(V) and/or C.4248C/ FGC-73(V). For location, see figure $1-1$ in the Preliminary Instruction Manual for the Format Stripper supplied with F.C. Kit.

1-AN/FGC-73A(V): Modification to Accept JANAP-128
Correction Material: Change I, NS0967-075-4002 to Technical Manual NS0967.075-4000

1-A FA-65 NS0967.075-4001
SERIAL: Bl through B14
IDENTITY: Addition of new printed circuit board numbers 140627-501 (Qty. 1), 140628-501 (Qty. 5), and 140629-501 (Qty. 1)

2-AN/FGC-73A(V): Same as 9-AN/FGC-73(V) except (Modifies equipment to AN/FGC-73C)

1-AN/FGC-73B(V): Address Counter Printed Circuit Board Modification

Correction Material: T-1, NS0967-327-9011 to NS0967-327. 9010 (Volume I) and T-1, NS0967-871-5561 to NS0967-871. 5560 (Volume II)

2-A FA-I NS0967-327-9030
SERIAL: All series equipment serials
IDENTITY: Presence of red strapping wire described in this modification

1-AN/FGC-73C(V): Same as 1-AN/FGC-73B(V)
1-AN/FGC-73D(V): Same as 1-AN/FGC-73B(V)
1-AN/FGC.74: Installation of 194895 Mod Kit (Converts unit code to 7.42 unit code and 60,75 , and 100 WPM speeds)

Correction Material: T-1 to NS94460

## NS981562

None

## 1-AN/FGC.74X: Same as 1-AN/FGC-74

1-AN/FGR-5: Installation of 194274 Mod Kit (Converts 60,75 , 100 WPM speeds nonpolar operation using the 194273 and 194274 Mod Kits respectively.)

Correction Material: T-5 to NS94158
NS981561
None
1-AN/FGR-5A: Same as 1-AN/FGR-S

## 1-AN/FGR-6: Same as 1-AN/FGR-S

## 1-AN/FGR-6A: Same as 1-AN/FGR-6

1-AN/FGT-4: Installation of 194273 Mod Kit (Converts 60, 75 , 100 WPM speeds nonpolar operation using the 194273 and 194274 Mod Kivs respectively.)

Correction Material: T-2 to NS94158
NS981561
None

2-AN/FGT-4: Same as 1-TT-333/UG except
3-A FA-30 NS0967-287-7050
EIC F29U000
1-AN/FGT-7: Modification to Permit Simplified Bit Order Programming

Correction Material: Included in Change 1 to NE0967.426. 2050

I-A FA-I NS0967-426-2060
SERIAL: All serial numbers
IDENTITY: Centerlab switch PA- 1027 mounted on power supply module A .

1-AN/FGT-7A: Same as 1-AN/FGT-7
1-AN/FRA-3: Improve Rejiability and Reduce Outage Time Correction Material: T-2 to NS92792(A); T-1 to NS92955; T-1 to NS91639(A)

2-A FA. 24 NS98i217
None
SERIAL: All (remotely controlled)
IDENTITY: Substiturion of brass rigid sleeve coupling in the Antenna Selector SA-256/FRA-3 with a pracision type universal joint and a square high carbon steel shaf.

1-AN/FRA-11: Handles on racks, provide 1-A FA NS981099

None
SERIAL: All
IDENTITY: Handles on rack mounted components.

2-AN/FRA-11: C-1443/FRA-11 wiring to jack panel, chg Correction Material: T-1 to NS92273
2-A FA NS98895 None
SERIAL: All
IDENTITY: R-557, 100k installed in all three jack panels.
3-AN/FRA-11: Addition of a Jack for the Pulf-Down Speaker Plug

Correction Material: T-8, NS0967-135-5019 to TM, NS0967-135-5010 (formerly NS92273)

2-A FA-1 NS0967-135-5120
None

SERIAL: All shore equipment
IDENTITY: A telephone jack will be installed on the top of Control Indicator C-1443/FRA-11.

4-AN/FRA-11: Replacement of Electrolytic Capacitors in AM-1042/FRA-11 and PP-1143/FRA-11

Correction Material: T-8, NS0967-135-5019 to TM, NS0967-135-5010 (formerly NS92273)

2-A FA-2 NS0967-135-5120 None SERIAL: All shore ( 70 equipments)
IDENTITY: If the large filter (electrolytic) capacitors in AM-1042/FRA-11 and PP-1143/FRA-11 are mounted in octal sockets, this field change has been accomplished.

5-AN/FRA-11: Replacement of Impedance Matching Transformers Which Drive Individual Channe! Speaker Amplifiers

Correction Material: T-8, NS0967-135-5019 to TM, NS0967-135-5010 (formerly NS92273)

2-A FA-10 NSO967-135-5120 None SERIAL: All shore equipments
JDENTITY: Locate one of AM-413( )/G amplifiers being used as a Primary and Emergency Speaker Amplifier. Trace its input cable to its source. If this source consists of an ' L ' pad, this field change has been accomplished.

6-AN/FRA-11: Addition of 600 -ohm Termination for AM-413/ G Amplifier Position

Correction Material: T-S, NS0967-135-5019 to TM, NS0967-135-S010 (formerly NS92273)

2-A FA-1 NS0967-135-5120 None
SERIAL: Shore (approx. 60 equips.), using AM-413/G ampls. fiers
IDENTITY: Remove the panel containing the VL meter on each Control Indicator Console. If a 620 -ohm resistor is installed, this field change has been completed.

7-AN/FRA-11: Addition of Quick Discomect Feature to PP. 1142/FRA-11 and SB-389/FRA-11

Correction Material: T-3 to NS92273
3-A FA-6 NS0967.135.5050
None
SERIAL: All shore equipment (approx. 70)
IDENTITY: Six (6) socket connections will be present on the rear panel of the SB-389/FRA-1 1. Two (2) socket type connections will be present on the rear panel of each PP-1142/ FRA-11.

8-AN/FRA-11: Provides Transmitter and Receiver Audio Mixing for Position Recording

Correction Material: Ch. I to NS92273
3-A FA-3 NS0967.135-5060 None
SERIAL: All
IDENTITY: Look in Cabinet No. 1 from the rear. An open 'cage' containing several (3.5) printed circuit boards will be observed at approximately eye level.

9-AN/FRA-11: Provides Transmitter and Receiver Audio Mixing for Position Recording of Control Monitor C-3980/ FRA-11

Correction Material: $T$. 5 to NS92273
3-A FA-2 NS0967-135-5070
None
SERIAL: All shore (70)

IDENTITY: Remove the chassis from its case far enough to expose the speaker. If a printed circuit board containing nine (9) resistors is mounted immediately to the right of the speaker, this field change has been accomplished.

10-AN/FRA-11: Provides Quick Disconnect Cabling and Chassis Slides Correction Material: Ch. 2 to NS92273
1-A FA-2 NS0967-135-5080 None SERIAL: All
IDENTITY: The SB-390/FRA-11, AM-1044/FRA-11 and AM-1041/FRA-11 will be mounted on slides.

11-AN/FRA-11: Relocation of Transmitter Line Isolation Transformers to SB-390/FRA-11

## Correction Material: Ch. 2 to NS92273

3-A FA-16 NS0967-135-5090
None
SERIAL: All shore (70) (To be accomplished only during rehabilitation or overhaul and concurrently with FC 10.)
IDENTITY: Sixteen transformers will be mounted on the top side of the SB-390/FRA-11 chassis.

12-AN/FRA-11: Provides Pre-Wired Wiring Harnesses for Relay Panel Assemblies Mounted in Equipment Cabinet No. 2 Correction Material: Ch. 3 to NS92273
3-A FA-8 NS0967-073.3130 None SERIAL: All Control Monitor Group AN/FRA-1I equipment that have not yet been installed.
IDENTITY: Look into Cabinet No. 2 from the rear. All connections to the terminal board mounted on the rear of the RE. 166 chassis will be made through a 18 lug Fanning Strip.

13-AN/FRA-11: Provides a Audio Frequency Monitor (ID. 1185/FRA)

3-A FA-1 NS0967-135-5100 None
SERIAL: All Control Monitor Group AN/FRA-11 equip. ments.
IDENTITY: Audio Frequency Monitor (ID-1185/FRA) will be mounted in AN/FRA-11 equipment cabinet No. 1.

14-AN/FRA-11: Provides Updated Audio Patching System With Monitor Jacks

Correction Material: Ch. 4 to NS92273
1-A FA-20 NS0285-077-1100 None SERIAL: All Control Monitor Groups, AN/FRA-11
IDENTITY: If cabinet number one (1) contains a total of ten (10) patch strips with four (4) wire wrap terminal blocks mounted horizontally directly behind them, this field change has been accomplished.

15-AN/FRA-11: Provide Front Panel High Voltage Test Points

Correction Material: T-9, NS0967-135-5201 to NS92273
2-A FA-1 NS0967-135.5130 None SERIAL: Applies to PP-1143/FRA-11 power supplies. IDENTITY: Presence of two test points on front panel marked J603 (250 VDC) and 1604 (ground).
1.AN/FRA.16: Circuit Addition and Equipment Protection
1-B YF. 16 NS981061 None SERIAL: All

IDENTITY: F101, F102, F103, Fl04 are 250 volt fuses.

1-AN/FRA-19(V): Same as 1-AN/FRA-501 except
Correction Material: T-1, NS0967-210-3011 to TM, NS0967-210-3010 (formerly NS93238)

## 2-AN/FRA-19(V): Replacement of Primary Power Cables and

 ConnectorsCorrection Material: T-5, NS0967-069-6015 to NS0967-069. 6010

2-A FA-8 NS0967-069-6050
SERIAL: All
IDENTITY: Noting that MS series, 3-pin connectors are used with the primary power cables on each equipment.

1-AN/FRA-44(XN-2): Modification of OFF Lines for AN/
FRA-54A(V) Compatibility (Modifies equipment to OA-8587/
FRA-54A(V))
Correction Material: Included in new Technical Manua! for OA-8587/FRA-54A(V), NAVSHIPS 0967-380-7010

1-A FA-8 NS0967-269-2300
SERIAL: All serial numbers of OFF Line equipments AN/ FRA-44(XN-2) and AN/FRA-44(XN-3) - 11 equipments IDENTITY: Presence of RP-184/FRA-54A(V) in the cabinet configuration.

## 1-AN/FRA-44(XN-3): Same as 1-AN/FRA-44(XN-2)

1-AN/FRA-501: Replacement of Resistors R-53, R-55 and R57 in Remote Controls C-5027/FRA-501 through C-5031/
FRA-501 and C-5027A/FRA-501 through C-5031A/FRA-501
Correction Material: T-3, NS0967.069-6013 to TM, NS0967-069-6010 (formerly NS92600B)

2-A FA-2 NS0967-210-3020
None
SERIAL: Remote control units associated with AN/FRA-501, -501A, AN/FRA-19(V)
IDENTITY: A 68,000 -ohm resistor connected between pins 3 and 6 on tube sockets XV-1, XV- 3 and XV-5.

## 2-AN/FRA-501: Same as 2-AN/FRA-19(V)

1-AN/FRC-6: Chassis Modification to Fit Tube Type 5933
2-A FA-1 NS981131 None
SERIAL: All
IDENTITY: No visible means
1-AN/FRC-6A: Same as 1-AN/FRC-6
1-AN/FRC-37: Elimination of High Failure Rate of Cathode Filament Choke L-312

Correction Material: T-1, NS0367-129-5013 to NS0367-129. 5010
2.A FA-1 NS0367-129-5030 EIC QNeOMe SERIAL: All
IDENTITY: Modified tube socket utilized in the cathode filament circuit of tube V 311 .

1-AN/FRC-59: Modification to Provide Continuous Meter Monitoring Circuits

Correction Material: Not required
2.A FA-8 NS096\%-198-6020 None

SERIAL: Equipments installed in locations that require transporting of test equipment to points accessible only by small ladders or where cranes or pulleys are used.
IDENTITY: Presence of additional rack panel installed in place of the audio panel, which is relocated at the bottom of the rack.

1-AN/TRC-149(V): (LC-8E) Change Resistors 1A5PSIA5R3 and 1A5PS2A5R3 from 0.5 Watts to 2.5 Watts

Correction Material: T-1, NS0967-326-4011 to NS0967-3264010

2-A FA-1 NS0967-326-4050
SERIAL: All
IDENTITY: On printed circuit boards 1A5PSIA5 and 1A5PS2A5 resistor R3 should be 2.5 watts.

## 1-AN/FRM-3: Radiation Reduction

Correction Material: T-1 to NS91320(A); T-2 to NS900,708; T-1 to NS900,477
SERIAL: All
IDENTITY: Coaxial connectors J608, 9 and 10 added in converter.

1-AN/FRN-12A: Addition of Balancing Controls in IPA and PA Stages

Correction Material: None
1-A FA-4 NS981427 None
SERIAL: All
2-AN/FRN-12A: VOR Omni Range (simultaneous voice and ident, transmission)

Correction Material: T-3 to T.O. 31R4-2 FRN-12-2
2-A FA-I NS0967-198-9050 None
SERIAL: All Navy owned
3-AN/FRN-12A: Modification to Prevent Operation of Keyer Motor while Equipment is in Stand-by Condition Correction Material: T-3 to T.O. 31R4-2 FRN-12-2
2-A FA.3 NS0967-198-9050
None
SERIAL: All
IDENTITY: Presence of a SPST momentary contact switch S-1401, having replaced the original DPST switch.

4-AN/FRN-12A: Replacement of AS-494/FRN-12A type Antenna System with the Adjustable Fixed Loop Type Correction Material: T-2 to T.O. 31R4-2FRNI2-1 2-B FA-600 NS981643
SER1AL: All VOR omni-range equipments
IDENTITY: Presence of a fixed-loop type antenna in lieu of a squirrel-cage type antenna.

5-AN/FRN-12A: Provision for Fail-Safe Circuit for Remote Monitor Amplifier AM-325/FRN-12 Correction Material: T- to NS94467 1-A YF-4 NS981749
SERIAL: All equipments which utilize type AM-325 amplifier IDENTITY: A bridge type selenium rectifier, mounted near L4701, inside AM-325/FRN-12, is plainly visible when the front panel is opened.

6-AN/FRN-12A: Modification to Remove the Voltage from

Blower Fan BL-3201 when rear panel of Cabinet of the Control Monitor Group CY-810/FRN-12A or CY-1495/MRN-9 is removed

Correction Material: T- to NS94467
2-A FA-2 NS0967-198-9050
None
SERIAL: All
IDENTITY: Blower Fan BL-3201 will not operate when rear panel of Cabinet CY-810/FRN-12A or CY-1495/MRN-9 is removed. Installation should be accomplished immediately.

1-AN/FRN-17: R305, R306, and ped sw pin, repl
Correction Material: T-1 to NS92334(A)
A FA-1 NS98665
None

## SERIAL: 1-38

IDENTITY: Steel ped sw pin screws into magnetic disc.

1-AN/FRN-24: Installation of 120 Cycle Filter
Correction Material: T-2 to NS93291
I-A FA-I NS981482
None

## SERIAL: All

IDENTITY: The presence of filter mounted on left side of transmitter control C-2516/FRN-24 to the rear of L-201/C201.

2-AN/FRN-24: Modification to Provide Wiring Diagrams, Remote Alarm Indication for Local Unit Failure, and Restoration of Transmitter Carrier Function after Power Failure

Correction Material: T-3, NS0967-154-8013 to NS0967-154. 8010 (NS93291)
i-A FA-15 NS0967-154-8030 2Z5825-936. 9082
SERIAL: C-2517/FRN-24, C-2516/FRN-24 and AN/FRN-24 - All

IDENTITY: Presence of an amber and a white indicating light on the front panel of the Transmitter (Remote) Control C-2517/FRN-24. The absence of an adjustment screw on the top of the armature of relays K205 and K206 in drawer C-2516/FRN-24.

3-AN/FRN-24: Interface ATIS with AN/FRN-24 UHF Homing Beacon (Using Sound Recording/Reproducing Set AN/GSH-39).

Correction Material: Chg. 2, NE0967-LP-154-8012, to TM, NS0967-154-8010 (formerly NS93291).

1-A FA-1 NS0967-154-8040
SERIAL: All AN/FRN-24 installations using ATIS. (Shore installations only).
IDENTITY: Verify installation of a wire connected between terminal 5 of T-203 and ground (chassis) within the C-2516/ FRN-24 Local Control Unit.

1-AN/FRQ-15(V): Replacement of HF Receiver and Control.
Correction Material: Change 3, NE0967-281-6013, to TM, NE0967-281-6010.

I-A FA NE0967-LP-281-6020 EIC QB6Y
SERIAL: All serial numbers.
IDENTITY: Verify installation of new receiver ( $p / n$ RACAL RA6775-4) mounted from the rear of the console immediately above the power supplies. The old receiver ( $\mathrm{p} / \mathrm{n} 8772097-8$ ) was located immediately below the oscilloscope.

1-AN/FRR-10: AGC Improvement
2-A FA-3 NS98870
SERIAL: 1-33

2-AN/FRR-10: Replacement of Two Watt Carbon Resistors Correction Material: T-3 to NS92144
2-A FA-3 NS981346 None
SERIAL: All (AM-450B, 451B, 452B, 453B/FRR-24)
IDENTITY: Presence of two wirewound resistors on terminal board B-101 in lieu of six carbon resistors.

1-AN/FRR-21: Provision for Silicon Diode Rectifyers and Zener Diode Voltage Regulator in Lieu of Electron Tube Type 6x4 and Ballast Tube Type 1HT4

Correction Material: T-4 to NS92211
1-A FA-I NS981356 2N5820-856.
0078
SERIAL: All
IDENTITY: V1601, V1602, and R1605 replaced by the diode rectifier unit.

1-AN/FRR-22: Same as 1-AN/FRR-21
1-AN/FRR-23: Same as 1-AN/FRR-21

1-AN/FRR-26: Never procured
1-AN/FRR-27: Never procured
1-AN/FRR-30: Never procured
1-AN/FRR-31: Never procured
1-AN/FRR-49(V): Modification Kit (R-5007/FRR-502)
Correction Material: T-2 to NS92786(A)
1-A FA NS981228 F5820-783-
6504
SERIAL: All
IDENTITY: Foil-cal nameplate affixed immediately below existing nameplate.

2-AN/FRR-49(V): Addition of Output Load Resistor Correction Material: T-3 to NS92786A
2-A FA-1 NS981329 None
SERIAL: All Radio Receivers R-5007/FRR-502
IDENTITY: Presence of a 2 -watt, 2000 -ohm resistor connector across terminals 2 and 3 on the inside of terminal strip E-1.

3-AN/FRR-49(V): Addition of Crystal Oven to Improve the Receiver Frequency Stability

Correction Material: T-4 to NS92786(A))
2-A FA-2 NS981366 None
SERIAL: RF Tuners: TN-5010/FRR; 5011, 5012, 5014
IDENTITY: RF tuners with this field change have a bracket assembly, for the crystal oven, externally mounted on the front panel.

4-AN/FRR-49(V): Modification for Use with O-1207/URC Frequency Synthesizer and CV-1758/URR Single-Side Converter

Correction Material: T-5 to NS92786A

2-A YF-1.5 NS981786 None
SERIAL: R-5007/FRR-502 and R-5007A/FRR. 502 and R.F. Tuners TN-5010/FRR-S02, TN-S011/FRR-S02, TN-S012/ FRR-S02, TN-S014/FRR-S02. All equipment used for SSB operation w/o-1207/URC, CV-1758/URR
IDENTITY: Each r-f tuner with this field change has BA6 Tubes for the lst and 2nd r-f stages instead of 6AKS and/or 6AG5 tubes. Each R-5007A/FRR-502 with this field change has capacitor C-107 and C-109 removed and a wire jumper installed between pin 7 of V101 and J-100.

5-AN/FRR-49(V): Same as 2-AN/TRA-19(V) except
Correction Material: T-6, NS0967-114-2015 to NSO967-1142010

1-AN/FRR-58A: Mechanical Modification to Improve Performance

Correction Material: T-1, NS0367-166.3011 to TM, NS0367-166.3010

1-A FA-2 NS0367-166.3030
SERIAL: All equipment

1-AN/FRR-59: Same as 1-AN/WRR-2
2-AN/FRR-59: Elimination of Shock Hazard to Personne!
Correction Material: T-1, NS0967-105-2015 to NS0967-106. 2010 (NS93550(A)) and T-S, NS0967-137-3015 to NS0967-137. 3010 (NS94715)

4-A FA-1 NS0967-106-2040
SERIAL: All equipments
IDENTITY: Proper secording of the field change number on the field changes accomplished plate.

3-AN/FRR-59: Same as 3-AN/WRR-2 except

ElC QB0F000
1-AN/FRR-59A: Same as 2-AN/FRR-59
2-AN/FRR-59A: Same as 3-AN/WRR-2 except

EIC QB0G080
3-AN/FRR-59A: Radio Receivers - Fuse Value Changes to Protect Power Supplies

2-A FA-1 EIB 877 EIC QBOG000
SERIAL: All serial numbers
IDENTITY: Fuses F-601 and F-651 are 1-1/2 Ampere 'fast blow type (F02A-250V 1.5A).

1-AN/FRR-59B: Same as 2-AN/FRR-59

2-AN/FRR-59B: Same as 3-AN/WRR-2 except
EIC QBOHOOO
1-AN/FRR-60(V): (Commercial designations DDR-5A and DDR-5B); Replacement of Cathode Resistors in Voltage Reg. ulator Section of PP-3341/FRR-60(V) (HFP-1) Power Supply

Correction Material: To TM for AN/FRR-60(V); NS No. pending

2-A YF-1
None
SERIAL: All equipments (serial numbers less than 19544)
IDENTITY: Pull out the HFP-1 power supply chassis drawer. Remove top cover. Examine terminal boards TB8001 and TB8002. The values of R8010, R8011, R8019, R8020 should be 18 ohms, 2 watts, $5 \%$ tolerance.

2-AN/FRR-60(V): Increased Output of the Audio Sync Tone
Correction Material: T. to TM for AF Amplifier Model HFA-1 (AM-3296/FRR-60(V) Issue date 15 April 1963)

2-A FA. 1 EIB 769
ElC FF9T000
SERIAL: Only those equipments located in high noise environments
IDENTITY: Absence of resistors R7118 and R71 19 and the presence of a jumper in place of R7il8 in the HFA dsawer.

1-AN/FRR-87: Increase 1-F Bandwidth on Selected Equipments

Correction Material: Ch. I, NE0967-LP.468-7011 to NE0967-LP.468-7010

1-A FA-3 NE0967-LP-468-7030 EIC QB45000 SERIAL: One only of three AN/FRR-87's installed in the AN/FRR-93
IDENTITY: The new filter assemblies are marked with part numbers 89199-0003278-5,-6,-7, and -8 in receivers I, 2, 3, and 4 , respectively. Labels are affixed to receiver modules and to front panel of AN/FRR-87's to indicate wideband i-f filters have been installed.

## 1-AN/FRR-502: Same as 2-AN/FRR-49(V)

2-AN/FRR-502: Same as 3-AN/FRR-49(V)
3-AN/FRR-502: Same as 4-AN/FRR-49(V)

4-AN/FRR-502: Same as 2-AN/FRA-19(V) except
Correction Material: T-6, NS0967-114-2015 to NS0967-114. 2010

1-AN/FRT-S: Operational Characteristic Improvement

2-A FA

None

SERIAL: All

2-AN/FRT-5: Current Limiting Resistor for K-401A Change
Correction Material: T.S, NS0967-198-2015 to TM, NS0967-198-2010 (formerly NS91183)
2-A FA-I NS0967-198-2030
None

SERIAL: All

3-AN/FRT-5: RF Oscillator Modification
Correction Material: T-S, NS0967-198-2015 to TM, NS0967-198-2010 (formerly NS91183)
2-A FA.8 NS0967-198-2030 None SERIAL: All

4-AN/FRT-5: Power Supply Modification
Correction Material: T-S, NS0967-198-2015 to TM,
NS0967.198-2010 (formerly NS91 183)
2-A FA-8 NS0967-198-2030 None
SERIAL: All

5-AN/FRT-5: Installation of Output Tuning Indicator in FR Oscillators

Correction Material: T-3 to NS91183
2-A FA-2 NS981216
None
SERIAL: All
IDENTITY: Presence of indicator at center of O-91/FRT-S series oscillator panel.

6-AN/FRT-5: Protective Device for Blower Motor B-301
Correction Material: T-S, NS0967-198-2015 to TM, NS0967.198-2010 (formerly NS91183)

2-A FA-] NS0967-198-2030 None
SERIAL: All
IDENTITY: Presence of a fuse holder and fuse connected in one leg of the input of blower motor B-301 of the subject power supplies.

1-AN/FRT-5A: Same as 1-AN/FRT-5

2-AN/FRT-5A: Same as 2-AN/FRT-5
3-AN/FRT-5A: Same as 3-AN/FRT-5
4-AN/FRT-5A: Same as 4-AN/FRT-5
5-AN/FRT-5A: Same as 5-AN/FRT-S except Correction Material: T-1 to NS91457(A)

1-AN/FRT-5B: Same as 1-AN/FRT-5

2-AN/FRT-5B: Same as 2-AN/FRT-5
3-AN/FRT-5B: Same as 3-AN/FRT-5
4-AN/FRT-5B: Same as 4-AN/FRT-5
5-AN/FRT-5B: Major Modiśication oì AN̄/FRT-SB 2-A FA

None
SERIAL: All shore equipments
1-AN/FRT-6: Cancelled
2-AN/FRT-6: Change to Facilitate Use of High or Low Power Correction Material: T-1 to NS91263
2-A FA-12 NS981167 None
SERIAL: Where change from high power ( $40 \mathrm{kw)} \mathrm{to} \mathrm{low}$ power ( 15 kw ) and vice-versa are req̣uired.
IDENTITY: Presence of an 18 -inch-by-14-inch Mycalex pane] mounted above the T-225A/FRT-5 and AM-305A/FRT-6 cabinets.

3-AN/FRT-6: Installation of Output Tuning Indicator on RF Oscillators

Correction Material: T-2 to NS91263
$\begin{array}{llll}\text { 2-A } & \text { FA-2 } & \text { NS9812i6 }\end{array}$
SERIAL: All
IDENTITY: Presence of indicator at center of O-91/FRT-5 series oscillator panel.

1-AN/FRT-6A: Cancelled

2-AN/FRT-6A: Same as 2-AN/FRT-6 except
Correction Material: T-1 to NS91404(A)
3-AN/FRT-6A: Same as 3-AN/FRT-6 except
Correction Material: T-2 to NS91404(A)
1-AN/FRT-6B: Cancelled
2-AN/FRT-6B: Same as 2-AN/FRT-6 except
Correction Material: T-2 to NS91739

3-AN/FRT-6B: Major Modification to AN/FRT-6B
2-B YF
None SERIAL: Al]
IDENTITY: Modifies equipment designation to AN/FRT-6D.

## 1-AN/FRT-6C: Cancelled

2-AN/FRT-6C: Same as 2-AN/FRT-6 except
Correction Material: T-1 to NS92596(A)
3-AN/FRT-6C: Same as 3-AN/FRT-6B
1-AN/FRT-15: Deenergizing of Modulator Tubes and Blower Motor During CW and FSK Modes of Operation

Correction Material: T-2 to NS91690(A)
2-A FA-2 NS981312 None SERIAL: All
IDENTITY: With MAIN LINE circuit breaker and FILA. MENT switch in the ON position, if either A2 or A3 is dialed, blower B-1501 will operate.

2-AN/FRT-15: Removal of One Filament and Plate Voltages from Radio Modulator MD-137/FRT-15 in CW or FSK Modes of Operation

Correction Material: T-3 to NS91690(A)
2-A FA-I NS98 1348 None
IDENTITY: When the equipment is operated in the CW or FSK modes, the filaments of all audio tubes will be extinguished. The filaments of these tubes will be lighted when the equipment is operated in the Phone and MCW modes.

3-AN/FRT-15: Replaces R-3154, 3155, 3165, and 3166 in Frequency Selector Mixer CV-276/FRT-15A and Frequency Selector Mixer CV-149/FRT-15; Replaces R3305, 3306, 3310, and 3311 in Frequency Selector C-1245/FRT-15A and Frequency Selector C-855/FRT-15

Correction Material: None
2-A FA-2 NS981349 None SERIAL: All
IDENTITY: See bulletin
4-AN/FRT-15: Replacement of Resistors R-1538 through R. 1556 in Radio Modulator MD-137A/FRT-15

Correction Material: T.S to NS91690(V)
2-A FA-2 NS981351
None
SERIAL: All equipments which have experienced failure of resistors
IDENTITY: Resistors are solid (1) color, with the ohmic values and wattage ratings stamped on them.

## 5-AN/FRT-15:

Correction Material: T-6 to NS91690(A) נ-C YF-SO NS981405

1-AN/FRT-15A: Wiring Change to Deenergize Modulator Tubes and Blower Motor During CW and FSK Modes of Operation

Correction Material: T-3 to NS91848(A)
2-A FA-2 NS981165
None SERIAL: All
IDENTITY: With MAIN LINE circuit breaker and FILAMENT switch in the ON position, if either A2 or A3 is dialed, blower 8-1501 will operate.

2-AN/FRT-15A: Same as 1-AN/FRT-i5 except Correction Material: T-4 to NS91848(A)

3-AN/FRT-15A: Same as 3-AN/FRT-15 except
Correction Material: T-S to NS91845(A)

4-AN/FRT-15A: Same as 4-AN/FRT-15 except Correction Material: T-6 to NS91848(A)

5-AN/FRT-15A: Same as 5-AN/FRT-5

1-AN/FRT-17: Removal and Replacement of C417, L603, R609, and R610

Correction Material: T-3 to NS91963
1-A FA-1.5 NS98574 F5820-325-
7483
SERIAL: 1-159
IDENTITY: R-609 and R-610 (adjacent to C-601) removed from CU- 362 and C- 417 changed from 100 mmf to 47 mmf (mounted on TB-405) in AM-766.

2-AN/FRT-17: Remote Control Voice
Correction Material: T-5 to NS91963
1-A FA-I NS981098 None
SERIAL: All
IDENTITY: Terminal 6 on sw S813F removed from ground and connected to terminal 5 .

3-AN/FRT-17: Change to RF Power Amplifier Sub-Assembly Chassis

Correction Material: None
2-A FA- NS0967-099-2050
None
SERIAL: All
IDENTITY: Presence of two machine screws installed on top front sides of drawer for easy removal of top bracket.

1-AN/FRT-18: Caps in AM-897/FRT, modif
Correction Material: T-3 to NS92018
A FA-2 NS98558
None
SERIAL: BUSHIPS 1, $3-44$
IDENTITY: Addition of capacitors C-963 thru C968
2-AN/FRT-18: Removal of C-417, C901, C902, L603, chg; R609, R610

Correction Material: T-\& to NS92018
1-A FA-2 NS98575
F5820-568-
7818

SERIAL: 1-95
IDENTITY: C-901 and C-902 are changed to 200 mmf .
3-AN/FRT-18: Same as 2-AN/FRT-17 except
Correction Material: T-6 to NS92018

4-AN/ERT-18: Same as 3-AN/FRT-17
5-AN/FRT-18: Disabling of Modulator Section When Transmitter is Not Used for A-3 Emission

Correction Material: T-8, NS0967-099-2013 to TM, NS0967-099-2010 (formerly NS92018)

2-A FA-1 NS0967-099-2060 None
SERIAL: When transmitter is not expected to be used for A-3 type of emission
IDENTITY: Accomplishment can readily be detected by the absence of vacuum tubes in the modulator section of the transmitter.

1-AN/FRT-19: Antenna Helix Tuning Relay Modification Correction Material: None
1-A FA-2 NS98677 F5820-590.

SERIAL: All
IDENTITY: Contact pres springs mtd on ant helix tuning relay.

2-AN/FRT-19: Radio Transmiter Circuit and Mechanical Modification<br>Correction Material: T-4, NS0967-238-3011 to TM, NS0967-238-3010 (formerly NS92117)<br>NS0967-238-3030

SERIAL: All installed

1-AN/FRT-24: Ground Switch S- 102 Drive Shaft and Install C-106A

Correction Material: T-4 to NS92223(A)
2-A FA-2 NS0967-117-0040 None
SERIAL: All
IDENTITY: The insulated flexible shaft coupling 0-121 on modified equipments, has been replaced by noninsulated flexible shaft coupling.

2-AN/FRT-24: Improving Reliability of Channel indicator Circuits in Transmitier AN/FRT-24

2-A FA-2 NS0967-117-0060
None
SERIAL: All
IDENTITY: Substitution of a two watt resistor for a one watt resistor (R-161) in the Auto tune System.

3-AN/FRT-24: Replacement of R-149 in T-440/FRT-24 to Reduce Excessive Radiation

Correction Material: T-5, NS0967-117-0011 to TM, NS0967-117-0010 (formerly NS92223(A))

2-A FA-1 NS0967-117-0050 None
SERIAL: T-440/FRT-24 Serial 224 and higher, and T-440A/ FRT-24 all
IDENTITY: R-149 is a 2000 ohms resistor.

4-AN/FRT-24: Provision for Lifting Handles for the Side

Panels of the Transmitter Cabinet Correction Material: None required
2-A YF-1 NS0967-117-0050
None
SERIAL: All
IDENTITY: Close observation of the chrome trim strips on the side panels of the transmitter will reveal that the center trim strip on each side panel has been separated from the side panel by means of $3 / 4$ inch spacers.

5-AN/FRT-24: (C-1362/FRT-24), VU Meter Readings
Correction Material: None
2.A FA-I NS0967-117-0050 None

SERIAL: All
IDENTITY: Recording of field change number on Field Change Accomplished plate.

1-AN/FRT-25: Same as 3-AN/FRT-15 except
Correction Material: T-1 to NS92431
2-AN/FRT-25: Same as 5-AN/FRT-15
1-AN/FRT-27: Same as 6-AN/FRT-5 except
Correction Material: T-3, NS0967-198-5012
1-AN/FRT-27A: Protection of the Secondary of the 1500 Power Supply

Correction Material: T-1, NS0967-033-8044 to NS0967-0338040
1.A FA. 4 NS0967.033-8050 EIC

SERIAL: All serial numbers
IDENTITY: In units 3 and 6 , a phenolic or plastic base with 3 fuses will be mounted on the right side wall. The fuses will be separated from the plastic by ceramic stand-offs, and held to the base by fuseclips.

1-AN/FRT-39: Convenience Outlet
Correction Material: T-1, NS0967-101-9012 to TM, NS0967-101-9010 (formerly NS94430)

2-A FA-1 NS0967-101-9040
SERIAL: All
IDENTITY: Proper recording of the appropriate field change number on the Field Change Accomplished plate.

1-AN/FRT-39A: Removal of Capacitors
Correction Material: T-1, NS0967-101-9012 to TM, NS0967-101-9010 (formerly NS94430)

2-A FA-3 NS0967-101-9040 None SERIAL: Equipment delivered and not modified.
IDENTITY: Capacitors C-2007 thru C-2014 have been removed.

## 2-AN,FRT-39A: Same as 1-AN/FRT-39

1-AN,FRT-39B: Same as 1-AN/FRT-39A except
Correction Material: NS93699

2-AN/FRT-39B: Same as 1-AN/FRT-39
1-AN/FRT-39C: Same as I-AN/FRT-39

## 1-AN/FRT-39D: Same as 1-AN/FRT-39

1-AN/FRT-39N: Replace Resistor R-108 and Fuse F-103 on the Standing Wave Control Unit (SWCU)

Correction Material: T-1, NS0967-377-3011 to NS0967-3773010; T-1, NS0967-377-4031 to NS0967-377-4010

2-A FA-2 NS0967-377-3030 EIC QE00000 SERIAL: All AN/FRT-39s and AN/FRT-40s which contain the SWCU.
IDENTITY: This field change may be identified by R-108 being a four watt value and $\mathrm{F}-103$ being rated at 0.250 amp .

1-AN/FRT-40: Same as 1-AN/FRT-39A except
Correction Material: NS93167
2-AN/FRT-40: Same as 1-AN/FRT-39
1-AN/FRT-40A: Same as 1-AN/FRT-39
2-AN/FRT-40A: Installation of Operative VSWR Overload Protection Circuit

Correction Material: Ch. 1, NSO967-158-9011 to NS0967-158-9010
2.A FA-4 NS0967.158-9030 EIC QE6C000

SERIAL: AN/FRT-40A - all serial numbers; AN/FRT-40B all serial numbers; AN/FRT-40C - all serial numbers
IDENTITY: Upon completion of this field change, SWR meter M8205 will be a type containing two indicator pointers.

1-AN/FRT-40B: Same as 1-AN/FRT-39

## 2-AN/FRT-40B: Same as 2-AN/FRT-40A

1-AN/FRT-40C: Same as 2-AN/FRT-40A
1-AN/FRT-40J: Same as I-AN/FRT-39N except
Correction Material: T-1, NSO96T-377-3011 to NS0967-377. 3010; T-1, NS0967-377-4011 to NS0967-377-4010

1-AN/FRT-61: Engineering Design Changes
Correction Material: T- to NS94592

## NS981686

1-AN/FRT-67: Same as 1-AN/FRT-64
2-AN/FRT-67: Replacement of Main Circuit Breakers in Units 22, 33, 35, 36, and 37

Correction Material: The Technical Manuals for AN/ FRT-67, VLF Radio Transmitter (U), Australia have been revised according to their respective Change Notice, dated 20 October 1970.

1-A FA-80 NS0967-384-5080
SERIAL: All equipments
IDENTITY: This field change has been accomplished if the circuit breakers in Units 22, 33, 35, 36, and 37 are ITE Types CJ3B400, CJ3B250, CF3B030 and CF3B090.

1-AN/FRT-72B: Eliminate Network Vibration
Correction Material: T-1, NS0967-238-9011 to NS0967-2389010

## 1-A FA-4 NS0967-238-9050

QEOW000
SERIAL: All serials
IDENTITY: In units 3 and $6, \mathrm{Cl}, \mathrm{C} 2$, and C 3 , are placed between two plastic panels $(6 \times 5 \times 1 / 4)$

2-AN/FRT-72B: Protects the Secondary of the Power Amplifier Screen Supply

Correction Material: T-1, NS0967-238-9012 to NS0967-2389010

1-A FA-4 NS0967-238-9060 EIC QEOW000

## SERIAL: All serials

IDENTITY: In units 3 and 6, a phenolic or plastic base with 3 fuses will be mounted top of CR2. The fuses will be separated from the plastic by ceramic stand-offs, and held to the base by fuseclips. See figure 3.

1-AN/FRT-83(V): Replacement of the Side Carrier Generator (A9) With A Side Carrier Generator Simulator (A20) in the Modulator-Synthesizer, MD-777/FRT

Correction Material: Change I, NS0967-292-9031 to NS0967-292-9030

1-A FA-1 NS0967-292-9110
EIC QE00000
SERIAL: All equipment serial numbers
IDENTITY: This field change eliminates the use of the (4) ISB (4 independent sidebands) function of the sideband selector switch. To insure that the field change has been adequately incorporated, select the (4) ISB mode of the sideband selector switch and note: although the functional characteristics of the (4) ISB mode have been eliminated, the transmitter fail light should remain off indicating no fault. All other modes should function normally.

2-AN/FRT-83(V): Modification for Independent Control of the Two ll5VAC Branch Circuits Controlled by Circuit Breaker 8A1CB3

Correction Material: T-1, NS0967-292-9012 to NS0967-2929010; T-1, NS0967-292-9062 to NS0967-292-9060

2-A FA-4 NS0967-292-9120 EIC QE6N000
SERIAL: Ail serial numbers
IDENTITY: The 115 VAC supply to outlet strip 8A3 will be from a separate external source and controlled by circuit breaker 8A1CB4.

3-AN/FRT.83(V): Modification of Frequency Shift Keyer KY655/FRT

Correction Material: T-1, NS0967-292-9021 to NS0967-2929020

II-A FA-2 NS0967-292-9140 EIC QE6N000 SERIAL: All serial numbers
IDENTITY: Noting that with the mode switch in the CW position, CW mode operation is permitted using any of the input signal levels indicated on the TГY input selector switch.

4-AN/FRT-83(V): Internal, External Frequency Standard MD777/FRT

Correction Material: T-1, NS0967-292-9031 to NS0967-2929030

4-A FA-I NS0967-292-9130
EIC QE6N000
SERIAL: All serial numbers

IDENTITY: Upon loss of the external frequency standard, the STANDARD FAIL light on the MD-777/FRT will illuminate, and the transmitter will cont enue to function, due to automatic switch-over to the internal standard.

## 5-AN/FRT-83(V): Improved Antenna Interlock

Correction Material: T-2, NE0967-292-9013 to NE0967-292-9010

IV-A FA-1 NE0967-292-9150 EICQE6N000

## SERIAL: All serial numbers

IDENTITY: Upon opening the antenna interlock the STANDBY light on the modulator synthesizer will remain illuminated.

6-AN/FRT-83(V): Replacement of the Bridge Rectifiers (2AICR2/2AICR3)

Correction Material: T-3, NS0967-292-9014 to NS0967-2929010

III-A FA-1 NS0967-292-9160 EIC QE6N000
SERIAL: All serial numbers
IDENTITY: The presence of the two new type bridge rectifiers in Power Supply PP-6067/FRT can be identified by noting the part number 130072014 SC 3 on the printed circuit board of the bridge rectifiers.

7-AN/FRT-83(V): Transmitting Set Cooling
Correction Material: Ch. 2, NE0967-LP-292-9015 to NE0967-LP-292-9010; Ch. 3, NE0967-LP-292-9034 to NE0967-LP-292-9030; Ch. 2, NE0967-LP-292-9063 to NE0967-LP-292-9060

3-A FA-24 NE0967-LP-292-9170 EIC QE6N000
SERIAL: All serial numbers
IDENTITY: Air intake/alarm panel 8A6 instalied at top of cabinet rack in place of blank panel.

1-AN/FRT-84V): Same as 1-AN/FRT-83

2-AN/FRT-84(V): Same as 3-AN/FRT-83(V) except
EIC QE6P000
3-AN/FRT-84(V): Addition of Circuit Breaker 8A1CB3
Correction Material: T-1, NS0967-293-0012 to NS0967-2930010; T-1, NS0967-293-0022 to NS0967-293-0020

1-A FA-4 NS0967-293-0070 EIC QE6P000 SERIAL: All serial numbers
IDENTITY: The 115 VAC supply to outlet strip 8A3 will be from a separate external source, protected and controlled by circuit breaker 8A1CB3.

4-AN/FRT-84(V): Same as 4-AN/FRT-83(V) except
E1C QE6P000

5-AN/FRT-84(V): Improved Antenna Interlock
Correction Material: T-2, NE0967-293-0013 to NE0967-293-0010

IV-A FA-1 NE0967-293-0080 EICQE6P000
SERIAL: All serial numbers
IDENTITY: Upon opening the antenna interlock the

STANDBY light on the modulator synthesizer will remain illuminated.

6-AN/FRT-84(V): Same as 6-AN/FRT-83(V) except
Correction Material: T-3, NS0967-293-0014 to NS0967-293-
0010 and EIC QE6P000
7-AN/FRT-84(V): Transmitting Set Cooling
Correction Material: Ch. 2, NE0967-LP-293-0015 to NE0967-LP-293-0010; Ch. 2, NE0967-LP-293-0023 to NE0967-LP-293-0020; Ch. 4, NE0967-LP-292-9035 to NE0967-LP-292-9030

I-A FA-24 NE0967-LP-293-9170 EIC QE00000 SERIAL: All serial numbers
IDENTITY: Air/intake/alarm panel 8A6 installed at top of cabinet rack in place of blank panel.

1-AN/FRT-85(V): Same as 3-AN/FRT-83(V) except
EIC QE6Q000

2-AN/FRT-85(V): Same as 4-AN/FRT-83(V) except
EIC QE6Q000
1-AN/FRT-86(V): Same as 1-AN/FRT-83
2-AN/FRT-86(V): Same as 3-AN/FRT-83(V) except
EIC QE6R000

3-AN/FRT-86(V): Same as 4-AN/FRT-83(V) except
EIC QE6R000
1-AN/FSA-17: NS981659-Virginia Elec. 87707. Refer to page 24.

1-AN/FSC-1(V): Replacement of Keying Relay Panel and Miscellaneous Changes

Correction Material: None
1-B YF-16 NS98987
None
SERIAL: Stations 10-13
IDENTITY: Addition of Power Supply and Keying Relay Panels.

## 2-AN/FSC-1(V): SECRET

3-AN/FSC-1(V): Addition of Dummy Load G-269646
Correction Material: None
1-A YF-16 NS981038 None
SERIAL: 10-13
IDENTITY: G-269646 installed with transmitter AN/FRT-24
1-AN/FSH-7(V): Capstan Motor Protection Fuse
Correction Material: T-1, NS0967-266-5011 to TM,
NS0967-266-50i0
II-A YF-1 NS0967-266-5040
SERIAL: AN/FSH-7 (RD-310 and RD-311) equipments
IDENTITY: Presence of double fuse clip on left side and
single fuse clip on right side of the preamplifier chassis (A9AI).

2-AN/FSH-7(V): Heat Sink and Zener Assembly Transistor Replacement

Correction Material: T-2, NS0967-266-5012 to TM, NS0967-266-5010

II-A YF-1 NS0967-266-5050
SERIAL: AN/FSH-7 (RD-310 and RD-311 equipments)
IDENTITY: Presence of a standoff mounted transistor in the heat sink and zener assembly (A7A2Q2, A7A3Q2) and a 2N3773 transistor in the A7A2QI and A7A3QI position of the assembly.

3-AN/FSH-7(V): Resistor Replacement in Power Supply Chassis

Correction Material: T-3, NS0967-266.5013 to TM, NS0967-266-5010

II-A YF-1 NS0967-266-5060
SERIAL: AN/FSH-7 (RD-310 and RD-311) equipments IDENTITY: Presence of a 3 watt, wirewound resistor in R4, R5, and R6 position in the Power Supply Chassis (A8) of the AN/FSH-7(V) equipment.

4-AN/FSH-7(V): Installation of High Vacuum Inhibit Switch
Correction Material: T-4, NS0967-266-5014 to TM,
NS0967-266-5010
2-A FA-1 NS0967-266-5070
SERIAL: All
IDENTITY: Single pole single throw toggle switch on the left side of A6TBI.

5-AN/FSH-7(V): Relay Replacement in 30 VDC Circuit Switch

Correction Material: T-5, NS0967-266-5015 to TM, NS0967-266-5010

1-A NS0967-266-5080
SERIAL: AN/FSH-7 (RD-310 and RD-311) equipments
IDENTITY: Location of an SPST toggle switch.
6-AN/FSH-7(V): Reproduce Monitor Switch Reinforcement Correction Material: None
2-A FA-I NS0967-266-5130
SERIAL: AN/FSH-7 (RD-310 and RD-311) equipments.
7-AN/FSH-7(V): Access to Heat Sink and Zener Assemblies on Chassis A7

Correction Material: None
2-A FA-2 NS0967-266-5090
SERIAL: RD-310/FSH-7(V) and RD-311/FSH-7(V) - All serial numbers
IDENTITY: The front panel on A7 chassis can be opened to a working position for maintenance on the Heat Sink and Zener Unit Transistor (QI) can be replaced by the removal of two (2) mounting screws.

8-AN/FSH-7(V): Multiple Tape Loop Buffer
Correction Material: None
2-A FA-2 NS0967-266-5100
SERIAL: RD-310/FSH-7(V) and RD-311/FSH-7(V) - All
serial numbers

IDENTITY: The storage bin roller (A9MP30) will be replaced with a fixed part having a wedge type cut-out encountering the tape as it comes from the storage bin

9-AN/FSH-7(V): Installation of Resistor in Heat Sink and Zener Assembly

Correction Material: T-7, NS0967-266-5017 to NS0967-2665010

2-A FA-0.5 NS0967-266-5110
SERIAL: RD-310/FSH-7(V) and RD-311/FSH-7(V) - All serial numbers
IDENTITY: Presence of a 100 ohm resistor between the QI-base/Q2-emitter junction and ground on the A7A2 and A7A3 assemblies.

10-AN/FSH-7(V): Reproduce Transfer Switch Indicator
Correction Material: T-8, NS0967-266-5018 to NS0967-266. 5010

2-A FA-2 NS0967-266-5120
SERIAL: RD-310/FSH-7(V) and RD-311/FSH-7(V) - All serial numbers
IDENTITY: Presence of a lamp indicator immediately to the right of the 'THREAD/READY' indicator on the control panel.

11-AN/FSH-7(V): Adjustable Capstan Motor Lamp with Holder

Correction Material: T-9, NS0967-266-5019 to NS0967-2665010

2-A FA-0.5 NS0967-266-5130
SERIAL: RD-310/FSH-7(V) and RD-311/FSH-7(V) - All serial numbers
IDENTITY: Presence of an adjustable type lamp holder within the housing of the capstan motor. There are no external indications of accomplishment.

12-AN/FSH-7(V): Conversion of Equipment to Operate at 30 IPS and Accept NRL 'Universal' Head (This field change is the same as $19-\mathrm{AN} / \mathrm{FLR}-\mathrm{Il}(\mathrm{V})$ which appears in the Countermeasures EIMB Handbook.)

Correction Material: None required
3-A FA-80 NS0967-046-3390 None SERIAL: All
IDENTITY: The tape recorders in the system will operate at 30 ips and will be equipped with the NRL 'Universal' head. All Time Distribution Panels will be equipped with a switch for obtaining one pulse at 15 minute or 30 minute intervals.

13-AN/FSH-7(V): Replacement of Potted Computer (A7A4A7A5), Converter (A7A6-A7A7), and Control (A7A8-A7A9) Modules with Repairable Unpotted Units

Correction Material: T-10, NE0967-266-5203 to NE0967-266-5010, Supp. Tech Man NE0967-266-5150

II-A YF-1 NE0967-266-5140
SERIAL: RD-310/FSH-7(V) and RD-311/FSH-7(V) - All serial numbers
IDENTITY: Presence of exposed components on printed circuit boards in lieu of potted modules at positions A7A4, A7A5, A7A6, A7A7, and A7A8 and A7A9 in the AN/FSH$7(V)$ equipments.

14-AN/FSH-7(V): Maintenance Switch for the AN/FSH-7(V) Equipment

Correction Material: T-11, NS0967-266-5204 to NS0967-266-5010

II-A YF-i NS0967-266-5170
SERIAL: All serial numbers
IDENTITY: A7A14SI is a DPST switch. The labeling on Sl (Fault Transfer Switch) located on Logic A Card (A7A14) will indicate 'MAINT' in the out position.

15-AN/FSH-7(V): Component Change to Improve Time Following Error

Correctson Material: T- to NS0967-266-65010
II-A FA-I EIB 861
SERIAL: All serial numbers
IDENTITY: Presence of a 015 ufd capacitor across resistor Rl on terminal A7A!.

16-AN/FSH-7(V): Modification of the XDS3 Lamp Socket Mounting Plate

## Correction Material: None

II-A FA-. 75 EIB 863
SERIAL: All serial numbers
IDENTITY: Ability to reposition the lamp socket mounting plate when the mounting plate securing screws have been loosened.

17-AN/FSH-7(V): Modification of Reel Knobs A9MP25
Correction Material: To TM NS0967-266-5010 published in EIB 867

II-A FA-2 *See note
SERIAL: All serial numbers
IDENTITY: Presence of set screws vice a rolled pin holding the reel hub to the shaft.
NOTES: *None assigned - A field change kit consisting of Nava! Research Laboratory (NRL) Technical Memorandurn 5470-300a NRL Prob R06-03 dated 26 Sept. 1973, and necessary parts was furnished to the cognizant activities. A field change number was assigned for configuration puiposes only.

18-AN/FSH-7(V): Improve Response of Tape Control Signal. Correction Material: NE 0967-266-5010 per EIB 895
2-A FA-4 EIB 895
SERIAL: All serials
IDENTITY: A7A15 C24 is 1.0 ufd. A2A15 R7 is 2.2 ohms. A 2A15AlR4 is 6.8 ohms.

19-AN/FSH-7(V): Modification of AN/FSH-7(V) to Provide Tape Loop Operation

Correction Material: T-13, NE0967-266-5207 to STM, NE0967-266-5010, and new STM, NE0967-LP-266-5190

1-A FA-16 NE0967-LP-266-5180 EIC QK11 SERIAL: All serial numbers
IDENTITY: Changes plainly visible on front of tape deck A9: large rectangular panel of tape monitor in upper left-hand corner, and precision plate carrying erase head and new tape guide rollers above the reproduce station.

1-AN/FSQ-59(V): Modification to Distribution Amplifier AM-

4874/FSQ-59(V)
1-A FA-8 NS0967-269-2120
SERIAL: All equipment
2-AN/FSQ-59(V): Modification to Distribution Amplifier AM-4874/FSQ-S9(V)

1-A FA-8 NS0967-269-2190
SERIAL: All AM-4874/FSQ-59(V) Distribution Amplifiers
3-AN/FSQ-S9(V): Modification to Outstation Processor Group OL-17(V)/FSQ-59(V) Teletypewriter Buffer Cabinet

I-A FA-4 NS0967-269-2200
IDENTITY: Presence of switch ABI-OPU on the Teletypewriter Buffer Cabinet panel located between TT-552(AI) and Tr.553(A2).

4-AN/FSQ-59(V): Modification to Cabinets CY-6308/F and CY-6318/FSQ-59(V)

Correction Material: None required
1-A FA-0.5 NS0967-269-2210
SERIAL: All equipment serial numbers
IDENTITY: Presence of cam stop on latch assembly.
5-AN/FSQ-59(V): Modification to C-7431/FSQ-59(V) Control Pane!

Correction Material: Ch. 1, NE0967-LP-269-2111 to TM, NE0967-LP-269-2110

1-A FA-2 NE0967-LP-269-2220 EIC QK13
SERIAL: All C-7431/FSQ-59(V) serial numbers
IDENTITY: The audible alarm unit is mounted abutting the C-7431/FSQ-59(V) control panel container.

1-AN/FIA-15A: Signaling Tone Output Level
Correction Material: T-1, NS0967-035-700t to NS0967-035. 7000

2-A FA.0.5 NS0967-035-7020
SERIAL: All equipments
IDENTITY: Checking the value of R26 on card A2A4. 15,000 ohms indicates this field change has been accomplished.

1-AN/FYA-7(V): Same as 4-AN/FSQ-59(V)
1-AN/GIC-17(V): Installation of Input Protection Fuses
Correction Material: T-1, NS0967-169-8011 to TM, NS0967-169-8010

I-A FA-2 NS0967-169-8020
SERIAL: All serial numbers
IDENTITY: Two fuseholders are installed on front panel below handset holder.

2-AN/GIC-17(V): Installation of Recorder Audio Output Circuit

Correction Material: T-2, NS0967-169-8012 to TM, NS0967-169-8010

1-A FA-30 NS0967-169-8030
SERIAL: All serial numbers
IDENTITY: Presence of a BNC connector on rear of case labeled 'Recorder Audio-J9.

1-AN/GMQ-2: Replacement of NT291529 Timer Fans
$\begin{gathered}\text { A FA-2 NS } 98164 ~\end{gathered}$ None

SERIAL: 1-125
IDENTITY: A phosphor-bronze fan is installed replacing steel fan inside timer unit.

2-AN/GMQ-2: Ceilometer Equipment
SERIAL: 1.125
1-AN/GRA-34: Short Alarm Circuitry and Simplification of Alignment Procedure

Correction Material: Change 1 to NS93121(A)
1-A FA-16 NS981094 F5820-542-
7137
SERIAL: 1-447
IDENTITY: Tube XVIIO in monitor chassis changed from a 5654 to a 6AS6W, and resistor R-1327 (sw. chassis) removed.

2-AN/GRA-34: Operational and Maintenance Improvements Correction Material: None
i-A YF-S NS0967-134-2050 None SERIAL: All
IDENTITY: Presence of screen covers on all four sides of monitor and screen guard over blower motor.

3-AN/GRA-34: Installation of Product Improvements
2-A FA-2 NS0967-134-2060 F5825.970-

SERIAL: 1-452
4-AN/GRA-34: Replaces SA-544/GRA-34, Antenna Transfer Switching Unit to Prevent Transmission into an open line (SA-544/GRA-34 becomes SA-549A/GRA-34)

Correction Material: T- to NS93121(A)
I-A YF-2 NS0967-134-2070
SERIAL: All
IDENTITY: The new Antenna Transfer Switching Unit has no manual switching knobs on front; Antenna-On-Air indicators and monitor panel are iocated on íront panei.

1-AN/GRA-40: Addition of Receptacle for Motor Control Cable

Correction Material: T-1 to NS93595
2-A FA-8 NS981507 None
SERIAL: All
IDENTITY: At Radio Frequency Tuner TN-357/GRA-40, note the addition of a receptacle box in the entrance hole provided for the motor control cable stuffing tube.

1-AN/GRA-60: Replacement of Diodes CR-213 and CR-214 (IN1341)

Correction Material: T-1 to NS94118 and NS94118.61
1.A FA-S NS981684 F5825-056. 7147
SERIAL: All
IDENTITY: The new diode has the identification number INI 202 stamped on it.

1-AN/GRA-61: Same as 1-AN/GRA-60
1-AN/GRC-9: Cancelled
1-AN/GRC-27: Panel J-390/GR Modification

Correction Material: T-1 to T.O. 16-30GRC27, T-1 to T.O. 16-30GRC27-4

## 2-B FA-4 <br> NS98435 <br> F5820-642-

6985
SERIAL: All w/CU-255/UR
IDENTITY: Terminal Strips E-710 and E-71I
2-AN/GRC-27: Shock and Vibration Improvement Correction Material: T-6 to NS92774

2-A FA-2 NS98750
None
SERIAL: All on ships
IDENTITY: Modifjes equipments to AN/GRC-27A
NOTES: F.C. 5 must be accomplished in conjunction with this field change.

3-AN/GRC-27: Conversion of Power Supply from Intermittent to Continuous Operation

Correction Material: T-1 to T.O. 16-350A104-3
1-B YF-8 NS98654
2N5820-336-

SERIAL: All with MD-129/GR
IDENTITY: Required if air inlets on front panel are louvered metal cans filled with steel wool.
NOTES: F.C. 6 must be accomplished in conjunction with this field change

4-AN/GRC-27: Modification to Permit Continuous Operation Correction Material: T-4 to T.O. 16-350A104-3; T-5 to T.O. 16-350A104-4

1-A YF-4 NS0967-031-8080 2N5825-665-
1246
SERIAL: 2146-2149, 2151, 2153, 2155, 2156, and 2161
IDENTITY: Required if P.A. blower is gear driven and has black bakelite housing.

5-AN/GRC-27: Ground Mounting Rack Modification

## 3-A YF-4 NS0967-031-8090 <br> 2N5820.669

7922
SERIAL: All on ships
IDENTITY: Equipments becomes AN/GRC-27A
NOTES: F.C. 2 must be accomplished in conjunction with this field change.

6-AN/GRC-27: MD-129/GR, Cross Brace Modification
2-A YF-3 NS0967-031-8100 2N5820-6427928
SERIAL: 2154-2773
IDENTITY: Required if brace across rear of mod power supply is $1 / 2^{4}$ diameter rod
NOTES: F.C. 3 must be accomplished in conjunction with this field change

7-AN/GRC-27: T-217/GR, Modification for Continuous Operation

2-A FA-6 NS0967.031-8110 F5820-6427924
SERIAL: 2146-2161
IDENTITY: Required if R-1226, 470 ohm, 1 watt is not installed in upper rear corner of large phenolic terminal board in left mid section of transmitter.

8-AN/GRC-27: Driver, Continuous Operation Modification 2-A FA-3 NS0967-031-8120 F5820-6652399

SERIAL: 1-2145
IDENTITY: F.C. required if driver motor is gear daiven.

9-AN/GRC-27: Method for Securing Covers
Correction Material: None
FA NS0967-031-8130 None

SERIAL: All
10-AN/GRC-27: Additional Protection Against B Shorts in Receiver

Correction Material: T- $\mathbf{t o}$ TM, NS0967-031-8010 (fornerly NS92774)

2-A FA-1 NS0967-031-8150 None
SERIAL: All
IDENTITY: Presence of a fuse clip mounted on inside wall of audio amplifier chassis of receiver.

11-AN/GRC-27: Change in Keying Circuit to Assure Motor Positive Operation of Relay KI405

Correction Material: T- to TM, NS0967-031-8010 (formerly NS92774)

2-A FA-0.5 NS0967-031-8150 None
SERIAL: All equipments not previously modified
IDENTITY: Resistor R1464 is 30 ohms instead of 20 ohms.

12-AN/GRC-27: Modifjes Wiring of MD-129A and R278B
Correction Material: T-9, NS0967-031-8011 to TM, NS0967-031-8010 (formerly NS92774)

3-A FA-8 NS0967-031-8160 None
SERIAL: All
IDENTITY: A small nameplate stating: 'MODIFIED: for normal operation, J1405 must have shorted plug attached' shall be affixed just below equipment nameplate on the MD129A Modulated Power Supply, and a small nameplate stating 'MODIFIED: for normal operation J 1215 must have shorted plug attached shall be affixed on the left side of the hinged door of the R278B Frequency Selector, just below the knurled captive screw.

13-AN/GRC-27: Modif!ed Main Crystal Oscillator Ovens in Transmitter and Recejver to Prevent Overheating

Correction Material: T-10, NS0967-031-8012 to TM, NS0967-031-8010 (formerly NS92774)

1-A FA-2 NS0967-031-8140
2N5820-937
0140
SERIAL: All
IDENTITY: Presence of disc type capacitor (item l) in crysal oscillator oven

1-AN/GRC-27A: Same as 1-AN/GRC-27

2-AN/GRC-27A: Same as 2-AN/GRC-27

3-AN/GRC-27A: Same as 3-AN/GRC-27

4-AN/GRC-27A: Same as 4-AN/GRC-27

## 5-AN/GRC-27A: Same as 5-AN/GRC-27

6-AN/GRC-27A: Same as 6-AN/GRC-27
7-AN/GRC-27A: Same as 7-AN/GRC-27

8-AN/GRC-27A: Same as 8-AN/GRC-27

9-AN/GRC-27A: Same as 9-AN/GRC-27

10-AN/GRC-27A: Same as 10-AN/GRC-27

11-AN/GRC-27A: Same as 11-AN/GRC-27

12-AN/GRC-27A: Same as 12-AN/GRC-27

13-AN/GRC-27A: Same as 13-AN/GRC-27

14-AN/GRC-27A: Installation of Elapsed Time Indicator
Correction Material: T-12, NS0967-031-8015 to TM, NS0967.031-8010 (formerly NS92774)

1-A FA. 4 NS0967-031-8160 2F5820.056.
1323
SERIAL: Equipments installed on selected ships (see field change bulletin)
IDENTITY: Presence of an elapsed time indicator on front panel of Modulator Power Supply (MD-129A/GR).

1-AN/GRD-6: Rheostats for Ballast Tubes R1419, R1420 to Improve Reliability Substitute

Correction Material: T-1 to NS92712(A)
1-A FA-4 NS981012 None
SERIAL: All
IDENTITY: Variable resistors replace ballast tubes.
2-AN/GRD-6: Addition of Resistors R-5013 and R-5014 in Power Supply Synchronizer PP-1186/GRD-6

Correction Material: T-5, NS0967-210-4015 to TM, NS0967-210-4010 (formerly NS92712A)

> 2-A FA-1 NS0967-210-4060

None
SERIAL: All equipments PP-1186/GRD-6
IDENTITY: Presence of 270 K ohm resistors between terminals 2 and 3 of relay K-4902 and between terminals 3 and 4 of relay K-4903.

3-AN/GRD-6: Modification of Power Supply System to Provide a Common Power Source to Antenna Arrays

Correction Material: T-4 to NS92712(A)
2-A FA-10 NS981626 None
SERIAL: All
IDENTITY: A 'phase shift relay suitch' and a 'goniometer switch' located in the AF patch panel.

4-AN/GRD-6: Modification of North-Pulse and Bearing-Tone Generating Systems in AN/GRD-6 Goniometers

## 1-A YF. 4 NS981640 None

 SERIAL: AS-697/GRD-6 and AS-779/GRD-6, all serials IDENTITY: The pulse transformer is mounted on the pulse amplifier chassis. The tone wheel and armature wheel are mounted on the same end of the goniometer shaft.1-AN/GRN-9: Humidity Control to Transmission Line Filter Z-1156 or Z-1157

Correction Material: T-2 to NS92986
1-A FA-1 NS981048 F5820-543.
SERIAL: 1.65
IDENTITY: Dehumidifier crystals placed in control duplexer C-2226/GRN-9.

2-AN/GRN-9: Modification to Deactivate the Identification Call Keyer when Equipment is in STANDBY status

Correction Material: T-4, NS0967-073-5012 to TM, NS0967-073-5010 (formerly NS92986A)

1-A FA-4 NS0967-073-5080
SERIAL: Coder Indicator KY-235/URN in all Radio Sets AN/GRN-9
IDENTITY: Keyer wheel will not rotate when master switch, Sll01, on Control Duplexer C-2226/GRN-9 is in STANDBY position.

3-AN/GRN-9: Modification to Stabilize the North and Auxiliary Reference Pulses

Correction Material: T-5, NS0967-073-5013 to TM, NS0967-073-5010 (formerly NS92986A)

2-A FA-3 NS0967-073-5100
SERIAL: Coder Indicator KY-235/URN
IDENTITY: Presence of a $1 N 69$ diode between terminals 20 and 21 of TB-698, a 1N69 diode between terminals 26 and 27 of TB-698 and a 120,000 -ohm resistor between terminals 22 and 61 of TB-698.

4-AN/GRN-9: Modification to Secure the Wiring Harness on Control Duplexer C-2226/GRN-9, C-2226/GRN-9A, C-2412/ GRN-9B, and C-2225A/SRN-6A

Correction Material: None required
II-A FA. 2 NS0967-073-5130
SERIAL: Ali serial numbers
IDENTITY: Presence of cable clamp on terminal board TBllOI.
1.AN/GRN.9A: Same as 1-AN/GRN-9

## 2-AN/GRN-9A: Same as 2-AN/GRN-9

3-AN/GRN-9A: Same as 3-AN/GRN-9 except
Correction Material: T-12, NS0967-031-8015 to TM, NS0967-031-8010

4-AN/GRN-9A: Installation of Klystron Aging Switch
Correction Material: T-3 to NS0967-073-5013
1-A FA.3 NS0967-073-5090
SERIAL: All
IDENTITY: The presence of a NORMAL/AGE switch on the hinged fuse panel of Power Supply Group Cabinet CY-2189/GRN-9A.

## 5-AN/GRN-9A: Same as 4-AN/GRN-9

1-AN/GRN-9B: Installation of RF Fitter Cavity Cover
2-A FA-0.5 NS981053
None
SERIAL: 6-19, 21-26, 29, 31, 33

IDENTITY: Filter cover over filter cavity is C-2412.

```
2-AN/GRN-9B: Operational Improvement for Reduction of
Radiated Noise
    Correction Material: None
    1-A FA-4 NS0967-073-6060 None
SERIAL: 1 thru }14
IDENTITY: Presence of cable separator board assembly.
```

3-AN/GRN-9B: Operational Improvement for Reduction of Radiated Noise Correction Material: None
1-A FA-3 NS981183
None
SERIAL: 1 thru 100
IDENTITY: Presence of reference symbol E1478 on underside of video chassis.

4-AN/GRN-9B: Reduction of Radiated Noise
Correction Material: Change 1 to $\operatorname{NS} 93177(A)$
1-A FA-10 NS981363
F5825-856.
1861
SERIAL: Equipments on NObsr 75819
IDENTITY: Presence of RF Shield Box.

5-AN/GRN-9B: Installation of Frequency Multiplier Oscillator High Voltage Protective Shield

Correction Material: None
1-A FA-1 NS981404 None
SERIAL: CV-650/GRN-9B
IDENTITY: Presence of protective shield over R1471 in the video chassis in the frequency multiplier oscillator drawer.

6-AN/GRN-9B: Modification to Deactivate the Identification Call Keyer when the Equipment is in Standby Status

Correction Material: T-1, NS0967-073-6012 to TM, NS0967-073-6010 (formerly NS93177A)

1-A FA-7 NS0967-073-6100
SERIAL: Coder Indicator KY-248/GRN-9B in all Radio Sets AN/GRN-9B
IDENTITY: Keyer wheel will not rotate when master switch, Sll01, on Control Duplexer C-2412/GRN-9B is in STAND. BY position.

7-AN/GRN-9B: Modification to Stabilize the North and Auxiliary Reference Pulses

Correction Material: T-2, NS0967-073-6014 to TM, NS0967-073-6010 (formerly NS93177A)

2-A FA-3 NS0967-073-5100 None SERIAL: KY-248/GRN-9B Coder Indicator
IDENTITY: Presence of $\operatorname{lN} 69$ diode between terminals 20 and 21 of TB 698, a 1 N69 diode between terminals 26 and 27 of TB 698, and a $120,000-\mathrm{ohm}$ resistor between terminals 22 and 61 of TB 698.

8-AN/GRN-9B: Modification of S609 in Keyer KY-248/GRN. 9B

Correction Material: T-2, NS0967-073-6014 to TM, NS0967-073-6010 (formerly NS93177A)

2-A YF NS0967-073-5100
SERIAL: All supplied with Keyer KY-248/GRN-9B

IDENTITY: A jumper will be found between contacts 6 and 7 of S-609.

9-AN/GRN-9B: Installation of Klystron Aging Switch
Correction Material: T-2, NS0967-073-6012
1-A FA-3 NS0967-073-6150
SERIAL: All
IDENTITY: Presence of a NORMAL/AGE switch on the fuse panel of Power Supply Group Cabinet CY-2374/GRN9B.

10-AN/GRN-9B: Same as 4-AN/GRN-9
11-AN/GRN-9B: Tacan Radio Set - Correct Wiring De!iciency in Loss of Phase Relay Circuitry Correction Material: None required
II-A FA-I NS0967-073-6220
EIC L603000

## SERIAL: All

IDENTITY: This change can be identified by an AWG No.
16 wire connected between K-901, pis 1, and K-902, pin 1.
1-AN/GRN-9C: Interference Shield Kit Installation
Correction Material: None
1-A FA-4 NS981115
None
SERIAL: 1-21 less 11
IDENTITY: Shield installed around CV-673/GRN-9C

2-AN/GRN-9C: Special Wrench and Mounting Clip for Klystron Tuning

Correction Material: Change I to NS93208(A)
1-A FA-1 NS981218 F5825-789-

SERIAL: 1-342
3-AN/GRN-9C: Replacement of Capacitors C331 and C335 to Improve Adjacent Channel Rejection

Correction Material: Change 1 to NS93208(A)
1-A FA-1 NS98!219 F5825-789.
1070
SERIAL: 200, 205, 207, and 212
4-AN/GRN-9C: Replacement of R1788 to Eliminate Drop in North Reference Burst

Correction Material: Change 1 to NS93208(A)
1-A FA.0.5 NS981220 F5825-789.
1071
SERIAL: 1-26, 28-129, 131-167, 180-221, 223-258, 260-277, 288-293, 295-300, 302, 304, 308, 315, 317-342

5-AN/GRN-9C: Installation of High Voltage Protective Shield Correction Material: None
1-A FA-1 NS981396 None SERIAL: All AN/GRN-9C on NAS
IDENTITY: Presence of protective shield on video chassis.
6-AN/GRN-9C: Operational Improvements
Correction Material: None
1-A FA-1 NS981462
None
SERIAL: Sets installed at Naval Air Station
IDENTITY: Presence of an elongated hole on right hand side of shield over the RF section in the frequency multiplier oscil-
lator and also the presence of a larger diameter raised surface on the top cover of the shield over the RF section in the frequency multiplier oscillator.

7-AN/GRN-9C: Modification to Deactivate the Identification Call Keyer when the Equipment is in Standby Status Correction Material: T-3, NS0967-109-1014 to TM, NS0967-109-1010 (formerly NS93208A)

## 1-A FA-5 NS981795

SERIAL: Coder Indicator KY-248A/GRN-9B in all Radio Sets AN/GRN-9C
IDENTITY: Keyer wheel will not rotate when master switch, S801, on Control Duplexer C-2412A/GRN-9B is in the standby position.

8-AN/GRN-9C: Modification to Improve Reliability and Prevent Terminal Board Damage in Coder-Indicator KY-248A/ GRN-9B Power Supply

Correction Material: T- to NS93208(A)
2-A FA-1 NS
None
SERIAL: All
IDENTITY: Substitution of 1/2-watt resistors (R752 and R753) in subject power supply with 2-watt resistors.

9-AN/GRN-9C: Modification to Eliminate Spurious Triggering of North Gate Generator in Coder-Indicator KY-248A/GRN9B

Correction Material: T-6, NS0967-109-1016 to TM, NS0967-109-1010 (formerly NS93208A)

2-A YF-1 NS0967-073-5100
None
SERIAL: All indicators Coder - KY-248A/GRN-9B
IDENTITY: A 1N457 diode will be located on TB608 between terminals 7 and 57.

10-AN/GRN-9C: Replacement of Blower Protect Fuses Correction Material: T-3, NS0967-073-7012
1-A YF-1 NS0967-073-7240
SERIAL: AIl
IDENTITY: The presence of a 3.0 ampere fuse in fuseholders XF-901, XF-902, XF-903, and XF-904 and the presence of a 2.5 ampere fuse in fuseholders XF-1006. XF-1007, and XF1008, and XF-1010.

11-AN/GRN-9C: Installation of Klystron Aging Switch
Correction Material: T-4, NS0967-073-7014
1-A FA-3 NS0967-073-7250
SERIAL: All
IDENTITY: Presence of a NORMAL/AGE switch on the hinged fuse panel of Power Supply Group Cabinet CY-2374A/GRN-9C.

12-AN/GRN-9C: Replacement of R1772 and R1785 to Improve Reliability by Increasing the Safety Factor of the Components

Correction Material: T-7, NS0967-109-1017 to TM, NS0967-109-1010

2-A FA-1 NS0967-109-1020
SERIAL: Only to the Frequency Multiplier Oscillator CV. 673/GRN-9C
IDENTITY: By the presence of 3500 ohms, 10 watt resistors
on TB-1705 across terminals 10 and 51 and across terminals 11 and 52.

1-AN/GRR-23: Wiring Change to Crystal Controlled Oscillator Assembly Heater

Correction Material: EIB 931
4-A FA-2 EIB 931
SERIAL: All serial numbers
IDENTITY: HR1 and HR2 each have two white wires. Upon completion of this fieid change, one white wire of HR1 is connected to the collector lug Q4 and one white wire of HR2 is connected to terminal E13 of the oven control circuit card assembly 800439G1. The other white wires of HR1 and HR2 are spliced together near the Q4 end of the inner chassis 8004392 Gl .

## 1-AN/GRR-24: Same as 1-AN/GRR-23

1-AN/GRT-20: PA Plate Circuit Modification
Correction Material: T- to NS0967-LP-344-1010
2-A FA-1 EIB 899
SERIAL: All serial numbers
IDENTITY: Remove the bottom cover of the transmitter and note the presence of a fuse block located near R-36.

2-AN/GRT-20: Keying Relay Replacement. (EIB 904, 917, 921, 930).

Correction Material: T- to NE0967-344-1010
2.A FA-1 EIB 904 EIC QE00000 SERIAL: All serial numbers
IDENTITY: Note the K3 relay on the A7 section. If the relay is a plug-in type, this change has already been accomplished.

## 1-AN/GRT-21: Same as 1-AN/GRR-23

1-AN/GRT-22: Modification for Beacon Operation
Correction Maierial: To be supplied
I-A FA-4 NS0967.429-5040
SERIAL: Only those installations using the AN/GRT-22 transmitting set as a UHF homing beacon
IDENTITY: Modifications to Exciter Unit T-1 109/GRT-22 as follows: a. Installation of optional component module A3, tone oscillator and power amplifier control assembly, P/N 8007526G1. b. Legended tape noting conversion for beacon operation, on front panel of exciter unit.

## 2-AN/GRT-22: Same as 1-AN/GRR-23

1-AN/GYK-3(V): Installation of Additional Storage Capacity
Correction Material: T-1, NS0281-074-500S; Change 3, NS0281-074-5603; Change 3, NS0281-074-5618; Change 3, NS0281-074-5632

1-C YF-720 NS0281-074-5010 None SERIAL: All sites
IDENTITY: The addition of new operating units will be apparent.

2-AN/GYK-3(V): Instaliation of Bleeder Resistor in RD-278/ GYK-3(V)

II-A FA-I EIB 870
SERIAL: All serial numbers

IDENTITY: Presence of a 10 megohm 2 watt resistor across terminals A1A9FL5-1 and A1A9FL6-1.

3-AN/GYK-3(V): This field change formerly issued as 1-OA-7436/GYK-3(V) and is to be accomplished and reported accomplished as 1-OA-7436/GYK-3(V).

1-AN/MRN-9: Same as I-AN/FRN-12A
2-AN/MRN-9: Same as 2-AN/FRN-12A except
Correction Material: T-3, NS0967-099-0013 to NS0967-0990010 (formerly NS92411(A))

## 3-AN/MRN-9: Same as 5-AN/FRN-12A

4-AN/MRN-9: Same as 6-AN/FRN-12A

5-AN/MRN-9: Replaces Keyer-Oscillator Group OA-535/ MRN-9

Correction Material: T-4, NS0967-199-0014 to NS0967-1990010; T-1, NS0967-199-0031 to NS0967-199-0030

1-A FA-24 NS0967-199-0090
SERIAL: All AN/MRN-9 equipments
IDENTITY: Presence of A.F. Oscillator 0-99/FRN-12 located next to Transmitter Control C-611/FRN-12 in the Transmitter Cabinet CY-1493/MRN-9.

1-AN/MRN-18: Elimination of One Set of Test Equipment. Correction Material: None.
2-C YF-4 NS981377
SERIAL: All; only during shipyard overhaul. IDENTITY: Presence of one set only of test equipment.

2-AN/MRN-18: Power Phase Indicator for TACAN Van. Correction Material: Preliminary Instruction Book (BUWEPS Publication, no NAVSHIPS No. assigned).

> 1-A YF-3 NS0967-200-4030

SERIAL: All Mobile TACAN Vans in use by the Naval System.
IDENTITY: The presence of the Phase Indicator Box on the Antenna Hoist Control Unit.

3-AN/MRN-18: Replacement of HD-372/U and HD-506/M Air Conditioners.

Correction Material: Use commercial TM, From 510.08 Nl . 3-A FA-12 NE0967-LP-200-4040 EIC

LLI5,LL16
SERIAL: All serial numbers of mobile TACAN AN/MRN-18 and AN/MRN-21 Radio Sets.
IDENTITY: Installation of commercial air conditioner PF 60 25E in place of HD-372/U or HD-506/M air conditioner.

1-AN/MRN-21: Elimination of One Set of Test Equipment Correction Material: None
2-C YF-4 NS981377 None
SERIAL: All only during shipyard overhaus
IDENTITY: Presence of one set only of test equipment.
2-AN/MRN-21: Same as 2-AN/MRN-18
3-AN/MRN-21: Same as 3-AN/MRN-18.

1-AN/PRC-25: Modification to Battery Box CY-2562/PRC-25
(Part of Radio Sets AN/PRC-25, AN/PRC-77)
Correction Material: None required
II-A FA-I NE0967-LP-542-4020
EIC QDICOOO
SERIAL: All
IDENTITY: Presence of the relief valve on the battery case.
1-AN/PRC-41: Battery Waming Decal on Transit Case CY-3883/PRC-41

Correction Material: T- to NS93714
2-A FA-0.5

2-AN/PRC-41: Modification of AC Power Cable CX-8687/ PRC. 41 to Add Ground Wire

Correction Material: T- to NS94755(B)
SERIAL: Equipments used with PP-3700/PRC-41 Power Supply

3-AN/PRC-41: Cancelled. Superseded by field change 4-AN/ PRC-4!.

4-AN/PRC-41: Improved Modification to Preclude Shorting of Electrical Contacts. (Supersedes and cancels Field Change 3-AN/PRC-41, originally appearing in EIB 864.) (EIB 929)

Correction Material: EIB 929
II-A FA-I EIB 929
EIC QDIM
SERIAL: All
IDENTITY: Installation of a standard rubber grommet over the end of both the positive and negative electrical contacts ( Jl and J3) in the receiver-transmitter case (CY-3884/PRC-41) as viewed from the bottom of the case.

1-AN/PRC-77: Same as 1-AN/PRC-25 except
EIC QDIXOO
1-AN/PRC-96: Replacement Lithium Batiery Unit.
Correction Material: Chg. I to NE0967-LP-588. 4010
1-A FA-1 NE0967-LP-588-4020 EIC QD7N
SERIAL: All serial numbers.
IDENTITY: Verify that the battery unit (IAIBTI) is a single lithium battery unit vice two identical battery cells.

## 1-AN/SAT-2: Provide Emission Status

Correction Material: T-1, NS0967-069.9011 to NS0967-069. 9010

2-C FA-3 NS0967-069-9040 EIC QA0N000 SERIAL: Applicable to all AN/SAT-2 Infra-Red equipment installed aboard ships with the AN/SSQ-54 Emission Status Indicator Set
IDENTITY: The presence of TWO relays, mounted in the C-1356/SAT-2, Control Unit and TWO relays mounted in or adjacent to the Yardarm Blinker Lamp System Power Junction Box.

1-AN/SAT.2A: Provide Emission Status Indication
Correction Material: T-1, NS0967.004-6001 to TM, NS0967-004-6000

1-C FA-3 NS0967-004-6020
SERIAL: All Infra-Red equipment installed aboard ships with the AN/SSQ-54 Emission Status Indicator

IDENTITY: Presence of TWO relays mounted in the C-1356/ SAT Control Unit and TWO relays mounted in or adjacent to the Yardarm Blinker Lamp System Power Junction Box.

1-AN/SGC-1: Change the Value of R-180 from 680 Ohms to 240 Ohms

Correction Material: T-i, NS0967-1 16-2011 to NS0967-116. 2010; T-4, NS0967-116-3012 to NS0967-1 16-3010

2-A FA-1 NS0967-116-2050
SERIAL: All
IDENTITY: R-180 is 240 ohms.

1-AN/SGC-1A: Modification for 20 Milliamp Operation Correction Material: T-2 to NS91503
2-B YF-2 NS98691
None
SERIAL: Only when 20 ma operation required
IDENTITY: A DPST switch installed near the top and to the right of the front panel.

2-AN/SGC-1A: Remove Resistor R-182 from the Receive Bias Circuit

Correction Material: T-3, NS0967-116-3011 to NS0967-1163010

4-A FA-I NS0967-116-3040 EIC F203000
SERIAL: Those equipments manufactured by David Bogen, Inc., under Contract NObsr 57206
IDENTITY: Presence of a yellow wire on pin 2 of XV104.

## 3-AN/SGC-1A: Same as 1-AN/SGC-1

1-AN/SIA-114B: Correct Wiring Error in General Alarm Circuit

Correction Material: T-1, NS0365-287-9001 to NAVSHIPS 365-2879

2-A FA-0.5 NS0365-287-9010 EIC RBC000
SERIAL: All mfr. by Dynalec Corp.
IDENTITY: R8 (R308) is connected to C7 (C307)
1-AN/SIA-115: Same as 1-AN/SIA-114B except
Correction Material: T-1, NS0965-050-7011 to NS0965-0507010
SERIAL: SB-406/SRA and SB-407/SRA associated w/AN/ SRA-13, -14, -15, and -16
IDENTITY: Presence of a toggle switch located directly below the blower signal lamp I-201 on the fuse panels SB-406/ SRA and SB-407/SRA.

1-AN/SIA-116: Same as I-AN/SIA-114B except
Correction Material: T-1, NS0965-023-9011 to NS0965-0239010 and

2-A FA-0.5 NS0365-287-9010 EIC RB2A000

1-AN/SIA-117B: Same as 1-AN/SIA-114B except
Correction Material: T-1, NS0965-068-10II to NS0965-0681010

1-AN/SIA-125A: Eliminate Squeal in Output Circuit Correction Material: T- to NS0965-101-3010
2-A FA-0.5 EIB 873
SERIAL: Those equipments manufactured by Monmouth Industries

IDENTITY: Presence of a 3 ohm resistor connected between terminals 2 and 5 of A 101.

1-AN/SIC.1: Replacement of Cabinet and Addition of Load Resistance

Correction Material: Change 1 to NS92165(A)
1-A FA-8 NS98636 F5830-332-
1811

## SERIAL: 1-67

IDENTITY: Elect. equip. cab CY-1173A replaced $w / C Y$. 183A.

2-AN/SIC-1: Channel 'lockout' feature, elimination Correction Material: None
2-A FA-2 NS981010 None
SERIAL: All
IDENTITY: A jumper wire connects terminals 1149-1159 to ground in console OA-365/SIC-1.

1-AN/SRA-12: Front Panel Replacement (Modifies equipment to AN/SRA-12B)

Correction Material: Change 3 to NS92206
1-A FA-2 NS981209 F5915-752-
1008
SERIAL: 1001 thru 1307 and 2160 thru 2184 (NObsr 75181)
1-AN/SRA-13: Modification of Fuse Panels SB-406/SRA and SB-407/SRA

Correction Material: T-1 to NS92746
2-A FA NS981347 None
SERIAL: SB-406/SRA and SB-407/SRA associated w/AN/ SRA-13, 14, -15 and -16
IDENTITY: Presence of a toggle switch located directly below the blower signal lamp I-201 on the fuse panels SB-406/ SRA and SB-407/SRA.

1-AN/SRA-14: Same as 1-AN/SRA-13

1-AN/SRA-15: Same as 1-AN/SRA-13
1-AN/SRA-16: Same as 1-AN/SRA-13 except
Correction Material: T-2 to NS92839
1-AN/SRA-18: Connections to Overload Relay of C-1360/ SRT

Correction Material: T-1 to NS92540(A)
2-A FA-1 NS98862 None

## SERIAL: 1-250

IDENTITY: Relocate overload relay $K-123$ to terminal number 3.

2-AN/SRA-18: Interconnecting Cables Simplification Correction Material: Change 2 to NS92540(A) 2-A FA-3 NS98956

None
SERIAL: All

3-AN/SRA-18: Modification of Antenna Transmission Line Fitting W-3501 and W-3502

Correction Material: Change 3 to NS92540(A)
2-A FA-8 NS98961 None

SERIAL: 1-250

IDENTITY: Replacement of coaxial cable R-F terminal with MX-2034/UR.

4-AN/SRA-18: Replacement of Antenna Transmission Line Fittings W-301, W3501 and W3502

Correction Material: Change 5 to NS92540(A)
1-A FA-3 NS981178 2N5820-682-
2723
SERIAL: All
IDENTITY: Insulators IL-59/UR used as antenna transmission line fittings.

S-AN/SRA-18: Improvement for Mounting of Switch S-307 in Radio Frequency Tuner TN-229/SRT

Correction Material: None
2-A FA-2 NS981238 None
SERIAL: All
IDENTITY: Presence of a No. 8 flat washer mounted at the top of each standoff under the switch mounting plate.

6-AN/SRA-18: Replacing Electromagnetic Actuators B303, B3501, and B3502, replacing sliding short and guide shoe E305 and 0376, and replacing mounting screws for C3501

Correction Material: T-10 to NS92540(A) and T-2 to NS9212!(A)

J-A FA-16 NS981284 None
SERIAL: All
IDENTITY: Presence of nylon screws in capacitor C3501 and nylon guide shoes for electromagnetic actuator E305.

7-AN/SRA-18: Obsolete
8-AN/SRA-18: Same as 11-AN/WRT-1

1-AN/SRA-18A: Same as 6-AN/SRA-18

1-AN/SRA-22: Elimination of Continuing Equipment Failures Due to 'Operator Tuning Errors'

Correction Material: None
2-A FA-2 NS0967-136-6050 None
SERIAL: 1-353
IDENTITY: Toggle switch mounted on C-2698/SRA-22 next to fuse holder.

2-AN/SRA-22: Protection of Antenna Coupler CU-714/SRA22 Against Possible Damage Due to Antenna Systems w/High Standing Wave Ratios

Correction Material: Change 3 to NS0967-136-6010
1-A FA-3 NS0967-136-6060 F5820.0785510
SERIAL: 1 thru 1133 approximately
IDENTITY: Presence of VSWR circuit board mounted on terminal of meter M1.

3-AN/SRA-22: Fuse Failure in AN/URC-32( )
Correction Material: T-2, NS0967-136-60!2 to TM, NS0967-136-6010 (formerly NS93286)

2-A FA-0.5 NS0967-136-6070
None
SERIAL: Coupier Control C-2698/SRA-22, part of Antenna Contro! Group AN/SRA-22, serial numbers 1 through 1132, when used with AN/URC-32A or when used with AN/URC-

32 having an AN/SRA-22 with a VSWR protective circuit addition.
IDENTITY: When the C-2698/SRA-22 ground connection to pin J6-6 has been removed.

4-AN/SRA-22: Pressurization of CU-714/SRA-22
Correction Material: None
2-A FA-1 NS0967.136-6070
SERIAL: All
IDENTITY: Presence of $0-30$ psi gauge mounted on the right front of the CU-714/SRA-22.

5-AN/SRA-22: Protection of Antenna Coupler CU-714/SRA22 Against Possible Damage Due to Overdriving of Mechanical Stops

Correction Material: To be included in revised manual
1-A FA-8 NS0967-136-6080 2N5820-919.

SERIAL: All
IDENTITY: Presence of a two-wafer switch mounted on shaft of coil potentiometer R-6.

6-AN/SRA-22: Interchanging Brass Bolt with Nylon Bolt in CU-714/SRA-22

Correction Material: T-2, NS0967-136-60!2 to TM, NS0967-136-6010 (formerly NS93286)

2-A FA-1 NS0967-136-6070
SERIAL: All
IDENTITY: Presence of the nylon bolt (1H-58)
7-AN/SRA-22: Antenna Coupler Group - Replacement of TUNE-OPERATE Switch Correction Material: Change 3 to NS93286
2-A FA-4 NS0967-136.6070 None
SERIAL: All
IDENTITY: Presence of a 4PDT TUNE-OPERATE switch.
8-AN/SRA-22: Terminal Board Protective Cover for Antenna
Coupler
Correction Material: None required
2-A FA- $0.5 \quad$ NS0967- 136.6070
!36.6070
None
SERIAL: 1 thru 350
IDENTITY: Presence of a protective cover measuring 12-1/4 x $1-1 / 4$ with $3 / 8^{*}$ beveled sides mounted over terminal board TB-5.

9-AN/SRA-22: Protection of CU-714/SRA-22 Against Damage Due to Arcing of $1 \mathrm{~S} 9 \mathrm{H} . \mathrm{V}$. Switch and $1 \mathrm{C} 7 \mathrm{H} . \mathrm{V}$. Capacitors

Correction Material: T-3, NS0967-136-6014 to NS0967-136. 6010

2-A FA-2 NS0967-136-6120
SERIAL: All
IDENTITY: Noting the location of 1E8 and 1E16 on top of IS9, figure 1.

10-AN/SRA-22: Installation of Elapsed Time Indicator
Correction Materia!: T-1, NS0967-136-6011 so TM, NS0967-136-6010 (formerly NS93286 and NS0967-071-7010)

1-A NS0967-136-6090 2F5985-0617641

SERIAL: DD-706, 708, 709, 729, 790, 840, 848, 876; DL-5, DLG-18, 33; MSO-426, 432, 435, 455, 460, 468, 470, 491, 519; SS-425, 522; SSN-596, 613
IDENTITY: Presence of elapsed time indicator on the front panel of CU-714/SRA-22.

11-AN/SRA-22: Protection of Antenna Coupler CU-714/SRA22 Against Self-Destruction from Heat in its Most Inefficient Operating Condition

Correction Material: Change 1, NS0967-136-6012 to TM, NS0967-136-6010 (formerly NS93286 and NS0967-071-7010)
1-B FA-4
NS0967-136-6030
2F5985-089.
4489

SERIAL: All
IDENTITY: Presence of Beryllium Oxide sleeve on Ferrite Core IH7 and emergency repair decal on CU-714/SRA-22.

12-AN/SRA-22: Adapting Coupler Control C-2699/SRA-22 for use with Coupler Adapter MX-4845/SRA-34

Correction Material: T-2, NS0967-136-6013 to NS0967-136. 6010

> 1-A FA-3 NS0967-136.6110

SERIAL: Equipments as required for interface with AN/ SRC-16 Antenna Matrix (NTDS ships only)
IDENTITY: Presence of decal over old ANT-LOAD switch S6 showing BYPASS-MATRIX and change of nomenclature from C-2698 to C-2698A.

13-AN/SRA-22: Rapid Replacement of Drive Motors
Correction Material: T-4, NS0967-136-6015 to NS0967-1366010

1-C FA-4 NS0967-136.6130 EICQ91K000
SERIAL: All serial numbers
IDENTITY: Presence of half turn clamp devices on the front ring recess of the dive motors.

1-AN/SRA-23: Replacement of Roller Shear Pins in Coupler Selector Switch

Correction Material: None required
2-A FA.0.5 NS0967-981-3020
None
SERIAL: All C-2530/SRA-23 associated with AN/SRA-23
IDENTITY: By visual inspection and comparison.
1-AN/SRA-33: Relocation of Tiepoints E1 and E2 in C-4586/ SRA-33 Power Supply

Correction Material: None required
II-A FA-1 NS0967-037-8030 EIC Q91Q000 SER1AL: All
IDENTITY: This field change can be identified by the lack of tie points beside the chassis lettering 'E1' and 'E2.'

2-AN/SRA-33: Improve Reliability of AN/SRA-33 and Reduce Failure of Motor Tachometer.

Correction Material: To be provided.
1-C FA-8 NE0967-LP-037-8040
EIC Q91Q
SERIAL: All serial numbers.
IDENTITY: Verify installation of the following components in Control Power Supply C-4586/SRA-33: R21 (300 ohm fixed wire wound); $k 9$ (RFID SPDT, NSN $3 N 5945-00-241$ 5830); CR14, CR15, CR16, and CR17 (Type 1N3611 diode).

1-AN/SRA-34A(V): Antenna Coupler ARC Alann
1-C FA-12 NS0967-304-3130 EIC QD4L000 SERIAL: Antenna Coupler CU-1169/SRC-16
IDENTITY: Addition of a dash number (-4) after the MCN number of the listed units or module.

1-AN/SRA-38: Modification to Audio Jacks Correction Material: Ch. 1, NE0967-LP-303-8611 to NE0967-LP-303-8610

I-A FA-4 NE0967-LP-303-8620 EIC Q91V000 SERIAL: All serial numbers
IDENTITY: Removal of sping loaded covers on audio jacks.
1-AN/SRA-39: Same as 1-AN/SRA-38 except
EIC Q91w000
1-AN/SRA-40: Same as 1-AN/SRA-38 except
EIC Q91X000
1-AN/SRA-42: LORAN Antenna Coupler and Amplifier Installation

Correction Material: Ch. 1, NE0967-274-901 1 to NE0967-274-9010; T-1, NE0967-274-9031 to NE0967-274-9030

1-A FA-6 NE0967-274-9040 EIC L10J000 SERIAL: All serial numbers
IDENTITY: Presence of RF amplifier circuit board on each AN/SRA-42 RF tuner (TN-443/SRA-42).

2-AN/SRA-42: Pressurization of Antenna Tuner
Correction Material: New manual supplied
1-A FA-8 NE0967-LP-274-9050 EIC LIOJ000 SERIAL: All serial numbers
IDENTITY: Presence of tank fill valve on antenna tuner and low pressure indicator lamp on antenna control wnit.

## 1-AN/SRA-43: Pressurization of Antenna Tuner

Correction Material: Ch. 1, NE0967-LP-269-4011 to NE0967-LP-269-4010

1-A FA-6 NE0967-LP-269-4030 E1C Q91Y000 SERIAL: All serial numbers
IDENTITY: Presence of tank fill valve on antenna tuner and low pressure indicator lamp on antenna control unit.

1-AN/SRA-49: Diversity Antenna Inputs and Modification to Audio Jacks (Modifies equipment to AN/SRA-49A)

Correction Material: Ch. 1, NE0967-LP-303-8611 to NE0967-LP-303-8610

I-A FA-8 NE0967-LP-303-8630 EIC Q91Z000
SERIAL: All serial numbers
IDENTITY: Presence of additional DA-SIS/U load.

1-AN/SRA-51: Wiring Change to Power Input Connector 232
Correction Material: T-3, NS0967-299-4015 to NS0967-2994010

IV-A FA-1 NS0967-299-4040 EIC Q931000 SERIAL: All serial numbers
IDENTITY: This field change can be identified (and may have already been accomplished by the manufactuæer) by
measuring continuity of zero (0) ohms between pin 'B' of power connector 2 J 2 and ground.

2-AN/SRA-51: Antenna Suppoit Cone Installation Correction Material: T-1, NS0967-299-4012 to NS0967-299. 4010

1-A FA.4 NS0967-299.4030 EIC Q931000
SERIAL: All serial numbers
IDENTITY: Presence of a two foot high gray cone which surrounds and supports the lower portion of the whip antenna.

1-AN/SRA-56: Low Power Tuning Modification
Correction Material: Addendum 1. NS0967-284-6013 to NS0967-284-6010

I-A FA-10 NS0967-284-6020
EIC Q933000
SERIAL: All Navy owned equipments
IDENTITY: Presence of power level selector switch on the front panel of individual antenna coupler: CU-1772/SRA-56. CU-1774/SRA-57, or CU-1776/SRA. 58.

2-AN/SRA-56: Inter-Drawer Comparability Modification.
Correction Material: Cbg. to TM, NE0967-284-6010
1-A FA-1 NE0967-284-6030 EIC
Q933.Q934.Q935
SERIAL: All serial numbers of AN/SRA-56, 57, and 58.
IDENTITY: Verify that relay ( 1 A 1 K 1 ) is installed below XDS3 on the back of the front panel.
NOTES: Prerequisite Field Change: FC :-AN/SRA-56,57,58 must be installed prior to or concurrent with FC 2-AN/SRA56.57.58.

1-AN/SRA-57: Same as 1-AN/SRA-56 except
EIC Q934000

1-AN/SRA-58: Same as 1-AN/SRA-56 except
EIC Q935000

## 1-AN/SRA-60: Antenna Reinforcement

Correction Material: T-1, NE0967-421-4011 to NE0967. 421-4010
I.C YF-40 NE0967.421-4020 EIC Q94X000

SERIAL: All serial numbers
IDENTITY: Presence of fiberglass support struts inside the antenna.

2-AN/SRA-60: Improve Reliability of Vacuum Relays A4K1 and A4K2

Correction Material: Ch. 1, NE0967-421.4012 10 NE0967. 421.4010

1-A FA-6 NE0967.421-4030 EIC Q94X000
SERIAL: All serial numbers
IDENTITY: Presence of a resistor and capacitor on standoff insulators on the back panel of the drawer adjacent to plug Pl.

1-AN/SRC-10: MX-1583/SRC, install for remote opration
Correction Material: T-2 to TM1I-286
C FA-4 NS98518(B) F5820-642.

SERIAL: All on ships
IDENTITY: Presence of MX-1583/SRC
NOTES: FC kits include old bulletins so NS 98518 K must be ordered.

2-AN/SRC. 10. Type BNG conn, repl w/type N
2-A FA-2 NS98573(A)
F5820-332-
1907
SERIAL: All
IDENTITY: Instailation of type N connector.
3-AN/SRC-10: Metal-cal nameplates, apply
A FA-1/3 NS98688
2N5820-348-
4936
SERIAL: All
IDENTITY: Appearance of metal-cal nameplate on the iighthand mounting foundation.

1-AN/SRC-10X: Same as 1-AN/SRC-10
2-AN/SRC-10X: Same as 2-AN/SRC-10
3-AN/SRC-10X: Same as 3-AN/SRC-10
1-AN/SRC-10Y: Same as 2-AN/SRC-10
2-AN/SRC-10Y: MX-1986/SRC. install adaptor
A FA-3 NS98762 2N5820-501.
4576
SERIAL: Equips to be integrated into shipboard radio remote cont. system
IDENTITY: Presence of MX-1986/SRC.

3-AN/SRC-10Y: Same as 3-AN/SRC-10

4-AN/SRC-10Y; Installation of an Adapter Box on Load Re. sistor Adapter Unit

Correction Material: Not required
2-A FA-8 NS0967-153-3070
None
SERIAL: Equips where auxiliary Radio Receivers R-108, 109, or $110 /$ GRC are not used, and AC Power Supply PP-1175/ SR is used (Part of FC 2-AN/SRC-10Y)
IDENTITY: Presence of an additional box mounted to the terminal box on rack of subject radio sets.

1-AN/SRC-11: Installation of MX-1583/SRC for Remote Operation

Correction Material: T-2 to TM11-286
C YF. $4 \quad$ NS98518(B)
F5820-6427918

## SERIAL: All on ships

IDENTITY: Presence of MX-1583/SRC
NOTES: FC kits include old bulletins so NAVSHIPS 98518 K must be ordered.

2-AN/SRC-11: Replacement of Type BNC Connectors with Type N

2-A FA.2 NS98573(A) F5820.332-
SERIAL: All
IDENTITY: Instaliation of type N connector

3-AN/SRC-11: Application of Metal-cal Nameplates
A FA.0.5 NS98688 F5820-3484936
SERIAL: All
IDENTITY: Appearance of metal-cal nameplate on the sight hand mounting foundation

1-AN/SRC-11X: Same as 1-AN/SRC-11

2-AN/SRC-11X: Same as 2-AN/SRC-11
3-AN/SRC-11X: Same as 3-AN/SRC-11
1-AN/SRC-11Y: Same as 2-AN/SRC-11

2-AN/SRC-11Y: Installation of Adaptor MX-1986/SRC
Correction Material: See NS98762
A FA-3 NS98762 2N5820-501.
4576
SERIAL: Equips to be integrated into shipboard radio remote cont. system
IDENTITY: Presence of MX-1986/SRC.
3-AN/SRC-11Y: Same as 3-AN/SRC-11
4-AN/SRC-11Y: Same as 4-AN/SRC-10Y
1-AN/SRC-12: Installation of MX-1583/SRC for Remote Operation
$\begin{array}{lrrr}C & \text { YF-4 } & \text { NS98518(B) } & 7918\end{array}$
SERIAL: All on ships
IDENTITY: Presence of MX-1583/SRC
NOTES: FC kits include old bulletins so NAVSHIPS 98518-
K must be ordered.
2-AN/SRC-12: Replacement of Type BNC Connectors with Type N

2-A FA-2 NS98573(A) F5820-3321907
SERIAL: All
IDENTITY: Installation of type N connector.
3-AN/SRC-12: Installation of Metal-Cal Nameplates
A FA-0.S NS98688 F5820-3484936

## SERIAL: All

IDENTITY: Appearance of metal-cal nameplate on the right hand mounting foundation.

1-AN/SRC-12X: Same as 1-AN/SRC-12
2-AN/SRC-12X: Same as 2-AN/SRC-12

3-AN/SRC-12X: Same as 3-AN/SRC-12
1-AN/SRC-12Y: Same as 2-AN/SRC-12
2-AN/SRC-12Y: Installation of Adaptor MX-1986/SRC Correction Material: See NS98762

A FA.3 NS98762 F5820-501.
4576
SERIAL: Equips to be integrated into shipboard radio remote cont. system
IDENTITY: Presence of MX-1986/SRC

3-AN/SRC-12Y: Same as 3-AN/SRC-12
4-AN/SRC-12Y: Same as 4-AN/SRC-10Y
1-AN/SRC-13: Installation of MX-1583/SRC for Remote Operation

Correction Material: T-2 to TMII-611
C YF-4 NS98518(B)
F5820-642-
SERIAL: All on ships
IDENTITY: Presence of MX-1583/SRC
NOTES: FC kiss include old bulletins so NA VSH1PS 98518-
K must be ordered.
2-AN/SRC-13: Replacement of Type BNC Connectors with Type N

2-A FA-2 NS98573(A) F5820-332-
SERIAL: All
IDENTITY: Installation of type N connector.
3-AN/SRC-13: Installation of Metal-Cal Nameplates
A FA-0.5 NS98688 F5820-348-
C 4936
SERIAL: All
IDENTITY: Appearance of metal-cal nameplate on the right hand moanting foundation.

1-AN/SRC-13X: Same as 1-AN/SRC-13
2-AN/sRC-13X: Same as 2-AN/SRC-13

3-AN/SRC-13X: Same as 3-AN/SRC-13

1-AN/SRC-13Y: Same as 2-AN/SRC. 13
2-AN/SRC-13Y: Installation of Adaptor MX-1986/SRC
Correction Material: See NS98762
A FA-3 NS98762 F5820-501. 4576
SERIAL: Equips to be integrated into shipboard radio remote cont. system
IDENTITY: Presence of MX-1986/SRC.
3-AN/SRC-13Y: Same as 3•AN/SRC-13
4-AN/SRC-13Y: Same as 4-AN/SRC-10Y
1-AN/SRC-14: Installation of MX-1583/SRC for Remote Operation

Correction Material: T-2 to TM11-611
C YF. 4 NS98518(B) F5820-642-
SERIAL: All on ships
IDENTITY: Presence of MX-1583/SRC

NOTES: FC kits include old bulletins so NAVSHIPS 98519-
K must be ordered.
2-AN/SRC-14: Replacement of Type BNC Connectors with Type N

2-A FA-2 NS98573(A) F5820-332-
1907
SERIAL: All
IDENTITY: Installation of type $\mathbf{N}$ connector.
3-AN/SRC-14: Installation of Metal-Cal Nameplates
A FA-1/3 NS98688 F5820-348.
4936
SERIAL: All
IDENTITY: Appearance of metal-cal nameplate on the right hand mounting foundation.

1-AN/SRC-14X: Same as 1-AN/SRC-14
2-AN/SRC-14X: Same as 2-AN/SRC-14
3-AN/SRC-14X: Same as 3-AN/SRC-14
1-AN/SRC-14Y: Same as 2-AN/SRC-14
2-AN/SRC-14Y: MX-1986/SRC, install adaptor Correction Material: See NS98762
A FA-3 NS98762
F5820.501.
4576
SERIAL: Equips to be integrated into shipboard radio remote cont. system
IDENTITY: Presence of MX-1986/SRC.
3-AN/SRC-14Y: Same as 3-AN/SRC-14
4-AN/SRC-14Y: Same as 4-AN/SRC-10Y
1-AN/SRC-15: Installation of MX-1583/SRC
Correction Material: T-2 to TM11-611
1-C YF-4 NS98518(B) F5820-642.
7918
SERIAL: All on ships
IDENTITY: Presence of MX-i583/SRC
NOTES: FC kits include old bulletins so NAVSHIPS 98518-
K must be ordered.
2-AN/SRC-15: Replacement of Type BNC Connector with
Type N

| A | FA-2 | NS98573(A) | F5820-332- |
| :---: | ---: | ---: | ---: |
|  |  |  | 1907 |

SERIAL: All permanently installed aboard ships
IDENTITY: Installation of type N connector.
3-AN/SRC-15: Installation of Metal-Cal Nameplates
1-A FA-0.5 NS98688 F5820-348-
4936
SERIAL: All
IDENTITY: Appearance of metal-cal nameplate on the right hand mounting foundation.

1-AN/SRC-15X: Same as 1-AN/SRC-15

2-AN/SRC-15X: Same as 2-AN/SRC-15 except SERIAL: All

3-AN/SRC-15X: Same as 3-AN/SRC-15

1-AN/SRC-15Y: Same as 2-AN/SRC-15 except SERIAL: All

2-AN/SRC-15Y: Installation of MX-1986/SRC
Correction Material: See NS98763(A)
A FA-3 NS98763(A)
F5820.501-

SERIAL: All
IDENTITY: Presence of MX-1986/SRC.

3-AN/SRC-15Y: Same as 3-AN/SRC-15 excepi
SERIAL: Equips to be integrated into shipboard radio remote cont. system

## 4-AN/SRC-15Y: Same as 4-AN/SRC-10Y

1-AN/SRC-16: Communications Central; Incorporation of System Modification Bulletins as a Unit Field Change

Correction Material: None
2-A NA NS0967-207-9130
None
SERIAL: Al thre A 16
IDENTITY: Change number stamped on the Field Change
Accomplished plate.
2-AN/SRC-16: Convert Indicator Wiring Change
Correction Material: T-1, NS0967-086-3011 to TM, NS0967-085-3010 (formerly NS94717(A))

2-A FA-1 NS0967-207-9130 None SER1AL: All
IDENTITY: Noting that there is a wire connected to pin 10 of 320 on the Converter-Indicator chassis and that there is a -1 following the MCN number oif Relay Unit A17, CPN 528-0320-005.

## 3-AN/SRC-16: Blower Motor Wiring Change <br> Correction Material: Not required <br> 2-A FA-0.5 NS0967-207-9130 <br> None

## SERIAL: All

IDENTITY: Noting that the white wire from blower motor BI on cabinet AM-3712/SRC-16 is not connected to ground.

4-AN/SRC-16: Communications Central; Incorporation of System Modification as a Field Change

Correction Material: None
2-A FA-1 NS0967-086-3110
SERIAL: 1 thru 16
IDENTITY: Change number stamped on the Field Change Accomplished plate.

5-AN/SRC-16: Communications Central; Installation of Two Switches on Front of Remote Switching Units for Purpose of Paralleling the STBY-OPR Pushbutton Switches Inside the Unit

Correction Material: T-1, NS0967.086-3092
2-A FA.2 NS0967-086-3110
SERIAL: All

IDENTITY: Observing that the Remote Switching Control Unit has had two switches added to the front panel.

6-AN/SRC-16: Communications Central; Replacing Cross Point Relays

1-A FA-4 NS0967-086.3120
SERIAL: Al thru Al6
IDENTITY: The purpose of this change is to replace the 416 defective cross point relays on a 1 for 1 basis. The Collins Radio Company will fumish the required parts and labor to install the change.
NOTES: Assignment of field change number is for equipment serial numbers Al thru Al6.

7-AN/SRC-16: Communications Central; Incorporation of Factory Field Bulletin T-34 as a Field Change
I.A FA-I NS0967-086.3140

SERIAL: AI thru A16 except serials A2 and A15 which have modified by Collins Radio Co.
IDENTITY: Field change number stamped on the Field Change Accomplished plate and also observing that the .7 has been added to the Radio Transmitter MCN (manufacturer's control r.umber).

8-AN/SRC-16: Deieting a Diode from the Antenna Coupler Control Module

Correction Material: T-1, NS0967-086-3051 to TM, NS0967-086-3050 (formerly NS94717(A))

2-A FA-1 NS0967-086-3150
SERIAL: All AN/SRC- 16 equipment with manufacturer's control number (MCN) 561 and below
IDENTITY: Observing that -1 has been added after the manufacturer's control number.

9-AN/SRC-16: Addition of Cover to Circuit Breaker CB1 in 2.6 ms Multicuupler Cabinets A6 and A8

Correction Material: T-2, NSO967-086-3012 to TM, NS0967-086-3010 (formerly NS94717(A))

1-B FA-1 NS0967-086-3160
SERIAL: Al thru Al6
IDENTITY: Observe that a cover has been added to primary power circuit breaker, CBI, in the 2.6 mc Multicoupler Cabinets Units A6 and A8.

10-AN/SRC-16: Same as 6-AN/SRC-16(XN-1)
11-AN/SRC-16: Radio Frequency Emission Status
Correction Material: T-3, NS0967-086-5016 to NS0967-0863010, T-2, NS0967-086-3035 to NS0967.086-3030, T-2, NS0967.086-3055 to NS0967.086-3050; T-1, NS0967.086-3064 to NS0967.086-3060

I-A FA. 16 NS0967-086.3170 EIC FHI3000
SERIAL: All equipments
IDENTITY: Locate connector 38 mating jack to the keyer subassembly A2 mounted on the control compartment door of equipment cabinets 6Al and 8A1. Observe that (1) $\mathbb{N} 647$ diode has boen added between $\mathbf{J} 8.4$ and standoff insulator E3. (1) IN647 diode between J8.4 and standoff insulator E4. (1) iN647 diode between J8-7 and standoff insulator E4 and (I) diode between J8-7 and standoff insulator ES.

12-AN/SRC-16: FSK Oscillator Output Impedance Change Correction Material: T-2, NS0967-086.3025 to NS0967.086. 3020; T-8, NS0967-086.3402 to NS0967.086.3060

1-C FA-4 NS0967.086-3250 EIC QD3J000 SERIAL: AN/SRC-16 Unit IA4; Oscillator O-655/URC modules A1, A2, A3, and A4
IDENTITY: The Collins part number of Oscillator $0.655 /$ URC is changed from 591-5584-004 to 591-5584.025.

13-AN/SRC-16: FSK Current Loop Modification Correction Material: T-9, NS0967-086-3403 to NS0967.086. 3060

1-C FA-2 NS0967.086-3260 EIC QD3J000
SERIAL: AI thru Ai7 and B1 thru B4
IDENTITY: Resistors R9 thru R12 are 690 ohms, 6 watts.
14-AN/SRC-16: Antenna Coupler ARC Alarm
Correction Material: T-4, NS0967-207-9114 to NS0967-207.
9110; T-7. NS0967-086-3501 to NSO967-086-3050; T-10, NS0967-086-3404 to NS0967-086-3060

1-C FA-36 NS0967-086.3270
EIC QD3J000
SERIAL: CU.1169/SRC-16 and CU.1170/SRC-16 Antenna Couplers
IDENTITY: Addition of a dash number after the MCN number of the listed unit or module: CU-1169/SRC-16-4: CU-1170/SRC-16-2; and CU-1170/SRC-16 parallel assembly -4.

15-AN/SRC-16: AN/SRC-16(U) and AN/URT-23 Interface Correction Material: Supplemental Technical Manual, NS0967.086.3210

1-C FA. 160 NS0967.086-3280
EIC QD3J000
SERIAL: AN/SRC-16(U) electrical equipment cabinet 7: All serial numbers and associated antenna coupler control C-4658/ SRC-16(U) when installed with AN/URT-23
IDENTITY: Loosen two thumbscrews that secure the Relay Assembly RE.757/SRC-16 (right dc matrix) to the cabinet. Press to the right on thumb latch lever, pull out the slidemounted right de matrix and extend to its maximum position. Make electrical continuity check between Pin One of 7A2A59/J261 thru 7A59A95/J309 and 7A2A63/J265 thru 7A59A99/J313.

16-AN/SRC-16(U): Increase RF Power Capabilities to IKW Average

Correction Material: Supplemental Technical Manual, NS0967-086-3210

1-C YF-40 NS0967-086-3290
EIC QD3J000
SERIAL: Antenna Coupler CU.1170/SRC-16U. All serial numbers when installed with AN/URT-23 Radio Transmitting Sets
IDENTITY: Turn four thumb screws counterclockwise until thumbscrews are loose. Push up on two thumb latch levers and pull antenna coupler from cabinet as far as it will come. Remove unit dust cover by loosening eleven quarter fasteners. Both Phillips and a flat-blade screwdriver are required. Inspect the tank assemblies and observe that the perforated dust cover has been instalied.

17-AN/SRC-16: Transmit Audio Montoring Jacks
Corroction Material: T-3, NS0967-086-3036 to NS0967-086. 3030; T-4, NS0967-086-3067 to .NS0967-086-3060

## 1-A FA-8 NS0967-086-3300 <br> EIC QD3J000

SERIAL: Equipments A-1 thru A-17, B-1 thru B-4
IDENTITY: Observe the six (6) test jacks installed on front of Radio Transmitter T-916/SRC-16.

18-AN/SRC-16: RF/DC Matrix Operation from an External 28 Volt DC Sousce

Correction Material: T-5, NS0967-086-3059 to NS0967-086. 3050; T-5, NS0967-086-3068 to NS0967-086-3060

I-A FA-8 NS0967-086-3310 EIC QD3J000
SERIAL: All serial numbers
IDENTITY: Addition of new jack (J.42), lower right side on back of cabinets 6 Al and 8 Al .

1-AN/SRC-16(XN-1): Communication Central - Incorporation of System Modification Bulletin as a Unit Field Change Correction Material: Incorporated in revised publications
2-A NA NS0967-207-9130 None
SERIAL: AI thru A 8
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-AN/SRC-16(XN-1): Audio Patching Adaptor Unit 6 Wiring Change

Correction Material: T-1, NS0967-207-90!3 to TM, NS0967-207-9010 (formerly NS94288)

2-A FA-1 NS0967-207-9130 None
SERIAL: All
IDENTITY: Performing the continuity test specified in the field change.

3-AN/SRC-16(XN-1): Addition of Doppler Shift Simulator Correction Material: None required
1-A FA-I NS0967-056-9220 F5820-940.

SERIAL: All
IDENTITY: Not applicable
4-AN/SRC-16(XN-1): Communication Central; Incorporation of Factory Field Bulletin T-22 (AN/SRC-16(U) as a field change)

Correction Material: None
1-A FA-1 NS0967-207-9140
SERIAL: 1 thru 8
IDENTITY: Change number stamped on the Field Change Accomplished plate and also by observing that the -3 has been added to the Radio Transmitter MCN (manufacturer's control number).

5-AN/SRC-16(XN-1): Same as 8-AN/SRC-16 except
Correction Material: T-1, NS0967-207-9021 to TM, NS0967-207-9020 (formerly NS94288, Vol. II)
6.AN/SRC-16(XN-1): Communication Central; Paralleling of K21 Relay Contacts in the Antenna Coupler Control Module A3

Correction Material: T-1, NS0967-207-9011 to NS0967-2079110 (TM for AN/SRC-16(XN-1)), T-3, NS0967-086-3056 to NS0967-086-3050 (TM for AN/SRC-16), NS0967-176-3010 (TM for AN/SRA-34(V)), and NS0967-098-2020 (TM for AN/SRM-14)

2-A FA-2 NS0967-086-3180
SERIAL: All AN/SRC-16(XN-I), also all Antenna Coupler Control Modules, Collins Radio past No. 528-0049-006 and 528-0049-005, both in equipment and in shipboard supply should be modified
IDENTITY: Observing that the individual module modifications have been accomplished.

7-AN/SRC-16(XN-1): Replace Obsolete 1N39B Diode
Correction Material: T-1, NS0969-0I0-0011 to TM, NS0969-010-0010, T-3, NS0967-207-9113 to TM, NS0967-2079110

II-A FA-2 NS0967-207-9150
EIC FH9N000
SERIAL: Applies to equipment only upon failure of the obsolete diodes (IN39B)
IDENTITY: Observing that the IN39B diodes have been replaced by IN914 diodes, and that the prescribed circuit changes have been accomplished.

8-AN/SRC-16(XN-1): FSK Oscillator Output Impedance Change

Correction Material: T-1, NS0967-207-9121 to NS0967-207. 9120

1-C FA-4 NS0967-207.9160 EIC QD3L000
SERIAL: AN/SRC-16(XN-1), Unit 6, Audio Patching Adaptes Modules A27 thru A30 and Oscillator O-655/URC
IDENTITY: The Collins part number of Oscillator O-655/ URC is changed from 591-5584-004 to 591-5584.025.

9-AN/SRC-16(XN-1): FSK Current Loop Modification
Correction Material: T-2, NS0967-207-9122 to NS0967-2079120

1-C FA-2 NS0967-207-9170 EIC QD3L000 SERIAL: Unit 6 Audio Patching Adapter IDENTITY: Addition of 5 after the MCN number on AN/ SRC-16(XN-1) unit 6 Audio Patching Adapter.

10-AN/SRC-16(XN-1): Same as 14-AN/SRC-16 except
EIC QD3L000
11-AN/SRC-16(XN-1): 60 Hz Operation with C-1138/UR
Correction Material: T-3, NS0967-207-9123 to NS0967-2079120

1-C FA-3 NS0967-207-9180
EIC QD3L000
SERIAL: Unit 6 Audio Patching Adapter
IDENTITY: Addition of -4 after the MCN number on Unit 6 Audio Patching Adapter.

12-AN/SRC-16(XN-1): Voltmeter Terminat Covers
Correction Material: T-2, NS0967-207-9102 to NS0967-207. 9100; T-7, NS0967-086-3401 to NS0967-086-3060

I-A FA-I NS0967-207-9190 EIC QD3LO00
SERIAL: Radio Frequency Amplifier AM-3799/SRC-23(V), AM-3712/SRC-16, AM-3712A/SRC-16 and Unit 3 of AN/ SRC-16(XN-1). All serial numbers.
IDENTITY: Open front doors, release the fous snap fasteners on the meter panel at top of cabinet, lower meter panel and observe that a silicon rubber cover is installed on the rear portion of meters MI and M2.

## 1-AN/SRC-16A: AN/SRC-16A and AN/URT-23 Interface Correction Material: Included in CTM for C.46580/SRC16 <br> 2-C FA-100 NSO967-086-3220 <br> EIC <br> FH9M000

SERIAL: AN/SRC-16A Electrical Equipment Cabinet 7: Serial number A4, A5, Bl and the associate Antenna Coupler Control C-4658/SRC-16
IDENTITY: Inspection of the circuit as outlined in the procedures.

2-AN/SRC-16A: Increase RF Power Capabilities to 1 KW Average

Correction Material: Included in CTM for C-46580/SRC. 16 Unit (Modified)
2.C FA-40 NS0967-086-3230 EIC

FH9M000
SERIAL: Antenna Coupler CU-1170/SRC-16
IDENTITY: Inspection of the circuit as outlined in the procedures.

3-AN/SRC-16A: Radio Frequency Emission Status
Correction Material: Included in NS0967-086-3010, NS0967-086-3030, NS0967-086-3050, and NS0967.086-3060
l-A FA-16 NS0967.086-3240 EIC
QD3K000
SERIAL: All serial numbers
IDENTITY: Locate connector 18 mating jack to the keyer subassembly A2 mounted on the Control Compartment Door of Equipment Cabinets 6A1 and 8AI. Observe that (1) IN647 diode has been added between $18-4$ and standoff insulator E3,
(1) IN647 diode between J8-4 and standoff insulator EA and
(1) IN647 diode between J8-7 and standoff insulator ES.

4-AN/SRC-16A: Same as 12-AN/SRC-16 except
EIC
QD3K000
5-AN/SRC-16A: Same as 13-AN/SRC-16 except
EIC
QD3K000
SERIAL: Al thru A6, Bl and B2
6-AN/SRC-16A: Same as 14-AN/SRC-16 except

## EIC <br> QD3K000

7.AN/SRC-16A: Same as 17-AN/SRC-16 except

EIC QD3K000
SERIAL: Equipments A-1 thru A-6, B1 and B2
8-AN/SRC-16A: Same as 18 -AN/SRC-16 except
EIC
QD3K 000

1-AN/SRC-17: Incorporation of Manson Field Change System Numbers as a Unit Field Change

Correction Material: Incorporated in revised publication 2-A NA
SERIAL: Al thru All
IDENTITY: Change number stamped on the Field Change
Accomplished plate.
1-AN/SRC-20: Modification of C-3866/SRC to Make System Compatible with C- 1138 Control Unit

Correction Material: T-S, NS0967.032-5007 to TM, NS0967-032-5000 (formerly NS94695A)

2-A FA-2.5 NS0967.032-5070 None SERIAL: All not previously modified
IDENTITY: Two wires (white with red and blue tracers) connected to F-205.

2-AN/SRC-20: Provide MCW Keying for Homing Beacon Installations. (This field change is no longer required.)

Correction Material: TM changes no longer required. T-1, NS0967-050-7041 and T-2, NS0967-050-7042 to field change bulletin.

2-C YF. 11 NS0967.050.7040
SERIAL: All used for Homing Beacon application. (1f this field change has not been installed, do not install.)
IDENTITY: Absence of wire on pin 5 of K802 in Modulator Audio Amplifier Assembly.
NOTES: T-1, NS0967.050-7041 originally appeared in EIB 682. T-2, NS0967-050.7042, originally appeared in EIB 751.

3-AN/SRC-20: Modification of PP-2702/LRC-9 to Provide Improved Operation During Shock and Vibration

Correction Material: T.S, NS0967-032-5007 to TM, NS0967-032-5000

2-A FA-t NS0967-032.5070
None
SERIAL: All not previously modified
IDENTITY: Use of INS61 in place of INS6G for CR-150i thru CR-1504.

4-AN/SRC-20: Modification of Line Fuses Main F-204 and Radio Set F-206 to Provide Safety of Operations

Correction Material: T- to NS94695(A) (NS0967.032.5000)
2-A FA-2 NS0967-032-5070 None SERIAL: All
IDENTITY: Presence of DYMO-MITE Tape Writer Labeling on the front of the C-3866/SRC.

5-AN/SRC-20: Changes Added to AN/SRC-20. Adapts Equipmeat to Withstand Shock and Vibration Correction Material: T-3, NS0967-032-5004
1-A FA 3 NS0967-032.5100 2N5820-986.
7729
SERIAL: A!!
IDENTITY: Presence of clamps in RT-581/URC. 9 Guide Pins in C-3866/SRC and screw lock pins for P-401 of Servo Amplifiers in AM-1565.

6-AN/SRC-20: Reduces Failure of Contacts in Relay K-601
Correction Material: T-4, NS0967-032-5005 to TM, NS0967.032-5000
1.A FA-1 NS0967-032-5060

SERIAL: All
IDENTITY: Presence of 100 ohm resistor, a 1 microfarad capacitor, and insulated terminal stud installed vertically alongside the case of Relay K-602 in the Relay Filter unit of Receiver Transmitter RT-581/URC-9.

7-AN/SRC-20: Installation of Elapsed Turne Indicator
Correction Material: T-1, NS0967-032-5001 to TM, NS0967-032-5000

1-A FA-8 NS0967-032-5080 2F5820056.
1334
SERIAL: Equipments on selected ships. (See field change bulletin.)
IDENTITY: Presence of an elapsed time indicator on front panel of Power Supply PP-2702/URC-9.

8-AN/SRC-20: Reduce Failure of Indicator Lamps DS201 and DS202

Correction Material: T-1, NS0967-125-6011 to TM, NS0967-125-6010

1-A FA-1 NS0967-125-6110 2Z5820-928. 5011
SERIAL: All
IDENTITY: The presence of a 15 ohm resistor between terminal 6 of T201 and ground.

9-AN/SRC-20: Ruggedize Drawer Slide
Correction Material: None required
1-A FA-1 NS0967-125-6120
2Z5820-019-
SERIAL: All equipments manufactured by Collins Radio Co. under Contract Numbers NObsr 87290 and 89509
IDENTITY: Presence of reinforcing blocks on the tilt control mechanisms (item lc and item ld).

10-AN/SRC-20: Protects RF and PA Assembly from Excessive Heat

Correction Material: T-3, NS0967-125-6013 to TM, NS0967-125-6010 (Vol. I)

1-A FA-1.5 NS0967-125-6130 EIC FH15000
SERIAL: All serial numbers
IDENTITY: Presence of a thermal sensing device in the center of PA tube cover plate on RF-PA Assembly.

11-AN/SRC-20: Reduces Failure of Contacts in Relays K801 and K802

Correction Material: T-4, NS0967-125-6014 to TM, NS0967-125-6010

1-A FA-4 NS0967-125-6140 EIC FH15000 SERIAL: All
IDENTITY: The presence of a 15 K ohm resistor and a 0.2 mfd capacitor connected between terminals 1 and 10 of socket XK801 in the RT-581 unit, and a 12 mfd capacitor with a 300 ohm resistor installed near P1501 in the PP-2702 power supply.

12-AN/SRC-20: Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T-5, NS0967-125-6016 to TM, NS0967-125-6010

2-C FA-10 NS0967-125-6150 EIC FH15000

SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: The presence of a 3 teiminal connector installed at the rear of AN/URC-9 case between J1404 and S1401.

13-AN/SRC-20: AM-1565/SRC High Voltage Protection
Correction Material: T-6, NS0967-125-6017 to TM, NS0967-125-6010

2-A FA-1 NS0967-125-6160 EIC FH15000
SERIAL: All equipments
IDENTITY: Installation of a TNC series connector in place of the normally used BNC connector at Jack J-3 in the AM1565/SRC RF Amplifier. The TNC connector is a screw thread adaption of the original BNC connector.

## 14-AN/SRC-20: Same as 7-AN/URC-9

15-AN/SRC-20: Removal of Voltage Regulator from FMO Oscillator

Correction Material: T-12, NS0967-125-6305 to NS0967-125-6010; T-4, NE0967-125-6204 to NE0967-125-6200; T-1, NSO967-305-4012 to NS0967-125-4010; T-3, NS0967-125-6043 to NS0967-125-6040

2-A FA-1 NS0967-125-6230 EIC QD3R000
SERIAL: All serial numbers and also to all frequency multiplier oscillator FMO assemblies which are held as stock or allowance spares
IDENTITY: If a zener diode (CR201) and a 1000 ohm resistor (R-218) are not visibly mounted on a bracket near tube V-202.

16-AN/SRC-20: Reduce Coil Failures of Relay K-601 and Standardize the Grid Bias Voltage of the Power Amplifier in the RT-581/URC-9

Correction Material: T-9, NS0967-125-6302 to NS0967-1256010; T-2, NS0967-125-6202 to NS0967-125-6200

1-A FA-1 NS0967-125.6190 EIC QD3R000 SERIAL: All serial numbers
IDENTITY: Presence of a $220 \mathrm{ohm}, 2$ watt resistor and a 100 mfd capacitor connected to terminal 5 of relay $\mathrm{K}-601$ in the relay filter assembly, also the presence of a 1 N2975RB zener diode in the Power Supply PP-2702/URC-9. Some equipments may already have the iN2975RB diode installed.

17-AN/SRC-20: Reduction of Coil Failures, Relays K202, 203, 204 in Radio Set Control Unit C-3866/SRC

Correction Material: T-10, NS0967-125-6303 to NS0967-
125-6010; T-3, NS0967-125-6203 to NS0967-125-6200
1-A FA-2 NS0967-125-6210 EIC QD3R000 SERIAL: All. (Does not apply to AN/URC-9())
IDENTITY: Presence of a 20 ohm 30 watt resistor and a 150 MF electrolytic capacitor mounted on the rear underside of the C-3866/SRC chassis adjacent to relay K204.

18-AN/SRC-20: Same as 10-AN/URC-9 except
EIC QD3R000
19-AN/SRC-20: Servo Balance Control Access Holes (EIB 980).

Correction Material: None required.

EIC QD3R
QD6H

SERIAL: All serial numbers of AN/URC-20 and AN/URC. 20A.
IDENTITY: Verify that access holes to servo banance controls have been cut in the bottom cover of AM-1565/URC.

1-AN/SRC-20A: Same as 10-AN/URC-9

2-AN/SRC-20A: Reduction of Coil Failures, Relays K202, 203, 204 and Reduction of Indicator Lamp Failures DS201 and DS202 in Radio Set Control Unit C-3866/SRC

Correction Material: T-2, NS0967-378-2012 to NS0967-3782010

I-A FA-3 NS0967-378-2060 EIC QD6H000
SERIAL: All serial numbers
IDENTITY: Presence of a 20 ohm 30 watt resistor and a 150 MF electrolytic capacitor mounted on the rear underside of the C-3866/SRC chassis adjacent to relay K204. Also the presence of a 15 ohm 2 watt resistor between terminal 6 of T201 and ground.

3-AN/SRC-20A: In the RT-58?A/URC-9: 1. Reduce Coil Failure of Relay K601 and Standardize the Grid Bias Voltage of the Power Amplifier. 2. Reduce Failure of K802 Relay Contacts

Correction Material: T-3, NS0967-378-2013 to NS0967.3782010; T-1, NS0967-378-3011 to NS0967-378-3010

## 1-A FA NS0967-378-2070 EIC

QD6H000
SERIAL: All sesial numbers
IDENTITY: 15 K ohm resistor and a 0.2 MFD capacitor connected between terminals 1 and 10 of XK801 in the audio amplifier and modulator assembly in RT-581A/URC-9. A 1N2975RB zener diode installed for circuit symbol CR1514 in the power supply PP-2702/URC-9.

4-AN/SRC-20A: AM-1565/URC High Voltage Connector Protection

Correction Material: T-4, NS0967-378-2014 to NS0967-378. 2010

I-A FA-1 NS0967-378-2080 EIC
QD6H000
SERIAL: All serial numbers
IDENTITY: This field change is identified by observing a TNC high voltage connector in place of the normally used BNC type at J-3 in the AM-1565/URC. The TNC is a screw thread connector, the BNC is a bayonet type connector.

5-AN/SRC-20A: Wiring Change, Elimination of Potential Safety Hazard

Correction Material: Has been included in Technical Manuals, NS0967-438-9010 and NS0967-438-9020

2-A FA-2 NS0967.438-9060 EIC QD6H000
SERIAL: All serial numbers
IDENTITY: Removing the RT-581A/URC-9 from its case and with an AC voltmeter set to the 250 volt scale, check for presence of an AC voltage between pin $r$ of $J-1401$ and the case with power switch S-1503 of Power Supply PP-2702/

URC in the OFF position. Switches S-204 and S-206 of Control Unit C-3866/SRC should be in the ON position. No voltage should be readable on the meter.

6-AN/SRC-20A: Same as 19-AN/SRC-20.

1-AN/SRC-21: Same as 1-AN/SRC-20

2-AN/SRC-21: Same as 2-AN/SRC-20

3-AN/SRC-21: Same as 3-AN/SRC-20

4-AN/SRC-21: Same as 4-AN/SRC-20
5-AN/SRC-21: Changes Added Adapts Equipment to Withstand Shock and Vibration

Correction Material: T-3, NS0967-032-5004 to TM, NS0967.032-5000
1-A FA.2 NS0967-032-5050 2N5820.986

$$
7746
$$

## SERIAL: All

IDENTITY: Presence of plug clamping plate in RT-581/ URC-9 and Guide Pins in back panel to rear of C-3866/SRC.

6-AN/SRC-21: Same as 6-AN/SRC-20

7-AN/SRC-21: Installation of Elapsed Time Indicator
1-A FA-4 NS0967-032-5090 2F5820.056.

1366
SERIAL: Equipments on selected ship. (See field change bulletin.)
IDENTITY: Presence of an elapsed time indicator on front panel of Power Supply PP-2702/URC-9.

8-AN/SRC-21: Same as 8-AN/SRC-20

9-AN/SRC-21: Same as $10-A N / S R C-20$
10-AN/SRC-21: Same as 11-AN/SRC-20
11-AN/SRC-21: Same as 12-AN/SRC-20 except
2-C FA-10 NS0967-125-6150
EIC FR16000
12-AN/SRC-21: Same as 7-AN/URC-9
13-AN/SRC-21: Same as 15-AN/SRC-20 except
2-A FA-1 NS0967-125-6230 ElC QD3S000
14-AN/SRC-21: Same as 16-AN/SRC-20 except
EIC QD3S000

15-AN/SRC-21: Same as 17-AN/SRC-20 except
EIC QD3S000
16-AN/SRC-21: Same as 10-AN/URC-9 except
EIC QD3S000

1-AN/SRC-21A: Same as 10-AN/URC-9

## 2-AN/SRC-21A: Same as 2-AN/SRC-20A except

EIC QD6J000
3-AN/SRC-21A: Same as 3-AN/SRC-20A except

EIC
QD6K000
4-AN/SRC-21A: Same as 5-AN/SRC-20A except
EIC QD6J000
1-AN/SRC-22(V): Factory installed change
Correction Material: Included in TM
2-AN/SRC-22(V): Installation of Standby and Emitting Status Monitoring Relays (EMCON)

Correction Material: T-1, NS0967-097-6012 to NSO967.097. 6010

2-C YF-8 NS0967-097-6050
SERIAL: All AN/SRC-22(V) Flight Deck Communications Systems installed aboard ships with AN/SSQ-54 Emission Indicator Set installed
IDENTITY: Presence of a three terminal connection installed on side of chassis, part of RT-647/SRC-22(V), between J1002 and J1008/1009.

3-AN/SRC-22(V): Electromagnetic Interference Filter for AN/SRC-22(V) Base Station.

Correction Material: Change to TM, NE0967.097-0010, to be provided.

1-A FA-1 NE0967.LP-097-6060 EIC QD6D SER1AL: All serial numbers.
IDENTITY: Verify installation of a coaxial bandpass filter (Telonic p/n TBP140-20-6EEl) connected to the receiver antenna port ( $\mathrm{JlOO9}$ ) of the base station RT-647/SRC-22(V).

1-AN/SRC-23(V): Incorporation of Factory Modifications 1 thru 19

Correction Material: None
2-A FA-30 NS0967-163-9080
SERIAL: All AN/SRC-23(V) equipment built under Contract NObsr 93052, serials numbers BI thru B9
IDENTITY: By observing that the individual modifications have been installed in the equipment.

2-AN/SRC-23(V): Radio Set - Incorporation of Factory Modifications 20 thru 27

Correction Material: To be supplied by Collins Radio Co.
IV-A FA-2 NS0967-163-9100
SERIAL: All equipments built under Contract NObsr 93052, serial numbers Bl thru B9
IDENTITY: Observing that the individual modifications have been installed in the equipment.

1-AN/SRC-23A(V): Radio Frequency Emission Status
Correction Material: T-1, NS0967-304-2031 to NS0967-3042030

1-A FA-16 NS0967-304-2130 EIC QD3W000

SERIAL: All serial numbers
IDENTITY: Disengage and pull the equipment rack out of the electrical equipment cabinet. Observe a connector bracket installed above existing connector fixture.

## 2-AN/SRC-23A(V): VSWR.

Correction Material: Revised TM's, NS0967-304-2010, . 2020, -2030, -2040, -2050, -2060 did March 73.

1-A FA-6 NS0967-304-2140
SERIAL: Al thru A45.
IDENTITY: The CY-4932/SRC-23(V) has VSWR protective circuit card mounted on upper right side of equipment drawer. The C-4785A/SRC-23(V) has white, brown, and orange wire between 15-6 and P1-14. In the ID-1370/SRC-23(V), two 1000 -ohm resistors are connected directly to contacts of switch S3.

3-AN/SRC-23A(V): 100 dHz Frequency Standard Alarm.
Correction Material: Revised TM's, NS0967-304-2010, . 2020, -2030, -2040, -2050, and -2060 did March 73.

3-A FA-16 NS0967-304-2150
SERIAL: Al thru A45.
IDENTITY: The T-1004/SRC-23(V) has terminal board TB2 installed over RF Detector All. The C-4785A/SRC-23(V) has terminal board TB2 installed on front side of bulkhead opposite relay K2. The CY-4932/SRC-23(V) has a violet wire connected between TB4-2U and TB1I-2P. In the O-1107/ SRC-16, check for installation of A5TB2 between C1 and C3. In the CY-4029/SRC-23(V), check for continuity (zero ohms) between J10.8, J11-8, J12-8, and J6-B.

## 4.AN/SRC-23A(V): Five kW Amplifier Switching.

Correction Material: Revised TM's, NS0967-304-2010, . 2020, -2030, -2040, -2050, and -2060 did March 73.

1-A FA-8 NS0967-304-2160
SERIAL: AI thru A45.
IDENTITY: In the ID-1370/SRC-23(V), J2 pins D, E, and F are not used. The CY-4932/SRC-23(V) has 'MOD I' decal on upper right side. (Note: The CY-4932/SRC-23(V) was modified at the factory for serial numbers A47 and above.) The AM-3799/SRC-23(V) has connectors installed to mount switching module A20 on top of cabinet on left side of subassembly Al9.

## 5-AN/SRC-23A(V): FSK Loop Current.

Correction Material: Revised TM's, NS0967-304-2010, . 2020, -2030, -2040, -2050, AND -2060 did March 73.

1-C YF-2 NS0967-304-2170
SERIAL: Al thru A45.
IDENTITY: Resistor A1R4 is a variable resistor and resistor AlR5 is 680 ohms, 6 watts.

1-AN/SRC-31A: Radio Set - Incorporation of ECI Factory
Modifications as a Unit Field Change
Correction Material: None required
4-A NS0967-237-9090
SERIAL: 101 thru 155
IDENTITY: This field change can be identified by observing this change number on the Field Change Record Plate.

2-AN/SRC-31A: Link 4 and Link 11, Additional Switching

Correction Material: T-1, NS0967-237-9021 to NS0967-237. 9020

3-A FA-2 NS0967-237-9080
SERIAL: Equipment serials 101 thru 155
IDENTITY: Remove radio set control (1A1) C-7743/SRC31A from electrical equipment cabinet (1A7). Visually check for two mounting brackets (IA7A4) secured to right hand side of interface compartment. See figure 5-99, page 5-129, Technical Manual, NA VSHIPS 0967-237-9020 for interface compartment and module 1A7A4.

3-AN/SRC-31A: Replacement of Blower Electric (1A4B1)
Correction Material: T-2, NS0967-237-9022 to NS0967-2379020

## 1-A FA-2 NS0967-237-9110

SERIAL: AN/SRC-31A serial numbers 101-155. AN/SRC31 Berial numbers A l-A20 and Bl-B30.
IDENTITY: Loosen ten (10) retaining screws on the front of Radio Frequency Amplifier AM-4342/GRC-112 (1A4), Remove drawer from Radio Set AN/SRC-31( ) cabinet CY. 6543/SRC-31A and place on work bench. Visually check nameplate on blower, electrical (1A4B1) for manufacture part number 19A2406.
4.AN/SRC-31A: Replace Handset Connector lAlMP3Jl

Correction Material: T-3, NS0967-237-9023 to NS0967-237. 9020

1-A FA-2 NS0967-237-9120
SERIAL: AN/SRC-31A serial numbers 101-155. AN/SRC31 B serial numbers A1-A20 and Bl-B30.
IDENTITY: Visual check for handset connector MS-3102. R14S-5S (1A1MP3J1) mounted on plate, located on front of Radio Set Control (1A1). (See figure 5-31, page 5-70, vol, 2 of 3, NAVSHIPS 0967-237-9020 for location of lAlMP3Jl.)

S-AN/SRC-31A: IPA Balanced Doubler Modifications
Correction Material: Included in new manuals
1-C YF. 12 NS0967-237-9130
SERIAL: 101 thru 155. All equipments will be the same after this field change has been installod.
IDENTITY: Remove Receiver R-1485/SRC-31 and note the presence of TPS (orange) on Amplifier-Oscillator 1A3A2A2A3. This field change affects depot repair assemblies; therefore, any further disassembly for checking purposes is not authorized.

## 6.AN/SRC-31A: FSK Detector Modification <br> Correction Material: Included in new manuals

1.C YF. 4 NS0967-237-9140

SERIAL: Numbers 101 thru 155. All of the equipment population will be the same after this field change has been accomplished.
IDENTITY: Check front pane! of Radio Receiver R-1485/ SRC-31 for designation plate. This field change affects a depot repair assembly; therefore, no disassembly for checking pur. poses is authorized.

7-AN/SRC-31A: Product Improvement
Correction Material: Included in new manuals
1-A YF-8 NS0967-237-9150

SERIAL: 101 thru 155. All of the equipment population will be the same after this field change has been accomplished.
IDENTITY: Remove P.A. IA4 assembly and note the presence of connector lA4 Jl 8 .

8-AN/SRC-31A: External Frequency Standard, Power Supply and Accessory Kit Modifications

Correction Material: Included in new manuals
1-A YF. 30 NS0967-237-9160
SERIAL: AN/SRC.31A serial numbers 101-155. AN/SRC31 B sedrial numbers A1-A20 and B1-B30.
IDENTITY: Check upper left comer of Radio Set for EXT.STEI. indicator. Check Receiver (lA3) and Synthesizer (1A5) frortt panels for VFO out BNC jack.

9-AN/SRC-31A: Servo System Modifications
Correction Material: Included in new manuals
1-A FA-18 NS0967-237-9170
SERIAL: AN/SRC-31A serial numbers 101-155. AN/SRC3 1B serial numbers A1-A20 and B1-B30.
IDENTITY: Identification plate marked with field change number on units 1A1, 1AJA2, 1A7, 1A7A5, 1A8, and 1A8A2.

10-AN/SR:C-31A: LINK 11 lnterface Card Modification.
Correction Material: Included in Field Change Bulletin.
I-A FA-2 NE0967-LP-237-9180 EIC
QD43,WD6G
SERIAL: AN/SRC-31A serjal numbers 101-155. AN/SRC. 31 B serial numbers Al-A20 and Bl-B30 (Bl-B30 had field change accomplished during production).
IDENTITY: Heat sinks have been removed from $Q 2$ and $Q 3$ of 1A9A2 and from Q8 and Q9 of 1A9A1.

1-AN/SRC-31B: Link 4 and Link 11, Additional Switching
Correction Material: T-1, NS0967-237-9021 to NS0967-237. 9020

1-A FA-2 NS0967-237-9100 ElC QD43000
SER1AL: All serial numbers: A1-A20 and Bl-B30.
IDENTITY: Remove radio set control ((AI) C-7743/SRC31A from electrical equipment cabinet (1A7). Visually check for two (2:) mounting brackets (3A7A4) secured to right hand side of interface compartment. See figure 5-99, page 5-129, Technical Manual NAVSHIPS 0967-237-9020 for interface compartment and module 1A7A4.

2-AN/SRC-31B: Same as 3.AN/SRC-31A

3-AN/SRC-31B: Same as 4-AN/SRC-31A
4-AN/SRC-31B: Same as 8-AN/SRC-31A
5-AN/SRC-31B: Same as 9-AN/SRC-31A

6-AN/SRC-31B: Same as 10-AN/SRC-31A.
1-AN/SRC-40: Mute 11 Interface Modification.
Correction Material: Revised TM, NS0967-LP-619-5010, will retlect this tield change.

1-C YF-8 NS0967-LP-619-5020 ElC QD74
SERIAL: All serial numbers.

IDENTITY: Verify installation of a ten-pin connector IJ9 (Type MS-31145-12-10S) located on the back and below the three-pin power connector 1 J .

2-AN/SRC.40: MUTE II Interface Connector change.
Correction Material: EIB 007
4A FA-1 EIB 007
EIC QD74
SERIAL: All serial numbers.
IDENTITY: Verify that a jumper wire has been installed between pins C and D of 1 Jg .
NOTES: Prerequisite Field Change: 1-AN/SRC-40.
1-AN/SRC-42: LORAN Antenna Coupler and Amplifier Installation

Correction Material: Chg. I, NE0967-274-9011 to NE0967-274-9010; T-1, NE0967-274-9031 to NE0967-274-9030
1.A FA-6 NE0967-274-9040 EIC L10J000 SERIAL: All serial numbers
IDENTITY: Presence of RF amplifier circuit board on each AN/SRA-42 RF tuner (TN-443/SRA-42)

1-AN/SRD-7: Primary Power Source Modification Correction Material: Change 1 to NS92349(A)
A FA-8 NS98943 2N5825-543-
SERIAL: All
1-AN/SRM-13: Incorporation of Factory Modification Bulletis No. I as a Field Change

Correction Material: Supplied as a Permanent Change to NA VSHIPS 95757

2-A FA-1 NS0969-098-1050 None
SERIAL: A1 thru A22
2-AN/SRM-13: Remounting Jack J51
Correction Material: None required
2-A FA-I NS0969-098-1050 None
SERIAL: B2 thru B7 - Equipments built under Contract NObsr 95099
IDENTITY: Observing that the silk screening undemeath the top panel for plug JSl has been removed.

1-AN/SRM-14: Incorporation of Factory Modification Bulletin No. 1 as a Field Change

Correction Material: To be supplied as a Pemmanent Change to NS95757

2-A FA-1 NS0969-098-1050 None
SER1AL: Ai thru A22
2-AN/SRM-14: Electronic Circuit Plug-In Unit Test Set - Installation of Protective Fuse

Correction Material: T-1, NS0969-098-2013 to NS0969-098-
2010; T-2, NS0969-098-2024 to NS0969-098-2020
2-A FA-1 NS0969-098-2060
EIC QR03003
SERIAL: All equipment serial numbers
IDENTITY: Noting the absence of 28 Vdc between J 42 and J43 upon removal of fuse A5F6. (See figure 5-1, NAVSHIPS 0969-098-2010.)

1-AN/SRN-6: Superseded by 4-OA-1545/SRN-6

2-AN/SRN-6: Modification to Stabilize the North and Auxiliary Reference Pulses

Correction Material: T-S, NS0967-073-5013 to TM, NS0967-073-5010 (formerly NS92986(A))

2-A FA-3 NS0967-073-5100
SERIAL: Applies only to Coder KY-235/URN
IDENTITY: Presesce of a 1 N69 diode between terminals 20 and 21 of TB-698, a IN69 diode between terminals 26 and 27 of TB-698, and a 120,000 ohm resistor between temminals 22 and 61 of TB-698.

## 3-AN/SRN-6: Elimination of Spurious AC Signals Present in KY-235/URN

Correction Material: T-6, NS0967-073-5014 to TM, NS0967-073-5010 (formerly NS92986(A))

2-A FA-2 NS0967-073-6100
None

## SERIAL: All

IDENTITY: The presence of a No. 18 stranded black nylon insulated wire connected to the various tube sockets and grounded at TB-604-8 in KY-235/URN video chassis.

4-AN/SRN-6: Installation of Klystron Aging Switch
Correction Material: T-7, NS0967-073-5016 to TM, NS0967.073-5010 (formerly NS92986(A))

1-A FA-3 NSO967-073-5110 EIC DL01000 SERIAL: All equipments ${ }^{-}$
IDENTITY: Presence of a NORMAL/AGE switch on the hinged fuse panel of Power Supply Group Cabinet CY-2189/ SRN-6.

5-AN/SRN-6: Pre-Trigger Generator Installation
Correction Material: T-1, NS0967-073-S017 to NS0967-0735010; NS0967-073-5021 to NS0967-073-5020, T-1, NS0967-0735031 to NS0967-073-5030

1-A FA-4 NS0967-073-5120 EIC L601000 SERIAL: All shapboard equipment only
IDENTITY: A pre-trigger assembly is mounted on the bottom rear of the KY-235/URN

6-AN/SRN-6: TACAN Test Equipment Protection
Correction Material: T- to NS0967-073-5020
4-A FA-1 EIB 871
EIC L601000
SERIAL: All serial numbers
IDENTITY: Presence of three wires on TB904(13) and three wires on TB904(14).

7-AN/SRN-6: Modification to Deactivate Identification Call Keyer when Equiprnent is in Standby Status

Correction Material: T-2, NS0967-LP-073-5022 to NS0967-LP-073-5020 and T-9, NS0967-LP-073-6302 to NS0967-LP-073-6010.

1-A FA. 4 NS0967-LP-073-5140 EIC L601000
SERIAL: All serial numbers
IDENTITY: Keyer whee! will not rotate when master switch S1101 in control duplexer C-2225/SRN-6 or C-2225A/SRN-6 is in the STANDBY position.

8-AN/SRN-6: Modification to Secure C-2225/SRN-6 and C-2225A/SRN-6

Correction Material: None required
2-A FA-2 EIB 931

SERIAL: All serial numbers
IDENTITY: Installation of a cable clamp on TBIIOI.
9-AN/SRN-6: Interface Antenла Group OE-273(V)/URN.
Correction Material: To be provided.
1-A FA. 4 NE0967-LP.073-5150
EIC
L601,L608
SERIAL: AN/SRN-6, -6A: all serial numbers.
IDENTITY: Absence of magnetic variation dial on Coder.Indicator front panel.

1-AN/SRN-6A: Reduction of Radiated Noise
Correction Material: Change 1 to $\mathrm{NS} 93177(\mathrm{~A})$
1-A FA-10 NS981363 F5825-856. 186
SERIAL: Equipments on NObsr 71717
IDENTITY: Presence of RF shield box.
2-AN/SRN-6A: Replacement of Heater Stabilized Spectrum Filter with a Temperature Compensated Spectrum Filter

Correction Material: Change 3, NSO967-104-60:1 to TM, NS0967-104-6010 (formerly NS93177(A))

1-B FA-30 NS0967.073-6160
SERIAL: Control Duplex Identification Nameplate.
IDENTITY: Modification nameplate located below the Control Duplexer Identification Nameplate.

3-AN/SRN-6A: Same as 2-AN/SRN-6 except
Correction Material: T-2, NS0967-073-6014 to TM, NS0967.073-6010 (formerly NS93177(A))

4-AN/SRN-6A: Same as 3-AN/SRN-6 except
Correction Material: T-2, NS0967-073-6012 to TM, NS0967-073-6010 (formerly NS93177(A))

5-AN/SRN-6A: Provide EMCON Status Indication
Correction Material: T-5, NS0967-073-6016 to TM, NS0967.073-6010 (formerly NS93177(A))

2-C YF-4 NS0967-073-6180 EIC DL02000
SERIAL: Only those AN/SRN-6A equipments connected to EMCON status indicator AN/SSQ-54
IDENTITY: Presence of two relays, K-1002 and K-1003, mounted in the rear bottom of power-supply assembly cabinet OA-1535/SRN-6.

6-AN/SRN-6A: Installation of Klystron Aging Switch
Correction Material: T-6, NS0967.073-6017 to TM. NS0967-073.6010 (formerly NS93177(A))

1-A FA.3 NS0967-073-6170
EIC DL02000
SERIAL: All equipments
IDENTITY: Presence of a NORMAL/AGE Switch on the fuse panel of Power Supply Group Cabinet CY-2187/URN.

7-AN/SRN-6A: Fusing of Roll and Pitch Transformer (T601)
Correction Material: T-7, NS0967-073-6018 to NS0967-0736010

2-A FA-I NS0967-073-6190 EIC DL02000
SERIAL: All equipments (TACAN)
IDENTITY: Presence of a $1 / 4 \mathrm{amp}$ fuse in fuse holder labeled F603.

8-AN/SRN-6A: Pre-Trigger Generator Installation
Correction Material: T-8, NS0967-073-6301 to NS0967-073. 6010

1-A
FA. 4
NS0967-073-6200
EIC L603000
SERIAL: All shipboard equipment only.
IDENTITY: A pre-tigger assembly is mounted on the bottom of the KY-235/URN.

9-AN/SRN-6A: Same as 4-AN/GRN-9
10-AN/SRN-6A: Same as 11-AN/GRN-9B
11-AN/SRN-6A: Same as 6-AN/SRN-6 except
EIC L603000

12-AN/SRN-6A: Same as 7-AN/SRN-6.
13-AN/SRN.6A: Same as 8-AN/SRN-6

## 14-AN/SRN-6A: Same as 9-AN/SRN-6.

1-AN/SRN-9: Addition of Flat Gasket to AM-6034/SRN-9 Correction Material: T- 10 NS0967-306-2010
2-A FA-1 EIB 883 EIC QP04000
SERIAL: Serial numbers AI thru A 16 and B1 thru B48
IDENTITY: Remove the preamplifier cover (MP6) to the AM-6034/SRN. 9 and note the addition of a flat gasket beneath the existing ' O ' ring (MP3) in the groove of the preamplifier base (MP2).

1-AN/SRN-9A: Replacement of Stabilized VCO Module Assembly IA7/IA17

Correction Material: Ch. 2, NS0967-315-9013 to NS0967. 315-9010

1-A FA-I NS0967-315-9020 EIC L706000 SERIAL: All serial numbers
IDENTITY: The compensated VCO module assembly ITTG part No. 5520310 will be visible in module assembly locations IA7 of Radio Receiver R-1682/SRN-9A.

1-AN/SRN-12: Replacement of Primary Power Connector, Spark Gap Warning Insulation for Test Probes, and Gear Change for Recorders

Correction Material: T-1, NS0967-344-00I 1 to NS0967-3440010

1-A FA NS0967-344-0040 EIC L303000 SERIAL: Equipment serial numbers 1 thru 140
IDENTITY: The power plug is a MS-3106A-16-IOS, warning decal on antensa base, and test probe spring tip is insulated with approximately $1 / 2$ inch tip uninsulated.

2-AN/SRN-12: Replacement of Power Transformer, Power Supply Assembly and Addition of Battery Charger Assembly Correction Material: Included in revised technical manual
1-A FA-8 NS0967-344-0050 EIC L303000 SERIAL: Al thru A140
IDENTITY: Receiver drawer 2A2 has a new power transformer, General Atronics P/N 71903-2, has a top area of 3-1/ $2^{\circ} \times 3^{\prime}$, instead of $2-1 / 2^{\prime} \times 2-1 / 4^{*}$ for old transformer ( $\mathrm{P} / \mathrm{N}$ 52671903.1).

1-AN/SRN.14: Modification for Navigational System Interface
Correction Material: T-1, NS0967-869-9011 to NS0967-8699010; T-i, NS0967-869-9031 to NS0967-869-9030

2-A FA-0.5 NS0967-869-9060 EIC L300000
SERIAL: All equipments
IDENTITY: Presence of hookup wire between pin 2 on connector IAIA2XA25 and pin 174 on terminal board IAlA2TBI.

1-AN/SRN-15: Pre-Trigger, Identity Switch Cover and Test Cable Modification

Correction Material: Ch. I, NE0967-434-3011 to NE0967-434-3010

I-A FA-10 NE0967-434-3030 EIC QPCo00
SERIAL: All serial numbers
IDENTITY: A new connector J8(40) is installed on the rear panel of RT.
NOTES: For AN/SRN-15A installations: This field change should be installed and reported accomplished as Field Change 1-AN/SRN-15.

2-AN/SRN-15: Antenna Motor Drive Assembly IA9, IAl0
Transformer Replacement
Correction Material: Ch. 2, NE0967.434-3012 to NE0967. 434-3010

1-A FA-8 NS0967-434-3040 EIC QP04000
SERIAL: All serial numbers
IDENTITY: In C-9146/SRN-15 (unit I) observe that transformer T ! in assemblies IA9 and A 10 are $\mathrm{P} / \mathrm{N} 906876$.
NOTES: For AN/SRN-I5A installations: This field change should be installed and reported accomplished as field change 2-AN/SRN-15.

3-AN/SRN-15: Sealing and Dampening Improvements to AS-2822/SRN-15

Correction Material: Ch. 3, NE0967-434-3013 to NE0967-434-3010

I-A FA-8
NE0967-434-3050
EIC QP040e
SERIAL: All serial numbers
IDENTITY: Addition of the shock-blocks and the unit assembly number decal on the support yoke provide immediate visual indication.
NOTES: For AN/SRN-15A installations: This fietd change should be installed and reported accomplished as field change 3-AN/SRN-i5.

4-AN/SRN-15: $15 / 135 \mathrm{~Hz}$ All-Band System Operation Modification (Modifies equipment to AN/SRN-15A)

Correction Material: Ch. 4 NE0967-434-3013 to NE0967-434-3010

1-C YF-40 NE0967-LP-434-3060 EIC L63300)
SERIAL: All serial numbers
IDENTITY: Installation of new AS-4036/SRN-15A antenna, and part number change on Beacon-Transponder Set Control from 006520 to 006520-04. Name tags on the above four listed equipments indicate their assigned nomenclature as a result of this field change.

5-AN/SRN-15: Antenna Motor Driver Overload Protection and Transponder Standby Indication

Correction Material: Ch. I, NE0967-LP-434-3015 io TM,

NE0967-LP-434-3010 dtd 30 Sep 72
1-A FA-8 NE0967-LP-434-3070 EIC L633
SERIAL: All serial numbers of AN/SRN-15 and AN/SRN15A.
IDENTITY: Presence of (1) supplemental circuit board assemblies IA9AI and IAIOAI in Unit I, 19156 ASSY 005520; (2) ferrite leads on emitter leads of driver transistors IA9Q5, IA9Q8, IAIOQ5, and IAIOQ8; and (3) jumper from IA 3RI6 (LH lead, component side) to IA3PI, pin 25.

1-AN/SRN-15A: Same as I-AN/SRN-15. (Installed, and reported accomplished, as field change 1-AN/SRN-15.)

2-AN/SRN-15A: Same as 2-AN/SRN-15. (Installed, and reported accomplished, as field change 2-AN/SRN-15.)

3-AN/SRN-15A: Same as 3-AN/SRN-15. (Installed, and reported accomplished, as field change 3-AN/SRN-15.)

4-AN/SRN-15A: Not Applicable.
5-AN/SRN-15A: Same as 5-AN/SRN-!5.

1-AN/SRR-4: Elimination of Rotary SA-215/U, Failure Correction Material: None
FA NS981108 Nor

SERIAL: A!]
2-AN/SRR-4: Replace of RF Head and Addition of Test Jack Correction Material: Change 3 to NS91410(A)
1-B YF NS98967 F5820-605. 9326
SERIAL: All (Modifies Equip to AN/SRR-4B)
3-AN/SRR-4: Improvement of AEW System Checkout
Correction Material: T-2 to NS91410(A)
2-A FA-4 NS981338 None
SERIAL: All
IDENTITY: Train designator MK2 MOD5 mounted on the bulkhead with cable entering the Data Converter CV-121/ SRR-4 of the AN/SRR-4. With the AN/SRR-4 energized, the Train Designator MK2 MOD5 will be energized.

1-AN/SRR-4A: Same as 1-AN/SRR-4 except
Correction Material: None
2-AN/SRR-4A: Same as 2-AN/SRR-4
3-AN/SRR-4A: Same as 3-AN/SRR-4
1-AN/SRR-11: Provide Silicon Diode Rectifiers and Zener Diode Voltage Regulator in Lieu of Electron Tube Type 6X4 and Ballast Tube Type IRT4.

Correction Material: T-6 to NS91875(A)
$\begin{array}{rrr}\text { 1-A FA-I NS981356 } & \text { 2N5820-856- } \\ & 0078\end{array}$
SERIAL: All
IDENTITY: V1601, V1602, and R1605 are replaced by the diode rectifier unit.

## 1-AN/SRR-12: Same as 1-AN/SRR-11

1-AN/SRR-13: Reduction of Power Input Voltage Correction Material: None
2-A FA-0.5 NS981078
SERIAL: All
IDENTITY: No visible means

1-AN/SRR-13A: Same as 1-AN/SRR-13
2-AN/SRR-13A: Same as 1-AN/SRR-11 except
Correction Material: T-6 to NS91875(A)
1-AN/SRR-19: To Provide Complete Operation with External Standard

Correction Material: T-2, NS0967-163-2022 to NS0967-1632020

2-A FA-1 NS0967-163-2060 ElC QB0U000
SERIAL: All serial numbers
IDENTITY: Accomplishment of this field change can be determined by inspection of the terminals on switch Sl on the AlA 9 module. Terminal 2 will have only one wire connected and terminal 12 will have two.

2-AN/SRR-19: External Standard Input Circuit Providing Proper Termination

Correction Material: Included in Technical Manual, NAVSHIPS 0967-163-2010 dated October 1973

I1-A FA-1 NS0967-163-2070 EIC QB0U000
SERIAL: All equipments
IDENTITY: Presence of a 51 ohm resistor between pin 10 of switch Sl and and ground terminal in the crystal oscillator frequency divider module AIA9.

1-AN/SRR-19A: Same as 1-AN/SRR-19 except
ElC QB0V000
2-AN/SRR-19A: Same as 2-AN/SRR-19 excep:
EIC QB0V000
1-AN/SRR-19B: Same as 1-AN/SRR-19 except
EIC QB4Q000
2-AN/SRR-19B: Same as 2-AN/SRR-19 except

E1C QB4Q000
1-AN/SRT-14: TN-229/SRT, Addition of Stop to Coupling Coil

Correction Material: None
A FA-6 NS0967-073-4090 F5820-695-
SERIAL: 6.33
iDENTITY: Presence of stop rod in RF tuner.
2-AN/SRT-14: C-1352/SRT, Auxiliary Ground Provision Correction Material: None

A FA. 4 NS0967-073-4100
2N5820-6954274

## SERIAL: 6.33

IDENTITY: Relay K-401 installed adjacent to M-402 inside the control indicator.

3-AN/SRT-14: Not issued
4-AN/SRT-14: RF ampl AM-1008/SRT, Prevention of ArcOver and Suppression

Correction Material: None
A FA-6 NS0967-073-4120 $\begin{array}{r}\text { 2N5820-695- } \\ 4277\end{array}$
SERIAL: 34-323
IDENTITY: C-1345 installed between term C of S1302A and C-1379 on right inside of AM-1008/SRT chassis.

5-AN/SRT-14: Improved Parts for Main Test Cable
Correction Material: None
A FA-6 NS0967.073-4130 2N5820-695-
4278

## SERIAL: 6-21

IDENTITY: Improved main test cable wired in accordance with wiring diagram NL.901193-14

6-AN/SRT-14: RF Oscillator 0-275/SRT, Improved Frequency Stability Correction Material: None
A FA-6 NS0967-073-4140 $\quad$ 2N5820-695-

SERIAL: 6-71, 73-88, 90-142, 144-149, 151, 158, 163, 165, 166, 169, 172
IDENTITY: R-2244 installed on underside of unit 5 (in 0-275/ SRT) between XV-2204 and stand-off term lug.

7-AN/SRT-14: MD-229/SRT, Replacement of FAX Input Resistance

> Correction Material: None

A FA-1 NS0967-073-4150 2N5820-695-
SERIAL: 6-188
IDENTITY: A 620 ohm 5\%, 2 w resistor connected across term 8 F and 10 F of S-II01B in top front of MD-229/SRT chassis

8-AN/SRT-14: AM-1008/SRT, RF Decoupling in Final Amplifier

Correction Material: None
A FA-5 NS0967-073-4160 2N5820-695.
SERIAL: 6.33
IDENTITY: L-1345 and C-1379 installed in series between S. 1302A term C.

9-AN/SRT-14: CY-1571/SRT, Protection of Low Voltage Power Supply

Correction Material: None

> 2N5820-695.

SERIAL: 6-304

IDENTITY: Replacement of connector assy. protective cover located in electrical equīp cabinet CY-1571/SRT, also add jumper on term board E-607.

10-AN/SRT-14: Modification for Mounting Relay K-3004 Correction Material: None 2-A FA-2 NS0967.073-4190 None
SERIAL: All
IDENTITY: Presence of bakelite strip mounted underneath relays K-3004 and K-300s.

11-AN/SRT-14: Improvement for the Mounting of Switch S307 in Radio Frequency Tuner TN-229/SRT

Correction Material: None
2-A FA-2 NS0967-073-4200 None
SERIAL: All
IDENTITY: Presence of No. 8 flat washer mounted at the top of each standoff under the switch mounting plate.

## 12-AN/SRT-14: Cancelled

13-AN/SRT-14: Relocation of Resistor to Eliminate Heat Hazard

Correction Material: None
2.A FA-3 NS0967.073-4230 None

SERIAL: All
IDENTITY: Resistor R-1045 is now mounted to the right of resistors R-1129 and R-1087.

14-AN/SRT-14: Improving the Performance of Transmitter Using Receiver-Transmitter AN/WRA-1 for SSB

Correction Material: T-10, NS0967-073-4016 to TM, NS0967-073-4010 (formerly NS92121(A))
2-A FA-1 NS0967-073-4272

None SERIAL: All using AN/WRA-1 for SSB
IDENTITY: Substitution of the SPDT toggle switch S-1305 with a DPDT toggle switch.

15-AN/SRT-14: Modification of Radio Modulator MD-229/ SRT (LLRM) for Prevention of Malfunction of Antenna Switching Relay, K-1306 and KEYING RELAY K-1101

Correction Material: T-5 to NS92121(A)
2-A FA-2 NS0967-073-4260 None SERIAL: All
JDENTITY: Wiring changes in Radio Modulator MD-229/ SRT (LLRM) and RF Amplifier AM-1008/SRT (RFA) and an additional resistor ( 200 ohm ) mounted on blank terminal of E1004 between R-1058 and R-106

16-AN/SRT-14: Guard for Cabinet Heater Switch
Correction Material: T-10, NS0967-073.4016 to TM. NS0967-073-4010 (formerly NS92121(A))

```
2-A FA-0.S NS0967-073-4272
None
```

SERIAL: All
IDENTITY: Presence of a guard installed over cabinet heater switch S3002.

17-AN/SRT-14: Simplification of Interconnecting Cables
Correction Material: T-10, NS0967-073-4016 to TM, NS0967-073.4010 (formerly NS92121(A))
2.A FA.S NS0967-073-4272
None

SERIAL: All
IDENTITY: Absence of Junction Box Assembly on Antenna Coupler CU-372/SRT.

18-AN/SRT-14: Same as 4-AN/SRA-18

19-AN/SRT-14: Same as 6.AN/SRA-18
20-AN/SRT-14: Replacement of Relay K1101 and K 1306
Correction Material: T-10, NS0967.073-4016 to TM, NS0967-073-4010 (formerly NS92121(A))

2-A FA-2 NS0967-073-4272 None
SERIAL: All
IDENTITY: The existence of standoff post under selay K110] in Radio Modulator MD-229/SRT, and of the angle bracket mount for relay K 1306 in Radio Frequency Amplifier AM1008/SRT.

## 21-AN/SRT-14: Cancelled

22-AN/SRT-14: Field Conversion to Power Supply PP-1094/ SRT (LVPS) to Use Silicon Diode

Correction Material: T-10, NS0967-073-4016 to TM, NS0967.073-4010 (formerly NS92121(A))

2-A FA-2.5 NS0967-073.4272 None SERIAL: All
IDENTITY: Absence of electron tubes and selenium rectifier in the PP-1094/SRT (LVPS).

23-AN/SRT-14: Modification to FSK Circuiz
Correction Material: T- to NS0967-073-4010
IV-A FA-2 EIB 863
EIC QEJIOOO
SERIAL: All serial numbers
IDENTITY: Locate resistor R-1094 in the Radio Modulator MO-229/SRT and observe that one lead of the resistor has been connected to pin 6 of V-1017.

1-AN/SRT-14A: Same as 1-AN/SRT-14
2-AN/SRT-14A: Same as 2-AN/SRT-14

3-AN/SRT-14A: Not issued
4-AN/SRT-14A: Same as 4-AN/SRT-14
5-AN/SRT-14A: Same as S-AN/SRT-14

6-AN/SRT-14A: Same as 6-AN/SRT-14

7-AN/SRT-14A: Same as 7-AN/SRT-14
8-AN/SRT-14A: Same as 8-AN/SRT-14
9-AN/SRT-14A: Same as 9-AN/SRT-14
10-AN/SRT-14A: Same as 10-AN/SRT-14
11-AN/SRT-14A: Same as 11-AN/SRT-14
12-AN/SRT-14A: Cancelled

13-AN/SRT-14A: Same as 13-AN/SRT-14

14-AN/SRT-14A: Same as 15-AN/SRT-14
15-AN/SRT-14A: Same as 16-AN/SRT-14
16.AN/SRT-14A: Same as 17-AN/SRT-14

17-AN/SRT-14A: Same as 4-AN/SRA-18

18-AN/SRT-14A: Same as 6-AN/SRA-18
19-AN/SRT-14A: Same as 20-AN/SRT-14
20-AN/SRT-14A: Cancelled

21-AN/SRT-14A: Same as 22-AN/SRT-14

22-AN/SRT-14A: Same as 23-AN/SRT-14

1-AN/SRT-15: Same as 1-AN/SRT-14
2-AN/SRT-15: Same as 2-AN/SRT-14
3-AN/SRT-15: CY-1573/SRT, Three-Phase Supply Leads Protection

Correction Material: None
A FA-3 NS98839 2N5820-695. 4256
SERIAL: 6.304
IDENTITY: Rubber on corners of cover over 21401, 2 \& 3
4-AN/SRT-15: Same as 4-AN/SRT-14

5-AN/SRT-15: Same as 5-AN/SRT-15 except
SERIAL: 6.29

6-AN/SRT-15: Same as 6.AN/SRT-14

7-AN/SRT-15: Same as 7-AN/SRT-14
8-AN/SRT-15: Same as 8-AN/SRT-14
9-AN/SRT-15: Same as 9-AN/SRT-14
10-AN/SRT-15: C-1352/SRT, apply Application of Decal on Indicator

Correction Material: T-1 to NS9212!
A FA-0.5 NS0967-073.4180 2NS840-513.
9903
SERIAL: All
IDENTITY: Decal added above ant. coupler loading sw. on
cont ind unit WARNING: 'Do not use above 2 MC '.
11-AN/SRT-15: Same as 10-AN/SRT-14
12-AN/SRT-15: Same as 11-AN/SRT-14
13-AN/SRT-15: Cancelled
14-AN/SRT-15: Field Conversion of Power Supply PP-1096/

SRT (HVPS) to Use Silicon Diodes 1-B FA.4 NS981249

2N5820.799.

SERIAL: All
15-AN/SRT-15: Same as 13.AN/SRT-14
16-AN/SRT-15: Same as 14-AN/SRT-14

17-AN/SRT-15: Installation of Safety Feature to Prevent Tuning While in 500 Watt Operation Correction Material: T- to NS92121(A) 2.A FA-2 NS0967-073-4272 None SERIAL: All
IDENTITY: Presence of a new relay installed between switch S.402 and capacitor C-402

18-AN/SRT-15: Same as 15-AN/SRT-14
19-AN/SRT-15: Same as 16-AN/SRT-14

20-AN/SRT-15: Same as 17-AN/SRT-14

21-AN/SRT-15: Same as 4-AN/SRA-38
22-AN/SRT-15: Same as 6-AN/SRA-18
23-AN/SRT-15: Same as 20-AN/SRT-14

24-AN/SRT-15: Cancelled

25-AN/SRT-15: Same as 22-AN/SRT-14
26-AN/SRT-15: Same as 23-AN/SRT-14
1-AN/SRT-15A: Same as 1-AN/SRT-I4

2-AN/SRT-15A: Same as 2-AN/SRT-14
3-AN/SRT-15A: Same as 3-AN/SRT-15
4-AN/SRT-15A: Same as 4-AN/SRT-14 except term C of S. 1302A and ground on right side of AM-1008/SRT chassis

5-AN/SRT-15A: Same as 5-AN/SRT-14 except SERIAL: 6-29
6.AN/SRT-15A: Same as 6-AN/SRT-14

7-AN/SRT-15A: Same as 7-AN/SRT-14

8-AN/SRT-15A: Same as 8-AN/SRT-14
9-AN/SRT-15A: Same as 9-AN/SRT-14
10-AN/SRT-15A: Same as 10-AN/SRT-15

11-AN/SRT-15A: Same as 10-AN/SRT-14
12-AN/SRT-15A: Same as 11-AN/SRT-14

COMMUNICATIONS

13-AN/SRT-15A: Cancelled
14-AN/SRT-15A: Same as 13-AN/SRT-14 15-AN/SRT-15A: Same as 17-AN/SRT-15 16-AN/SRT-15A: Same as 15-AN/SRT-14 17-AN/SRT-15A: Same as 16 AN/SRT-14 18-AN/SRT-15A: Same as 17-AN/SRT-34 19-AN/SRT-15A: Same as 4-AN/SRA-18 20-AN/SRT-15A: Same as 6-AN/SRA-18

21-AN/SRT-15A: Same as 20-AN/SRT-14 22-AN/SRT-15A: Same as 14-AN/SRT-15 23-AN/SRT-15A: Cancelled

24-AN/SRT-15A: Same as 22-AN/SRT-14
25-AN/SRT-15A: Same as 23-AN/SRT-14
1-AN/SRT-16: Same as 1-AN/SRT-14 2-AN/SRT-16: Same as 2-AN/SRT-14

3-AN/SRT-16: Same as 3-AN/SRT-15
4-AN/SRT-16: Same as 4-AN/SRT-14
5-AN/SRT-16: Same as 5-AN/SRT-14 except SERIAL: 6-24

6-AN/SRT-16: Same as 6-AN/SRT-14

7-AN/SRT-16: Same as 7-AN/SRT-14

8-AN/SRT-16: Same as 8-AN/SRT-14
9-AN/SRT-16: Same as 9-AN/SRT-14
10-AN/SRT-16: Same as 10 -AN/SRT-15

11-AN/SRT-16: Same as 10-AN/SRT-14

12-AN/SRT-16: Same as 11-AN/SRT-14
13-AN/SRT-16: Cancelled
14-AN/SRT-16: Same as $14 \cdot A N / S R T-15$

15-AN/SRT-16: Same as 13-AN/SRT-14
16-AN/SRT-16: Same as 14-AN/SRT-14
17-AN/SRT-16: Same as 17-AN/SRT-15

18-AN/SRT-16: Same as 15-AN/SRT-14

19-AN/SRT-16: Same as 16-AN/SRT-14 20-AN/SRT-16: Same as 17-AN/SRT-14 21-AN/SRT-16: Same as 4-AN/SRA-18 22-AN/SRT-16: Same as 6-AN/SRA-18 23-AN/SRT-16: Same as 20-AN/SRT-14 24-AN/SRT-16: Cancelled 25-AN/SRT-16: Same as 22-AN/SRT-14 26-AN/SRT-16: Same as 23-AN/SRT-14 1-AN/SRT-16A: Same as 1-AN/SRT-14 2-AN/SRT-16A: Same as 2-AN/SRT-14 3-AN/SRT-16A: Same as 3-AN/SRT-15

4-AN/SRT-16A: Same as 4-AN/SRT-14
5-AN/SRT-16A: Same as 5-AN/SRT-14 except SERIAL: 6.24
6.AN/SRT-16A: Same as 6.AN/SRT-14

7-AN/SRT-16A: Same as 7-AN/SRT-14

8-AN/SRT-16A: Same as 8-AN/SRT-14

9-AN/SRT-16A: Same as 9-AN/SRT-14
10-AN/SRT-16A: Same as 10 -AN/SRT-15
11-AN/SRT-16A: Same as 10-AN/SRT-14

12-AN/SRT-16A: Same as 11-AN/SRT-14

13-AN/SRT-16A: Cancelled
14-AN/SRT-16A: Same as 13-AN/SRT-14
15-AN/SRT-16A: Same as 17-AN/SRT-15

16-AN/SRT-16A: Same as 15-AN/SRT-14

17-AN/SRT-16A: Same as 16 -AN/SRT-14
18-AN/SRT-16A: Same as 17-AN/SRT-14
19-AN/SRT-16A: Same as 4-AN/SRA-18

20-AN/SRT-16A: Same as 6-AN/SRA-18
21.AN/SRT-16A: Same as 20-AN/SRT-14

22-AN/SRT-16A: Same as 14-AN/SRT-16<br>23-AN/SRT-16A: Cancelled

24-AN/SRT-16A: Same as 22-AN/SRT-14

25-AN/SRT-16A: Same as 23-AN/SRT-14

## 1-AN/SSM.4A: Test Program Cards

Correction Material: Change 1, NS0967-164-101] to NS0967-164-1010; Change 1, NS0967-164-1051 to NS0967-1641050

1-A FA.0.5 NS0967-164-1060 EIC WH03000
SERIAL: Equipments Al thru A6, Bl thru B4, Cl thru C7, and D1 thru D6
IDENTITY: Remove the cover from unit one (TS-1923A/ SSM.4) by releasing the catches and lifting. Check program cards in files for REV. A in upper right hand comer.

1-AN/SSQ-29(U): Same as 1-AN/SSQ-29(XN-2)

2-AN/SSQ-29(U): Same as 3-AN/SSQ-29(XN-2) except
Correction Material: NA VSHIPS 94315

3-AN/SSQ-29(U): Data Teıminal Set; Incorporation of Equipment Modification Bulletins as a Unit Field Change

Correction Material: None
2-A NA NS0967-048-8130 None
SERIAL: Al thru A22
IDENTITY: Change number stamped on the Field Change Accomplished plate.

4-AN/SSQ-29(U): Eliminates 2MS of Extra AGC Frames
Correction Material: T-2, NS0967-048-8023 to TM, NS0967.048-8020, Vol. II, and T-1, NS0967-048-8052 to TM, NS0967-048-8050, Volume V

> 1-A FA-1 NS0967-048-8140

SERIAL: All
IDENTITY: The change can only be identified by checking the wiring changes called for in the procedure.

5-AN/SSQ-29(U): Selectable Net Busy Reinitiate Timing
Correction Material: T.4, NS0967-048-8016 to NS0967-0488010; T-3, NS0967-048-8024 to NS0967-048-8020; T.1, NS0967-048-8043 to NS0967-048-8040; T-2, NS0967.048-8054 to NS0967-048-8050; T-1, NS0967-048-8063 to NS0967-0488060; T-i. NS0967-048-8121 to NS0967-048-8120
I.A FA. 4 NS0967.048-8160 EIC QJ05000 SERIAL: Serial numbers AI thru A22 and Bl thru B4 IDENTITY: Extend right hand unit (IA3) of Data Teiminal Group OA-4477/SSQ-29 (Unit 1). At the A06 card rack observe that a printed circuit card with a five position rotary switch marked 'NET BUSY TIME IN SECONDS' is installed in the A22 card slot.

1-AN/SSQ-29(XN-2): Modification to Permit on NTDS Station to Conduct the ' $A$ ' link POFA lndependently

Correction Material: None
1-A FA-2 NS981754
SERIAL: All (5 equipments)

IDENTITY: Change number stamped on Field Change Accomplished plate.

2-AN/SSQ-29(XN-2): Tone Suppression for Single Station POFA

Correction Material: T-1, NS0967-208-8014 to TM, NS0967-208-8010 (formerly NS94315)

2-A FA-2 NS0967-048-8130 None
SERIAL: All
IDENTITY: Observation of S-4 on the IA1A 01 Panel.
3-AN/SSQ-29(XN-2): Modification to Allow 'Transmit Start' After Completion of Self Check at Control Panel 1A3A01

Correction Material: T-2, NS0967-048-8013 to TM, NS0967.048-8010 (formerly NS94718A)

2-A FA-I NS0967-048-8130 None SERIAL: All
IDENTITY: Operating the equipment 'Reset' and 'Transmit Start' switches at control panel IA3A01 and observing if equipment starts transmitting.

4-AN/SSQ-29(XN-2): Data Temninal - Incorporation of System Modification Bulletin as a Unit Field Change

Correction Material: Incorporated in revised publications
2-A NS0967-048-8130 None
SERIAL: Al thru A8
IDENTITY: Change number stamped on the Field Change Accomplished plate.

5-AN/SSQ-29(XN-2): Data Terminal - Modification of the SYNC MODE switch

Correction Material: T-1, NS0967-208-8014 to TM, NS0967-208-8010 (formerly NS94315)

## 2-A FA-1 NS0967-048-8130 <br> None

SERIAL: All
IDENTITY: Observing that Wafer ' $A$ ' of SYNC MODE Switch located on the Control Panel of Unit 2 has been modified by the changes listed under procedures in this field change. To further insure that this modification has been accomplished, perform the Electrical Test directed by this change.

6-AN/SSQ-29(XN-2): Unit I Rack 3 Wiring Change
Correction Material: T- to NS94315
2-A FA-1 None
SERIAL: All (XN-2) equipment
IDENTITY: Noting that there is a wire connected between 1 A 3 A 04 A 8 Pin N and 1A3A03A2, Pin A.

7-AN/SSQ-29(XN-2): Replacement of Hold-Down Bars for Mullimodule Panels in Rack 1

Correction Material: None required
2-A FA-2 NS0967-169-0070
SERIAL: All
IDENTITY: Checking the Field Change Accomplished plate.
8-AN/SSQ-29(XN-2): Selectable Net Busy Reinitiate Timing
Correction Material: T-4, NS0967-207-8017 to NS0967-2078010; T-2, NS0967-207-8033 to NS0967-207-8030; T-1, NS0967-207-8041 to NS0967-207-8040

1-A FA-4 NS0967-207.8070
EIC QJ06000

SERIAL: Serial numbers 1 thru 8
IDENTITY: Extend the righthand unit (IA3) of the terminal equipment unit (Unit I of Data Terminal Set AN/SSQ-29(XN2)). At the A06 card rack observe that a printed circuit card with a 5 -position rotary switch marked 'NET BUSY TIME IN SECONDS' is installed in the A22 card slot.

1-AN/SSR-1: Add Wires to Hamess in TD-1063
Correction Material: Revised TM, NE0967-LP.541-9010 dtd Apr 76 and Ch. 1, NE0967-LP-541-9021 to NE0967-LP-$541-9020$ dtd Sep 74

3-A FA-2 NE0967-LP-541.9070
SERIAL: Selected serial nos only.
IDENTITY: - 20 VDC present on pin 3 of P4 and P5 (equipment energized) in the demulti plexer drawer.

2-AN/SSR-1: Install Switch for Disabling Blanker Circuits.
Correction Material: Contained in FCB, NE0967-LP-5419080.

3-A FA-3 NE0967-LP-541-9080 EIC
QP34,QP47
SERIAL: All serial numbers of AN/SSR-1 and AN/SSR-1A. IDENTITY: Verify installation of switch assembly (5AlA6Sl) located inside MD-900 drawer unit.

1-AN/SSR-1A: Same as 2-AN/SSR-1.
1-AN/SSW-1: Relocation of Air Filters to Outside Back of Cabinet

Correction Material: None

$$
\text { 1-A FA. } 2 \quad \text { NS0285-075-5500 } \quad \text { F5820-868- }
$$

9859
SERIAL: AEG. 1 thru AEG-22 (AN/SSW-1A); ALL (AN/ SSW-1)
IDENTITY: The presence of two air filters mounted on the outside rear of the cabinet.

## 1-AN/SSW-1A: Same as 1-AN/SSW-1

2-AN/SSW-1A: lnhibits Carrier Output Pulse when the equipment is in the Standby Condition

Correction Material: T-2, NS0967-074-1012 to NS0967-0741010 (Volume I); T-2, NS0967-074-1021 to NS0967-074-1020 (Volume II); T-2, NS0967-074-1031 to NS0967-074-1030 (Volume III); T-3, NS0967-232-8013 to NS0967-232-8010; T-2, NSO967-232-8022 to NS0967-232-8020; T-1, NS0967-232-8031 to NS0967-232-8030
1.A FA-3 NS0967.074-10.40

SERIAL: All (Cl thru C8)
IDENTITY: Locate terminal board TB2 in the Monitor Test Panel SB-1860/SSW-1A (IA2 and 1A4) and observe that a diode, 1N277, 1A2CR14 (1A4CR14) has been added on the 4th pair of terminals from the left side between R-85 and R-87.

## 3-AN/SSW-1A: Cancelled

4-AN/SSW.1A: 'CMSG' Signal Output Modification
Correction Material: T-4, NS0967.074-1014 to NS0967-0741010 (Vol. 1); T-4, NS0967.074-1024 to NS0967-074-1020 (Vol. 2): T-3, NS0967-074-3032 to NS0967-074-1030 (Vol. 3)

1-A FA-1 NS0967-074-1060 EIC QH05000

SERIAL: All serial numbers
IDENTITY: Loosen four screws on Converter CV-1458/ SSW-1A (IAl) (IA5) and eatend the drawer. Loosen two retaining screws on converter-generator (control message) card. Remove card and observe that capacitor C-22 is removed, and capacitor C-30 is removed and replaced with a wire jumper.

5-AN/SSW-1A: Operation CAINS/SINS Mode (Equipment nomenclature changed to AN/SSW-1E)

Correction Material: New technical manuals to be provided

1-C YF-9 NS0967-LP-074-1070
SERIAL: Designated by procuring activity.
IDENTITY: New nameplates installed - AN/SSW-IE, CV. 1458C/SSW-1A, and SB-1860C/SSW-1A. New assemblies installed - C-4476C/SSW-1A, and AM-6528/SSW-1D.

1-AN/SSW-1B: Same as 2-AN/SSW-1A
2-AN/SSW-1B: Cancelled
3-AN/SSW-1B: Same as 4-AN/SSW-1A except

EIC QH06000

## 1-AN/SSW-1C: Same as 2-AN/SSW-IA

2-AN/SSW-1C: Relocation of Air Filters to Outside Rear of Cabinet

Correction Materjal: T-1, NS0967-232-8011 to NS0967-232. 8010

1-A FA-1.5 NS0967-232-8060 EIC QH07000 SERIAL: Serial numbers Cl thru $\mathrm{C}-8$
IDENTITY: The presence of two air filters mounted on the outside rear of the cabinet.

## 3-AN/SSW-1C: Cancelled

4-AN/SSW-1C: Modification to Permit Operation of the AN/ SSW-1C in the SINS/CAINS Waypoint Data Insertion System Modifies

Correction Material: New Technical Manual being supplied

J-C S-/D NS0967-232-8080 EIC QH07000
SERIAL: Only those equipments designated by the procuring activity
1DENTITY: The old nameplates will be replaced by new nameplates designating the new nomenclatures of the equipments and units of the equipment. Two Puise Amplifiers AM-6528/SSW-1D will be added in the lower section of the equipments. See figure $A$.

## 5-AN/SSW-1C: Same as 4-AN/SSW-1A except

Correction Material: T-4, NS0967-232-8014 to NS0967-2328010 (Vol. 1); T-3, NS0967-232-8023 to NS0967-232-8020 (Vol. 2); T-2, NS0967-232-8032 to NS0967-232-8030 (Vol. 3), and

EIC QH06OOO
1-AN/SSW-1D: Incorporate Safety Device for Amplifier,

Pulse AM-6528/SSW-ID
Correction Material: Included in new manual
1-A FA-4 NS0967-555-4050
SERIAL: All serial numbers
IDENTITY: Loosen four (4) captive screws on Pulse Amplifier AM-6528/SSW-1D and slide drawer forward. Visually check for bracket with fuseholders F2 and F3 located on left side of drawer directly behind front panel.

1-AN/SSW-1E: Same as 1-AN/SSW-ID
1-AN/SYA-3\{MOD 1): Converter, Digital to Analog (IDAC-
MK-9) - Incorporation of Factory Field Service Orders as a
Unit Field Change
Correction Material: None
2-A
None
SERIAL: 1 and 2
IDENTITY: Change number stamped on the Field Change Accomplished Plate.

1-AN/TRC-131: Permits Operation from AC Power Source Correction Material: None
1-A FA-3 NS0967-159-4020 None SERIAL: All
IDENTITY: Power adapter is in yellow enclosure stenciled 'CONVERTER, POWER', located on exterior front wall of AN/IRC-131, below the window level, and adjacent to the external connection panel.

2-AN/IRC-131: Addition of Two UHF Transceiver AN/ ARC-51A

1-A YF-50 NS0967-159-4030
SERIAL: Al thru A20

3-AN/TRC-131: Addition of One VHF Transceiver AN/ VRC. 46

1-A YF-50 NS0967-159-4040
SERIAL: A2, A3, A16, A17, A18, A19, and A20
1-AN/TRN-14: Wiring Modification to Plug and Jack (Pl/Jl) of the High Voltage Power Supply Module (2A2A2)

Correction Material: T-2, NS0967-223-1012 to NS0967-2231010 (formerly NS95733)

2-A FA-1 NS0967-223-1040
SERIAL: All
2-AN/TRN-14: Installation of Drain Plug
Correction Material: T-1, NS0967-223-1011 to TM, NS0967-223-1010 (formerly NS95753)

1-A FA-3 NS0967-223-1050
SERIAL: AN/TRN-14 - All equipments procured under Contract NObsr 85416 ONLY.
IDENTITY: The presence of a drain plug on the bottom surface of the antenna.

3-AN/TRN-14: Wiring Modification to the Keyer Motor
Correction Material: T-2, NS0967-223-1012 to NS0967-223-
1010 (formerly NS95753)
2-A FA-4 NS0967-223-1040
SERIAL: 1 thru 22 procured under Contract NObsr 85416

IDENTITY: This field change can be identified by placing the equipment in standby mode; if the keyer wheel does not rotate, this field change has been accomplished.

4-AN/TRN-14: Improve Ventilation Reliability; Power Amplifier Protection, Circuit; Modulator Circuitry Improvement

Correction Material: T-3, NS0967-223-1013 to TM, NS0967-223-1010

1-A FA NS0967-223-1060
SERIAL: All equipments
IDENTITY: See field change bulletin
5-AN/TRN-14: Installation of Safety Shield
Correction Material: T-4, NS0967-223-1017 to NS0967-2231010 (formerly NS95753)

1-A FA-I NS0967-223-1070
SERIAL: All
IDENTITY: Plexiglass cover over chassis C-4473, control coder receiver.

1-AN/IRN-28: Transmitter Improvement
Correction Material: T-1, NE0969-131-6021 to NE0969-131-6020; T-1, NE0969-131-6031 to NE0969-131-6030

Il1-A FA-4 NS0969-131-6050
SERIAL: All serial numbers
IDENTITY: $\ln$ A3 unit: CR9 connected between Q7 collector and terminal E29 on chassis. CR8 is connected at junction of R29 and R30 to common collectors of pass transistors.

2-AN/IRN-28: Overload Protection for -5V Zener Regulator. Correction Material: To be provided.
2-C FA-12 NE0969-LP-131-6060 EIC PD57
SERIAL: All serial numbers.
IDENTITY: Verify installation of a type IN5338B diode (CR26) and a $110 \mathrm{ohm}, 10 \mathrm{~W}$ resistor (R37) in the elevation (2A3Al), azimuth (1A3A1), and spare transmitters.

3-AN/TRN-28: Voltage Regulator for ADP.
Correction Material: To be provided.
1-C YF-5 NE0969-LP-131-6070
EIC PD57
SERIAL: All serial numbers.
IDENTITY: Verify installation of Q1 (Transistor 2N1724A) in 1A8A1 and 2A8A1. The new transistors replace CR2 and are insulated from the chassis by an insulating washer.

4-AN/IRN-28: Lightning Piotection Modification.
Correction Material: To be provided.
1-C YF-72 NE0969-LP-131-6080
EIC PD57
SERIAL: All serial numbers.
IDENTITY: Verify installation of Lightning Protection Card ( $\mathrm{p} / \mathrm{n} 430077-8$ ) in the main junction box containing the remote site cabling at the RATCC site.

5-AN/TRN-28: Addition of Pitch Axis Level Sensor Adjustment Circuitry

Correction Material: To be provided
1-C YF-5 NE0969-LP-131-6090
SERIAL: AN/TRN-28 and AN/TRN-28A: All serial numbers.
IDENTITY: Verify that PC card (AIL $\mathrm{p} / \mathrm{n}$ 506687-1) is in
slot A 1 I of Azimuth Coder-Monitor (2A4). Prior to this field change, PC card (AIL p/n 395761-1) was in slot All.

6-AN/TRN-28: Replacement of Angle Data Pickoffs (ADP's). Correction Material: To be provided.
1-C YF-12 NE0969-LP-131-6100
SERIAL: AN/TRN-28 and AN/TRN-28A: Ail serial numbers.
IDENTITY: Verify that the ADP's (IAIAI and 2A1AI) are AIL p/n 500480-3 vice $\mathrm{p} / \mathrm{n}$ 39483-2.
NOTES: Field Change 7-AN/TRN-28, 4-AN/TRN-28A must be accomplished concurrentily with this field change.

7-AN/TRN-28: Elevation Coder-Monitor Changes.
Correction Material: To be provided.
1-C YF-12 NE0969-LP-131-6110
SERIAL: AN/TRN-28 and AN/TRN-28: All serial numbers. IDENTITY: Verify that PC card (AIL p/n 5063334-1) is in slot All of the Elevation Coder-Monitor (1A4). Prior to the change, PC card (AIL p/n 395752-1) was in slot All.
NOTES: Field Change 6-AN/TRN-28, 3-AN/TRN-28A must be accomplished concurrently with this field change.

1-AN/TRN-28A: Same as i-AN/TRN-28 except SERIAL: A001 and A002 (Radio Transmitter T-1191/TRN-28 serial numbers $005,007,017$, and 018)

2-AN/TRN-28A: Same as 5-AN/TRN-28.
3-AN/TRN-28A: Same as 6-AN/TRN-28.
4-AN/TRN-28A: Same as 7-AN/TRN-28.
1-AN/TSA-11: Installation of Silicon Bridge Rectifier in Lieu of Selenium Bridge Rectifier

Correction Material: T-1, NS0967-211-0011 to TM, NS0967-211-0010 (formerly NS92943)

2-A FA. 4 NS0967-211-0020
SERIAL: All Perkins No. 28-30 WXM, 28 -volt power supplies used in conjunction with Air Traffic Control Group AN/TSA-11
IDENTITY: Presence of a silicon bridge rectifier, instead of the selenium bridge rectifier in the power supply.

1-AN/ISC-54: To Provide Redundant Transmitter Capability by Installation of OG-163/G Radio Frequency Amplifier Group.

Correction Material: To be provided.
3-C YF NE0967-LP-550-1050
SERIAL: All serial numbers.
IDENTITY: To be provided.
1-AN/TXC-1B: Half-Speed Modification
A FA. 12 None
SERIAL: AII
IDENTITY: Equipment model changed to TT-41/TXC-1B.
1-AN/UCC-1(V): Replacement of Resistors 1A2A1R44, 1A2AIR 46, 1A2A!R 47 and Transistor 1A2A!Q14

Correction Material: T-1, NS0967-172-2012 to TM, NS0967-172-2010

1-A FA-3 NS0967-172-2040
EIC F2AIOOO SERIAL: Frequency Shift Converter CV-1522(P)/UCC-I(V) IDENTITY: Resistof 1A2AIR44 is 1100 ohms. Resistor 1A2A1R46 is 1600 ohms, Resistor 1A2AIR 47 is 680 ohms, Resistor 1A2A1R49 is 1000 ohms, and Transistor 1A2A1Q14 is a type 2 N 3439 .

2-AN/UCC-1(V): Rewire AGC Test Point; Delete Resistor 1A2-R4 and Capacitor 1A2A1:C9

Correction Material: T-2, NS0967-172-2013 to NS0967-1722010

2-A FA-3 NS0967-172-2050 EIC F2A1000 SERIAL: All Frequency Shift Converters CV-1522(P)
IDENTITY: Presence of a blue wire on the collector of transistor 1A2A1-Q10.

1-AN/UCC-1A(V): Same as 2-AN/UCC-I(V) except
2-A FA-3 NS0967-172-2050 EIC F2A2000 SERIAL: Frequency Shift Converters CV-1522A(P)

2-AN/UCC-1A(V): Replacement of Resistors 1A2A1R40, 1A2AIR44, IA2AIR46, 1A2A!R49, and Transistor 1A2A1Q14

Correction Material: T-2, NS0967-106-1012 to NS0967-1061010

1-A FA-3 NS0967-106-1050 E1C Q318000 SERIAL: All Frequency Shift Converters CV-1522A(P)/ UCC-I(V)
IDENTITY: Resistor 1A2AIR40 is 1600 ohms; resistor 1A2AIR44 is 1000 ohms; resistor 1A2AIR46 is 5600 ohms; resistor IA1AIR49 is 1000 ohms; and transistor 1A2A1Q14 is a type 2N3439.

1-AN/UCC-1C(V): Installs Jumper Wire on S2 of Test Set, Telegraph TS-2232/UCC-IC(V) Correction Material: None
2-A FA-1 NS0967-046.9040 None SERIAL: TS-2232/UCC-IC(V) serial numbers A003 thru A090
IDENTITY: The jumper wire connects terminal 2RI0 of S2 to terminal 2R4 of S2. Switch S2 must be examined to determine whether this wire has been installed.

2-AN/UCC-1C(V): Reverse Resistors 1A3A1R14 and 1A3A1R15 on Control-Attenuator C-6554/UCC-1C(V)

Correction Material: T- to NS0967-046-9010
2-A FA-I NS0967-046-9040 None SERIAL: C-6554/UCC-1C(V) serial numbers A009 thru A587 IDENTITY: Refer to NS0967-046-9010, Figure 5-3; RI4 should be MIL type RWP20F2000F and R15 should be MIL type RWP20F1500F.

3-AN/UCC-1C(V): Instal! Wire to Provide a Chassis Ground for Pin U of J 8

Correction Material: T-1, NS0967-046-9012 to NS0967-046. 9010

2-A FA-1 NS0967-046-9060
SERIAL: Ali AN/UCC-1C(V) Telegraph Terminal Cabinets CY-4639/UCC-1C(V)
IDENTITY: Presence of a black wire on pin $\mathbf{U}$ of J8.

4-AN/UCC-1C(V): Install a Wire to Connect the AGC Detector Output to Pin R of Test Connector Il on CV-1920 (P)/ UCC-1C(V) and CV-1920A(P)/UCC-1C(V)

Correction Material: T-3, NS0967-046-9014 to NS0967-0469010

2-A FA-] NS0967-046-9100
SERIAL: All CV-1920(P)/UCC-IC(V) and CV-1920A(P)/ UCC-IC(V) Frequency Shift Converters
IDENTITY: Presence of a red wire on Pin $R$ of the test connector 1A2A1-j-1.

5-AN/UCC-1C(V): Replacement of Capacitor 1A2A1C11, 1A2A1C19 and Addition of Resistor IA2A1R34

Correction Material: T-2, NS0967-046-9013 to TM, NS0967-046.9010

1-A FA-2 NS0967-046-9070 EIC F2A3000 SERIAL: All Frequency Shift CV-1920A(P)/UCC-1C(V) IDENTITY: Capacitor IA2A1C11 2.7 uf, Capacitor 1A2A1C19 1.0 uf and Resistor 1A2A1R34 510 Kohms.

6-AN/UCC-1C(V: Replacement of Resistors 1A2A1R16, 1A2AIR29 and IA2AIR30

Correction Material: T-3, NS0967-046-9014 to TM, NS0967-046-9010
1.A FA-2 NS0967-046-9090 EIC F2A3000 SERIAL: Converters for AN/UCC-IC(V) - CV-1920(P)/ UCC-JC(V) - All
IDENTITY: Resistor IA2A1R16 is Honeywell Part No. 262414-9, IA2AIR29 is 1100 ohms and IA2AIR30 is 750 ohms.

1-AN/UCC-1B(V): Replacement of Resistors 1A2A1R17 and 1A2AJR37

Correction Material: T-1, NS0967-239-4011 to TM, NS0967-239-4010

1-A FA-2 NS0967-239-4060
SERIAL: All equipments AN/LCC-ID(V) añd CV. 1920A(P)/UCC-IC(V) used in high level installations only. (EIB 991)
IDENTITY: Resistor IA2A1R17 is 620 ohms and Resistor 1A2AIR 37 is 510 ohms.

2-AN/UCC-1D(V): Same as 4-AN/UCC-IC(V) except
Correction Material: T-3, NS0967-239-4013 to TM, NS0967-239-4010
SERIAL: All. EIB 991
3-AN/UCC-1D(V): Replacement of Capacitor 1A2A1C11, 1A2A1C19 and Resistor 1A2AIR34

Correction Material: T-2, NS0967-239-4012 to TM, NS0967-239.4010

1-A FA-2 NS0967-239-4070 EIC F2B7000
SERIAL: All Frequency Shift CV-1920A(P)/UCC-1C(V). EIB 991.
IDENTITY: Capacitor IAlAICl] 2.7 uf, Capacitor 1A2A1C19 1.0 uf and Resistor 1A2AIR34 510 Kohms.

4-AN/UCC-ID(V): Installation of Capacitor 1A2Cl
Correction Material: T-4, NS0967-239-4014 to NS0967-239. 4010

1-A FA-3 NS0967-239-4080 EIC Q31B000

SERIAL: All Frequency Shift CV-1920A(P)/UCC-IC(V). (Applicable to high level installations only. EIB 991)
IDENTITY: Presence of Capacitor 1A2Cl . 25 MFD.
5-AN/UCC-1D(V): Remove Capacitor 1A2AIC28 and Resistor 1A2A1R22 on CV-1920A(P)/UCC-1C(V)

Correction Material: T-5, NS0967-239-4016 to NS0967-2394010

4-A FA-] NS0967-239-4090
SERIAL: Applicable to all equipments used in high level installations only. EIB 991
IDENTITY: Unit CV-1920A(P)/UCC-IC(V), note blank space between IA2AIQ6 and IA2AIQ9 and a blank space between 3A2AIR17 and IA2AIR20.

1-AN/UGA-3: MM Exchanges HV Power Supply on Oscilloscope Circuit

Correction Material: NS0967-046-7011 to TM, NS0967-0467010 (formerly NS94318)

1-A FA-50 NS0967-046-7030 2F5805-903-
1218
SERIAL: All thru 30 except for $5,20,26,27$, and 28 which have been modified at factory
IDENTITY: The new power supply (Millen 90902 M ) has six terminals which are wired directly to the oscilloscope and to the 115 V power input. The bracket and octal socket mounting for the original supply (Millen 90902) will have been removed. See figure 5-24 in the Technical Manual NS94316 for location.

2-AN/UGA-3: Adds Baffle and Replaces Power Plugs and Receptacles

Correction Material: Change 4, NS0967-046-7014, NS0967-046-7010 (Volume 1) and NS0967-046-7020 (Volume II) (formerly NS94316, Vols. I and 1i)

> 1-A FA-6 NS0967-046-7031

SERIAL: All serial numbers
IDENTITY: Figure $5-26$ in the Technical Manial shows the rear of the Converter-Shift Register front panel without the baffle. When this field change is completed, aluminum plate will cover 18 Tl (center bottom) and the power supply terminal board (bottom left). The area of the dust cover above this location will be perforated. Figure 1 of the field change shows the rear view of the converter-shift Register with the change completed. 24 jl and 24 J 4 formerly had socket-type contacts and have been replaced by pin-type equivalents.

1-AN/UGA-3A: Same as 2-AN/UGA-3
1-AN/UGA-4: Incorporate Distribution Amplifier Capability (Modifies equipment to AN/UGA-4A)

Correction Material: Change 1, NS0967-053-2001 to NS0967-053-2000

1-A FA-1 NS0967-053-2020
SERIAL: All equipment serial numbers
JDENTITY: A modification plate on the cabinet door identifies the equipment as AN/UGA-4A. The added terminal blocks, TBA and TB-5 are visible on the rear of the cabinet.

1-AN/UGA-5: Regenerative Repeater - TH-73/UGA-5 Wiring Modification and Automatic Mode Checking

Correction Material: T.1, NS0967-204-3011 to TM.

## NS0967-204-3010

IV-A FA-0.5 NS0967-204.3020
EIC FR04600
SERIAL: This field change applies to all TH-73/UGA-5 serials
IDENTITY: Absence of jumper wire between terminals 1 and 3 card AIl (80060070), and absence of diode (CR8) on card A 14 (80060080).

1-AN/UGC-1A: Modification of Oscillator Power Supply Unit O-872/UGC-IA

Correction Material: None
2-A FA-1 NS0967-978-2020 None
SERIAL: Al through Al4
IDENTITY: When equipment is operating properly and all circuits conform to the diagrams and schematics shown in the applicable technical manuals.

2-AN/UGC-1A: Modification to Disable Alarm and Lockup Circuits

Correction Material: T-1, NS0967-978-2012 to TM, NS0967-978-2010 (formerly NS94376A)

2-A FA-1 NS0967-978-2020 None
SERIAL: All Receiver Code Converters CV-1218/UGC-1A which are part of Terminal Telegraph AN/UGC-1A
IDENTITY: Operation should be norma! when the LockupTraffic Alarm Disable switch is in the Alarm Disable position except that in-frame and out-of-frame conditions will be apparent only by monitoring the circuits.

3-AN/UGC-1A: Provide 7.00 Unit Code Operation 6th Bit Delete Function, Maintain Relationship of Clock Pulses Crystal Frequency

Correction Material: NS94376(A)
1-A FA-10 NS0285-080-0800 F5805-910.
SERIAL: All
IDENTITY: New style frequency meter which has markings in both bands and words per minute and a modification label over this meter.

1-AN/UGC-5: Conversion of AN/UGC-5 to AN/UGC-6
1-A FA-8 NS981281 F5815-857. 1069
SERIAL: All
IDENTITY: Nameplate designates equipment as AN/UGC-6.
2-AN/UGC-5: Installation of 193936 (MK-764/UG) Modification Kit

Correction Material: T- to NS93534
1-A NS0967-109-4050
F5815-0664354
SERIAL: LP6 and up
3-AN/UGC-5: Incorporate a Separable Connector in the
Wiring to the Back-Space-Magnet L3400
Correction Material: T-5 to NS93534
2-A FA-1 NS981733 None
SERIAL: All
IDENTITY: Inspection of the wiring between the perforator back-space magnet, L3400, and TB102 will disclose that a sep-
arable piug and receptacle have been installed in the wiring to the back-space magnet, L3400.

4-AN/UGC-5: Cancelled
5-AN/UGC-5: Wiring Change to the Fan on Low Level Equipment to Eliminate a Possible Safety Hazard. (EIB 963). Correction Material: None required.
2-A FA-1 EIB 963
EIC Q3HH
SERIAL: All serial numbers of the following Automatic Send-Receive low-level teletype equipment: AN/UGC-5, 5B, SC with MK-1087/UG; AN/UGC-6, 6A, 6B, 6E, 6F, 6J, 6K, 6L with MK-1088/UG; AN/UGC-13, 16 with MK-1089/UG; and all AN/UGC-48, 48A, 48BY, 49, 49X, 54, 90, 90X.
IDENTITY: Verify that cable assembly (teletype part no. 326760) contains the in-line fuse holder. The in-line fuse holder was formerly installéd as part of the connector cable (teletype part no. 326373) on the opposite side of the cabinet.

1-AN/UGC-5A: Same as 2-AN/UGC-5
2-AN/UGC-5A: Same as 3-AN/UGC-5

1-AN/UGC-5AX: Same as 2-AN/UGC-5
2-AN/UGC-5AX: Same as 3-AN/UGC-5
1-AN/UGC-5B: Same as 5-AN/UGC-5
EIC Q3JT
1-AN/UGC-5C: Same as 5-AN/UGC-5
EIC Q3JU
1-AN/UGC-5X: Same as 2-AN/UGC-5
2-AN/UGC-5X: Same as 3-AN/UGC-5
1-AN/UGC-6: Provides for Full Duplex Operation of Equipment and Eliminates Line Relays

Correction Material: Change 1 to NS93534
2-B FA-6 NS981500 None SERIAL: Al!
IDENTITY: Four (4) signal lines will be coming into the equipment.

2-AN/UGC-6: Installation of 394028 Mod. Kit (Converts equip. from 7.42 unit code to 7.00 unit code with synchronous pulsed transmission and 45.5, 50, 75 BAUD speeds)

Correction Material: T-3 to NS93534
2-A FA-3 NS981560(A) F5815-981-
3249

## 3-AN/UGC-6: Same as 2-AN/UGC-5

4-AN/UGC-6: Same as 3-AN/UGC-5
5-AN/UGC-6: Modified, Teletypewriter Set, with Adapter Incorporation of Factory Field Service Orders as a Unit Field

ORIGINAL
A-51

## Change

Correction Material: None
2-A NS0967-972-8040 None
SERIAL: I thru 20 modified teletypewriter set with adapter IDENTITY: Change number stamped on Field Change Accomplished plate.

## 6-AN/UGC-6: Cancelled

7.AN/UGC-6: Elimination of Personnel Hazard

Correction Material: T-7, NS0967-062.6013 to TM, NS0967-062-6010 (formerly NS93534)

2-A FA-0.5 NS0967-062-6050 None
SERIAL: Teletypewriters which have the Front Panel Control panel for the auxiliary reperforator as shown on page 42 of Temp. Corr. T-2 to NAVSHIPS 93534
IDENTITY: Presence of an Orange lead on terminal 4 and a Blue lead on terminal 5 of Switch I55023.

8-AN/UGC-6: Teletypewriter adapter clear RDUC function code

2-A FA-1 NS0967.062-6050 None SERIAL: All
IDENTITY: Checking electrical continuity between card jacks J12-7 and J-40B-10.

9-AN/UGC-6: Teletypewriter Sets modified with Adapter for AN/USQ-20(V) - Bypass Thermal Relay

Correction Material: T. to NS94084 and NS94104
2-A FA-2 NS0967-076-7040
SERIAL: All equipments modified with adapter
IDENTITY: Presence of a 250770 printed circuit card in card jack JI3C.

10-AN/UGC-6: (Modified with AN/USQ-20 Adapter) - Retention of Filter Assembly

Correction Material: None required
2.A FA-0.5 NS0967-062-6060

SERIAL: Equipments (modified with AN/USQ-20 Adapter) used in NTDS configurations
IDENTITY: Visual inspection and noting that two screws have been inserted into the filter-holder frame, thereby securing the frame to the filter housing.

11-AN/UGC-6: Normal Input Keying Kit
Correction Material: None required
3-A FA-20 NSO967-062-6080
SERIAL: All
IDENTITY: Installation of decal adjacent to nameplate.
12-AN/UGC-6: Reliability Improvement
Correction Material: T-5, NS0967.972-8015 to NS0967-972. 8010

4-A FA-2.5 NS0967-972-8050 EIC F247000
SERIAL: All equipments modified with Adapters for AN/ USQ-20(V)
IDENTITY: Checking electrical continuity between bus bas TB04 and J42C-06. Continuity indicates this field change has been accomplished.

13-AN/UGC-6: Modification of Typing Perforator and Typing

Reperforator to Provide Fully Perforated Tape. Correction Material: None required.
1-A FA-16 NE0967-LP-972-8060
EIC Q3IN
SERIAL: All AN/UGC-6, $-6 \mathrm{~A},-6 \mathrm{~B},-6 \mathrm{E},-6 \mathrm{~F},-6 \mathrm{~J},-6 \mathrm{~K}$, and 6L. systems utilized with NAVMACS A systems or with other systems requiring fully perforated tape.
IDENTITY: Tape out of the typing perforator and typing reperforator fully perforated.

14-AN/UGC-6: Same as 5-AN/UGC-5

EIC Q31N
1.AN/UGC-6A: Same as 2-AN/UGC. 6

2-AN/UGC-6A: Same as 2-AN/UGC-5
3-AN/UGC-6A: Same as 3-AN/UGC-5

4-AN/UGC-6A: Cancelled
5-AN/UGC-6A: Same as 7.AN/UGC-6
6-AN/LGC-6A: Same as I1-AN/UGC-6
7.AN/UGC-6A: Same as 13.AN/UGC-6.

EIC Q3IP
8.AN/UGC-6A: Same as 5-AN/UGC. 5

EIC Q31P
1-AN/UGC-6AX: Same as 2-AN/UGC-6
2-AN/UGC-6AX: Same as 2-AN/UGC. 5
3-AN/UGC-6AX: Same as 3-AN/UGC-5
4•A.N/UGC-6AX: Cancelled
5-AN/UGC-6AX: Same as 7-AN/UGC-6
6-AN/UGC-6AX: Same as 1 i -AN/UGC-6

1-AN/UGC-6B: Same as 2-AN/UGC. 6
2-AN/UGC-6B: Same as 2-AN/UGC-5
3-AN/UGC-6B: Same as 3.AN/UGC-5
4.AN/UGC-6B: Cancelled

5-AN/UGC-6B: Same as 7.AN/UGC-6
6-A:N/UGC-6B: Same as 11-A:V/UGC-6
7-AN/UGC.6B: Same as 13-AN/UGC.6.

8-AN/UGC-6B: Same as 5-AN/UGC-5

1-AN/UGC-6C: Same as 2-AN/UGC-6

2-AN/UGC-6C: Same as 2.AN/UGC-5
3-AN/UGC-6C: Same as 3-AN/UGC-5
4-AN/UGC-6C: Cancelled

5-AN/UGC-6C: Same as 7-AN/UGC-6
6.AN/UGC-6C: Same as 11•AN/UGC-6

1-AN/UGC-6E: Same as 13•AN/UGC-6.

2-AN/UGC-6E: Same as 5-AN/UGC-S

EIC Q3IU

3-AN/UGC-6E: Modification (Update) of AN/UGC-6E to AN/UGC-6K. (Nomenclature changed to AN/UGC-6K.)

Correction Material: Use of AN/UGC-7K TM's.
2-C YF-10 NE0967-LP-972-8070
SERIAL: All serial numbers.
IDENTITY: Verify that the following equipment ID plates are installed: AN/UGC-6K replaces AN/UGC-6E, SB-2611/ UG replaces SB-1061/UG. LESU96 replaces LESU12, and LP14WY/AJG replaces LP!RN/AJE.

1-AN/UGC-6F: Same as 13-AN/UGC-6.

EICQ3IV
2-AN/UGC-6F: Same as 5-AN/UGC-5
EIC Q3IV
3-AN/UGC-6F: Modification (Update) of AN/UGC.6F to AN/UGC-6K. (Nomenclature changed to AN/UGC-6K.) Correction Material: Use of AN/UGC-6K TM's
2.C YF-10 NE0967-972-8080 EIC Q31V

SERIAL: All serial numbers.
IDENTITY: Verify that the following equipment ID plates are istalled: AN/UGC.6K replaces AN/UGC-6F, SB-2611/ UG replaces SB-1061/UG, and LESU96 replaces LESU12.
NOTES: The modification which provides the number symbol (\#) for upper case ' H ' must he accomplished prior to the installation of this field change. (See EIB 800 for information.)

1-AN/UGC.6G: Modification to Update AN/UGC-6G to AN/ UGC-6K. (Nomenclature changed to AN/UGC-6K.)

Correction Material: Use of AN/UGC-6K TM's.
2-C YF-10 NE0967.LP.972-8090
SERIAL: All serial numbers.
IDENTITY: Verify that the following equipment ID plates are installed: AN/UGC-6K replaces AN/UGC-6G, SB-2611/

UG replaces SB-1061/UG, LESU96 replaces LESU12, and LPI4WY: AJG replaces LP14RN/AGH.
NOTES: The modification which provides the number symbol (\#) for upper case ' H ' must be accomplished prior to the installation of this field change. (See EIB 800 for information.)

1-AN/UGC-6J: Same as 13-AN/UGC-6.

EIC Q3IY
2-AN/UGC-6.J: Same as 5-AN/UGC-5

EIC Q3JX

3-AN/UGC-6J: Modification to Update AN/UGC-6J to AN/ UGC-6K. (Nomenclature changed to AN/UGC-6K.)

Correction Material: Use of AN/UGC-6K TM's.
2-C YF-2 NE0967-LP-972-8100
SERIAL: All senial numbers.
IDENTITY: Vesify that the AN/UGC-6J equipment ID plate has been replaced with the AN/UGC-6K ID plate.
NOTES: The mofiification which provides the number symbol (\#) for upper case ' H ' must be accomplished prior to the installation of this field change. (See EIB 800 for information.)

1-AN/UGC.6K: Same as 11.AN/UGC-6
2-AN/UGC-6K: Same as 13-AN/UGC-6.
EIC Q3IZ

3-AN/UGC-6K: Same as 5-AN/UGC-5.

EIC Q3JY
1-AN/UGC-6L: Same as 13-AN/UGC.6

EIC Q330

2-AN/UGC-6L: Same as 5-AN/UGC.5.
EIC Q330
1-AN/UGC-6X: Same as 2-AN/UGC-6

2-AN/UGC-6X: Same as 2-AN/UGC-s

3-AN/UGC-6X: Same as 3-AN/UGC-5

4-AN/UGC-6X: Cancelled
S-AN/UGC-6X: Same as 7-AN/UGC-6

6-AN/UGC-6X: Same as 11 -AN/UGC. 6

1-AN/UGC-7: Same as 2-AN/UGC-5
2-AN/UGC-7: Same as 3-AN/UGC-5

3-AN/UGC-7: Cancelled

1-AN/UGC-7X: Same as 2-AN/UGC-5

2-AN/UGC-7X: Same as 3-AN/UGC-5

3-AN/UGC-7X: Cancelled

1-AN/UGC-8: Same as 2-AN/UGC-5
2-AN/UGC-8: Same as 3-AN/UGC-5
3-AN/UGC-8: Cancelled

1-AN/UGC-8X: Same as 2-AN/UGC-5

2-AN/UGC-8X: Same as 3-AN/UGC. 5

3-AN/UGC-8X: Cancelled

1-AN/UGC-13: Cancelled
2-AN/UGC-13: Same as 8-AN/UGC-6 except
Correction Material: T-1, NS0967-076-7012

3-AN/UGC-13: Same as 9-AN/UGC-6

4-AN/UGC-13: Same as 10-AN/UGC-6
5-AN/UGC-13: Reliability Improvement. (EIB 737).
Correction Material: T-4, NS0967-076-7015 to NS0967-076. 7010

4-A FA-3 NS0967-076-7030 EIC F241000 SERIAL: AN/UGC-13 (MOD) equipments modified with Adapters for AN/USQ-20(V).
IDENTITY: Checking electrical continuity between Bus Bar TB04 and J42C-06. Continuity indicates this field change has been accomplished.

6-AN/UGC-13: Switch Safety Shield
Correction Material: None Required
1-A FA-1 NS0967-076-7050 EIC QK05900 SERIAL: AN/UGC-13(MOD): All serial numbers.
iDENTITY: Open the top of the teletypewriter and observe that the switches located on the left side of the cover have a plastic shield over the wired side.

## 7-AN/UGC-13: Low Level Modisication

Correction Material: Included in technical manuas
1-C YF-120 NS0967.076-7090 EIC Q39U000
SERIAL: AN/UGC-13 (MOD) equipments as designated by Naval Ship Engineering Center.
IDENTITY: Placement of the maintenance control panel at space location other than under the transmitter distributor.

8-AN/UGC-13: NTDS Teletype Unit Code Standardization and Nomenclature Change. (Nomenclature changed to OJ212(V)1/UYK.)

Correction Material: T-1, NS0967-LP-076-7011, to NS0967. LP-076-7010, and T-2, NE0967-LP-972-7022, to NE0967-LP-972-7020.

1-A FA-5 NS0967-LP-076-7140 EIC Q33C SERIAL: AN/UGC-13(MOD): All serial numbers.

IDENTITY: Remove the four screws that secure the page printer. Remove page printer and observe the set of gears that make up the Intermediate Gear Mechanism. Verify that gears, bearing teletype part number 159284, 159285, and 163440 have replaced gears with numbers 163463,163464 , and 163460 respectively.

9-AN/UGC-13: Same as 5-AN/UGC-5.

EIC Q3LP

1-AN/UGC-15: Same as 3-AN/UGC-5
2-AN/UGC-15: Same as 2-AN/UGC-5
3-AN/UGC-15: Cancelled

1-AN/UGC-15X: Same as 3-AN/UGC-5
2-AN/UGC-15X: Same as 2-AN/UGC-5

1-AN/UGC-16: Installation of 1999915 Mod. Kit (Converts equip. from 7.00 unit code to 7.42 unit code and 60,75 , and 100 WPM speeds)

Correction Material: T-2 to NS93534

NS981562(A)
2N5815-073-

SERIAL: All
IDENTITY: See bulletin

2-AN/UGC-16: Same as 3-AN/UGC. 5

3-AN/UGC-16: Same as 2-AN/UGC-5

4-AN/UGC-16: Cancelled
5-AN/UGC-16: Same as 7-AN/UGC-6
6-AN/UGC-16: Same as 11-AN/UGC-6

7-AN/UGC-16: Same as 5-AN/UGC-5.

EiC Q33P
1-AN/UGC-16A: Same as 1-AN/UGC-16
2-AN/UGC-16A: Same as 3-AN/UGC-5
3-AN/UGC-16A: Same as 2-AN/UGC. 5

4-AN/UGC-16A: Cancelled

5-AN/UGC-16A: Same as 7-AN/UGC. 6

6-AN/UGC-16A: Same as 11-AN/UGC-6

1-AN/UGC-17: Installation of 194267 Mod. Kit (Converts equip. to 7.42 unit code and 60,75 , and 100 WPM both transmitting and receiving)

Correction Material: T- to NS93789

1-AN/UGC-18: Same as I-AN/UGC-16
2-AN/UGC-18: Same as 3-AN/UGC-5
3-AN/UGC-18: Same as 2-AN/UGC-5
1-AN/UGC-20: Positive Polarization of Copylight Connector Correction Material: T-1, NS0967.059-9021 to TM, NS0967-059-9020

1-A FA. 1 NS0967-059-9050
SERIAL: AN/UGC-20 equipments, serial number 922 and below
IDENTITY: A connector guide bracket is added to mounting hardware of the male copylight connector.

2-AN/UGC-20: Same as 2-AN/UGC-5 (see EIB 709) except
SERIAL: Navy Stunt Boxes (LP6 and up)
IDENTITY: Installation of 199823 Modification Identification Plate on the Typing Unit (LP) front plate.

3-AN/UGC-20: Normal Input Keying Kit
Correction Material: None required
3.A FA-14 NS0967.059-9070

SERIAL: All
IDENTITY: Installation of decal adjacent to nameplate.
4-AN/UGC-20: Modification to Update AN/UGC-20 and AN/UGC-20A to AN/UGC-20B. (Nomenclature changed to AN/UGC-20B.)

Correction Material: Use of AN/UGC-20B TM's.
2-C YF-12 NE0967-LP-059-9090 EIC Q33J, Q33K
SERIAL: AN/UGC-20 and AN/UGC-20A, all serial numbers.
IDENTITY: Verify that the following equipment ID plates are installed: LPI56WY/AJG replaces either the LPllIRN/ AY or LP1llRN/AJG, and AN/UGC-20B replaces either AN/UGC-20 or 20A.
NOTES: Prerequisite Field Changes: I and 2-AN/UGC-20. Also, the modification which provides number symbol (\#) for upper case 'H' for AN/UGC-20 and 20A. (Soe EIB 800 for information.)

1-AN/UGC-20A: Replace Keyboard and Distributor Correction Material: None
1-A YF-10 NS0967.059-9060 EIC Q33K000
SERIAL: Equipment serials used as part of the AN/USC-13 communications set
IDENTITY: An identification label, identifying the modification is attached to the equipment base, adjacent to and to the left of the equipment nameplate.

1-AN/UGC-20X: Same as 1-AN/UGC-20 except
SERIAL: All AN/UGC-20X equipments, serial number 93 and below

1-AN/UGC-25: Same as 1-AN/UGC-20 except SERIAL: All AN/UGC-25 equipments, serial number 1215 and below

2-AN/UGC-25: Same as 2-AN/UGC-5
3-AN/UGC-25: Modification to Update AN/UGC-25 to AN/ UGC-25A. (Nomenclature changed to AN/UGC-25A.)

Correction Material: Use of AN, UGC-25A TM's
2.C YF-I NE0967-LP-972-9080

SERIAL: All serial numbers.
IDENTITY: Verify that the following equipment ID plates are installed: AN/UGC-25A replaces AN/UGC-25 and LPllIWY/AJG replaces LPlliRN/AY.
NOTES: Field change 2-AN/UGC-25 and the modification which provides the number symbol (\#) for upper case ' H ' must be accomplished prior to the installation of this field change. (See EIB 800 for information.)

1-AN/UGC-25X: Same as 1-AN/UGC-20 except
SERIAL: All AN/UGC-25X equipments, serial number 103 and below

1-AN/UGC-41: Inclusion of Maintenance Fixture, MITE P/N 37200, with Maintenance and Adjustment Tools

1-A FA.0.5 NS0967-066-1080
SERIAL: All
IDENTITY: Nameplate, 'Modification by Addition of Field Change No. I, Contract M00027-67-C-0020,' installed on Keyboard Cover.

1-AN/UGC-43: Same as 1-AN/UGC-20 except
SERIAL: All AN/UGC-43 equipments, serial number 51 and below

2-AN/UGC-43: Same as 2-AN/UGC-5
1-AN/UGC-48: Same as 5-AN/UGC-5.
EIC Q3FS

1-AN/UGC-48A: Same as 5-AN/UGC-5.
EIC Q3ND

1-AN/UGC-48BY: Same as $5-A N / U G C-5$.
EIC Q3QG
1-AN/UGC-49: Same as 5-AN/UGC-S.
EIC Q3FU

1-AN/UGC-49X: Same as 5-AN/UGC-5.

EIC Q3QH

1-AN/UGC-54: Same as 5-AN/UGC.5.
EIC Q3Q

1-AN/UGC-90: Same as 5-AN/UGC-5.

EIC Q3JZ

1-AN/UGC-90X: Same as 5-AN/UGC-5.
EIC Q3QK
1-AN/UGH-1: Elimination of Potential Shock Hazard
Correction Material: T-1, NE0967-139-401! to NE0967139.4010
4.A FA-2 NE0967-139-4030 EIC QCOK000

SERIAL: All equipments
IDENTITY: Noting that the power input connector is a Hubbell 3 wire twist-lock connector.

1-AN/UNQ-7: Cancelled
1-AN/UNQ-7A: Cancelled

1-AN/UNQ-7B: Cancelled

1-AN/UNQ-7C: Cancelled
1-AN/UNQ-7D: Recorder-Reproducer - Correction of Wiring Errors on Extender Board

Correction Material: T-1, NS0965.016-5001 to TM for AN/UNQ-7D, NS0967-016-5000

4-A FA-1 NS0965.016.5030
SERIAL: All
IDENTITY: By noting that on $\mathrm{J}-\mathrm{l}$; c and b , and g and h are reversed from original drawing 92D1074, Fig 6-24

2-AN/UNQ-7D: Provide Mechanica: Support of Control Unit Correction Material: None
1-A FA-1 NS0965-016-5040 EIC RJ15000
SERIAL: All equipments.
IDENTITY: Presence of one hole on each side of the front of the control unit case.

3-AN/UNQ-7D: Provide Rapid Start Time
Correction Material: T-2, NS0965-016-5002 to NS0965-0165000
2.A FA-0.5 NS0965-0!6-5050 EIC M70P000

SERIAL: Those equipments used for certain ECM recording applications
IDENTITY: Noting that capstan rotates regardless of setting of mode selector switch.

4-AN/ LNQ-7D: Installation of Permanent Ground Lead on Tape Transport

Correction Material: None
2-A FA-1 EIB 793
SERIAL: Al thru A373, B1 thru B38, Cl thru C32, and D1 thru D53
IDENTITY: Presence of ground strap on power supply assembly terminal board TB1, terminal marked 115 VAC AUX GND.

1-AN/UNQ-7E: Same as 4-AN/UNQ-7D except
SERIAL: Al thru A58 and Dl thru B16
1-AN/UNQ-8(V): Signal Data Recorder-Reproduce: Set; Removal of Tape Lifter Studs

Correction Material: None

2-A FA-0.5
SERIAL: AI thre A38
IDENTITY: Removing the switch cover assembly and noting that the tape lifter stud on each of the two capstan roller as. semblies has boen removed.

2-AN/UNQ-8(V): Installation of Fuse Holder in Actuator As. sembly

Correction Material: T-1, NS0965-012-6003 to NS0965-012. 6000

1-A FA-0.5 NS0965-0〔2-6030
SERIAL: All
IDENTITY: Fuse holder mounted on top of supply reel motor.

1-AN/UPN-7: Provide Uniformity of AN/UPN-7; Improve Performance

Correction Material: Change 1 to NS91602
3-A FA-24 NS98586 F5825.325. 7492
SERIAL: 4.104
IDENTITY: Capacitor C 146.01 mfd , connected between the positive 105 volt terminal of TB102 and ground of the IF strip.

2-AN/UPN-7: Elimination of $\mathrm{Hi}-\mathrm{V}$ Corona
Correction Material: Change I to NS91602
1.A FA.4 NS98587 F5825-325.

SERIAL: 4-124, 126-152, 154-166, 168, 170
IDENTITY: Separates lead connecting T-601-7 and plate cap of V-617 instead of original harness leads.

3-AN/UPN-7: Reduction of Random Triggering Correction Material: Change 2 to NS91602
1-A FA-0.5 NS98631 F5825.311. 3303
SERIAL: All
IDENTITY: Installs C-211, one end of which connects to R204.
4.AN, UPN-7: Installation HV Safety Device

Correction Material: None
2-A FA-4 NS98995 None
SERIAL: All
IDENTITY: Plexiglass 'DANGER 4000 VOLTS' sign above osc and xfmr terminals.

1-AN/UPN-12: Addition of L.ORAN C Receiver to LORAN Receiving Sets (modified to AN/UPN-15)

Correction Material: Correct maintenance standards for MSB NS92988.42A and CTM NS94378

2-A FA-S NS981452 2N5825-560-
7213
SERIAL: All required to receive LORAN C signals IDENTITY: Modification nameplate attached near the unit nameplate.

2-AN/UPN-12: Addition of Ventilating Fan Protective Screen Correction Material: None required
2-A FA.2
None

SERIAL: All
IDENTITY: Presence of a protective screen mounted inside the power supply over the ventiating fan.

3-AN, UPN-12: Protective Covers for High Voltage Terminals Correction Material: None Required
2-A FA
None
SERIAL: Al
IDENTITY: Presence of a bakelite panel installed over the forward rear corner of terminal board TB202 in the Loran Indicator chassis. Portions of this field change have been provided on certain equipment by the manufacturer. All AN/ UPN-12() equipments should be checked and where necessary, modified to incorporate the safety measure detailed herein.

4-AN/UPN-12: Replacement of V232, 5696 Thyratron with a 5727/2D21W Thyratron

Correction Material: T- to NS92988 and 5- to NS94247
2-A FA-1
SERIAL: All AN/UPN-12 Loran Receivers
IDENTITY: Presence of type 5727/2D2:W tube in the V-232 tube socket.

5-AN/UPN-12: Replacement of Blower Motor Impeller and/ or Correction of Blower Motor Rotation

Corsection Material: T-4 to NS92988 (NS0280-434-2006);
T-3 to NS94247 (NSO280-765-7001)

$$
\text { 1-A FA. } 4 \text { NS0285-078.0900 F5825-919- }
$$

$$
9322
$$

SERIAL: All
IDENTITY: Inspection of power supply blower should reveal that the hub impeller and the concave side of the impeller blades are facing the motor. With the chassis in the horizontal service position the air flow should be in an upward direction.

6-AN/UPN-12: Wiring Change to Amplifier-Detector-Power Supply Chassis

Correction Material: T-10, NS0967-038-0101 to NS0967-038-0010; T-II, NS0967-038-2009 to NS0967-038-2000

2-A FA-1 NS0967-038.0090 EIC DF20000 SERIAL: All equipments
IDENTITY: Presence of a jumper wire connection between terminal 10 and the terminal junction of R70S and R711 on terminal board TB703.

1-AN/UPN-12A: Same as 1-AN/UPN-12
2-AN/UPN-12A: Same as 2-AN/UPN-2

3-AN/UPN-12A: Same as 3-AN/UPN-12

4-AN/UPN-12A: Same as 4-AN/UPN-12
5-AN/UPN-12A: Same as 5-AN/UPN-12

6-AN/UPN-12A: Same as 6-AN/UPN-12 except
EIC DF22000

2-AN/UPN-12B: Same as 2-AN/UPN-12

3-AN/UPN-12B: Same as 3-AN/UPN-12

4-AN/UPN-12B: Same as 4-AN/UPN-12
5-AN/UPN-12B: Same as 5.AN/UPN-12
6.AN/UPN-12B: Prevention of; Loss of Master Pedestal

Correction Material: T- to NS94247
2-A FA-1
SERIAL: All AN/UPN-12B and AN/UPN-15B LORAN receivers experiencing loss of Master Pedestal when switching the 'L.R' Switch to 'L' position
IDENTITY: The value of R 361 being 6.8 megohms.

7-AN/UPN-12B: Same as 6-AN/UPN-12 except

EIC DF23000

1-AN/UPN-12C: Same as 1-AN/UPN-12
2-AN/UPN-12C: Same as 2-AN/UPN-12

3-AN/UPN-12C: S3me as 3-AN/UPN- 12

4-AN/UPN-12C: Same as 4-AN/UPN-12

5-AN/UPN-12C: Same as 5-AN/UPN-12

6-A.N/UPN-12C: Same as 6-AN/UPN- 12 except

E1C DF24000

1-AN/UPN-15: Improve Power Supply Units
NS981799
SERIAL: All AN/UPN- 12 serial numbers modified by FC 1-AN/UPN-12
IDENTITY: 5RYWGA tube replaced with a 6AR6 tube
2-AN/UPN-15: Same as 2-AN/UPN-12
3-AN/UPN-15: Same as 3-AN/UPN-12

4-AN/UPN-15: Same as 4-AN/UPN-12

5-AN/UPN-15: Same as 5-AN/UPN-12

6-A.N/UPN-15: Cancelled

7-AN/UPN-15: Same as 6-AN/UPN- 12 except

EIC DF15000

1-AN/UPN-15A: Same as 1-AN/UPN-15

2-AN/UPN-15A: Same as 2-AN/UPN-12

3-AN/UPN-15A: Same as 3-AN/UPN-12

ORIGINAL
A-57

4-AN/UPN-15A: Same as 4-AN/UPN-12

5-AN/UPN-15A: Same as 5-AN/UPN-12
6-AN/UPN-15A: Same as 6•AN/UPN-12
7-AN/UPN-15A: Same as 6-AN/UPN-12 except
EIC DF16000

1-AN/UPN-15B: Same as 1-AN/UPN-15

2-AN/UPN-15B: Same as 2-AN/UPN-12
3-AN/UPN-15B: Same as 3-AN/UPN-12
4-AN/UPN-15B: Same as 4-AN/UPN-12

5-AN/UPN-15B: Same as 5-AN/UPN-12

6-AN/UPN-15B: Same as 6-AN/UPN-15

7-AN/UPN-15B: Same as 6-AN/UPN-12B
8-AN/UPN-15B: Same as 6-AN/UPN. 12 except
EIC DF 17000

1-AN/UPN-15C: Same as 1-AN/UPN. 15

2-AN/UPN-15C: Same as 2-AN/UPN-12

3-AN/UPN-15C: Same as 3-AN/UPN-12
4-AN/UPN-15C: Same as 4-AN/UPN-12
5-AN/UPr-15C: Same as 5-AN/UPN- 12

6-AN/UPN-15C: Same as 6-AN/UPN. 15

7-AN/UPN-15C: Same as 6-AN/UPN-12 except

EIC DF18000
1-AN/URA-8A: Improve Operation of Voltage Regulator Tubes

Correction Material: T-S to NS91490; T-2 to NS91278
NS0967-141-6040
SERIAL: All
IDENTITY: R. 730 is changed from 33 K to 10 K (located on TB E-701)

2-AN/URA-8A: Modification of Circuits to Increase TTY
Loop Current When Using AN/URA-8A, 8B
Correction Material: T-3 to NS91278
2-A FA-6 NS981187 None
SERIAL: All
3-AN/URA-8A: Replacement of Resistor R-231
Correction Material: Manual Obsolete
2-A FA- 0.5 NS0967-141-6060
SERIAL: All
IDENTITY: Presence of 100,000 ohm resistor R231

1-AN/URA-8B: Same as 1-AN/URA-8A
2-AN/URA-8B: Same as 2-AN/URA-8A except
Correction Material: T-6 to NS91490
3-AN/URA-8B: Same as 3-AN/URA-8A except
Correction Material: T-3, NS0967.141-9011 to NSO967-1419010 (formerly NS91490)

## NS0967-141-6060

4-AN/URA-8B: Disabling of Thermostatic Switch (S1201)
Correction Material: T-3, NS0967-141-9011 to NS0967-1419010 (formerly NS91490)

2-A FA-0.5 NS0967-141-9060
SERIAL: All
IDENTITY: Presence of two wires on one terminal of S1201

1-AN/URA-17: Replacing CRT Shield
Correction Material: T-2 to NS94028
1-A FA-1 NS981511
SERIAL: A-1 through A-10
2-AN/URA-17: Replacement of Resistor R-71 in -48 Volt DC Power Supply

Correction Material: T-2 to NS94028
2-A FA-0.5 NS981512 None
SERIAL: Al through Al55
IDENTITY: R-71 is a 2700 ohm resistor
3-AN/URA-17: Replacement of R-20 and R-22
Correction Material: T-2 to NS94028
2.A FA-0.5 NS9815:3 None

SERIAL: Al through A245
IDENTITY: R-20 and R-22 are 2200 ohm resistors

4-AN/URA-17: Cancelled

5-AN/URA-17: Replacement of Cable Clamp Bracket
Correction Material: T-4 to NS0967-034-9012 (formerly NS94028)

1-A FA.0.5 NS0967-034-9090 2N5821-9262624
SERIAL: All
IDENTITY: Cable clamp bracket for cable J]-P1 having extension on it preventing catch from falling down on Q4 or Q5.

6-AN/URA-17: Replacement of Wide-Shift Bandpass Filter FLI and Wide-Shift Discriminator Filter FL3

Correction Material: T-7, NS0967-034-9015 to TM, NS0967.034-9010

1-A FA-2 NS0967-034-9010 EIC F208000
SERIAL: All equipment
IDENTITY: Wide-shift filter, FLl and wide-shift discriminator filter, FL3 are 2000 Hz center frequency.

7-AN/URA-17: Installation of Warning Decal

## Correction Material: None required

1-A FA-0.2 NS0967-034-9120
SERIAL: All serial numbers
IDENTITY: Note the following in the Frequency Shift Converter CV-483( ). Extend converter chassis assembly. Locate cathode-ray tube (V-1). There should be a warning DECAL on the tube shield.

8-AN/URA-17: Install Diodes and a Capacitor to Provide a Low Level Polar Output

Correction Material: T-8, NS0967-034-9016 to NS0967-0349010; T-1, NS0967-340-0011 to NS0967-34-0010

II-A FA-2 NS0967-034-9130 EIC Q340000 SERIAL: Must be installed only in those equipments that are used in Low Level Polar Systems
IDENTITY: Withdrawing the converter chassis from the cabinet to permit access to the right-hand terminal board TB2. The field change is verified by the presence of a jumper wire between TB-2 terminal 50 and the junction of R64 and a capacitor.

1-AN/URA-17A: Same as 5-AN/URA-17
2-AN/URA-17A: Same as 6-AN/URA-17
3-AN/URA-17A: Same as 7-AN/URA-17 except
EIC Q3AG000

4-AN/URA-17A: Same as 8-AN/URA-17 except
EIC
Q3AG000
1-AN/URA-17B: Same as 7-AN/URA-17 except
EIC Q3AH000
2-AN/URA-17B: Same as 8-AN/URA-17 except
EIC Q3AH000
1-AN/URA-17C: Same as 7-AN/URA-17 except
EIC Q3AJ000
2-AN/URA-17C: Same as 8-AN/URA-17 except
EIC Q3AJ000
1-AN/URA-17D: Same as 7-AN/URA-17 except
EIC Q3CK000
1-AN/URA-24: Addition of Protective Circuitry for Excessive VSWR and Excessive PWR Input Overload

$$
\text { 1-A FA. } 8 \text { NS } 981145 \text { None }
$$

SERIAL: All
IDENTITY: Supplementary chassis mounted between side plates on top of control-indicator chassis

1-AN/URA-25: Same as 1-AN/URA-24
1-AN/URA-27: Addition of Jumper to S-101A in Monitor Control Unit Model ATS-MCU-2

Correction Material: See field change bulletin
II-A FA-I NE0967-543-1020
EIC Q936000
SERIAL: All Antenna Coupler Groups procured under contracts NObsr-75916, 75917, 81106, and 81394
IDENTITY: Presence of a short jumper between pins 8 and 9 of switch S-IOIA.

1-AN/URA-38: Provides Power Supply and Motor Brake Circuit Reliability

Correction Material: T-3, NS0967-204-0016 to TM, NS0967-204-0010

1-A FA. 4 NS0967-204.0060 2Z5820-459.
SERIAL: All serial numbers
IDENTITY: Anti-Turn Plate on Connector J.2
2-AN/URA-38: Provides Spark Gap Reliability and Case Pressurization

Correction Material: Ch. 2, NS0967-204.0015 to TM, NS0967-204-0010; T-1, NS0967-204-0071 to EFCB NS0967204.0070

1-A FA-4 NS0967-204-0070 EIC Q94F000 SERIAL: All serial numbers
IDENTITY: Presence of Circuit Breaker and Adjacent Label indicating 'RESET', 'ALARM', and 'OFF SWITCH TO MANUAL' on Front Panel
3.AN/URA-38: Improved Flipper Contacts and Servo Alignment in AN/URA-38, -38A

Correction Material: Change 3, NS0967-204-0017 to NS0967-204-0010; Change I, NS0967-297-6011 to NS0967-297. 6010

1-A FA-4 NS0967-204-0080
SERIAL: All serial numbers
IDENTITY: Presence of trimmer pots on servo PC boards.
4-AN/URA-38: Ceramic Antenna Insulator
Correction Material: Ch. 5, NE0967-204-0019 to NE0967-204-0010
I.A FA-2 NE0967-2040090 EIC Q94F000 SERIAL: All serial numbers IDENTITY: Presence of ceramic antenna insulator (IA!EJ) having marking 'BERRYLLIUM OXIDE'.

5-AN/URA-38: Improve Reliability of Blower Motor and Pressure Switch

Correction Material: Ch. 3, NE0967-204-0014 to NE0967204.0010

I-A FA-3 NE0967-204.0100 EIC Q94F000 SERIAL: All serial numbers
IDENTITY: Pipe plug in hole of old pressure switch (1AIS!) and adjustable type pressure relief valve (1A1MP3).

1-AN/URA-38A: Same as 3-AN/URA-38
2-AN/URA-38A: Same as 2-AN/URA-38

3-AN/URA-38A: Same as 1-AN/URA-38

4-AN/URA-38A: Same as 4-AN/URA-38 except
Correction Material: Ch. 2, NE0967-297-6012 to NE0967-297-6010, and

EIC Q94T000
5-AN/URA-38A: Same as 5-AN/URA-38 except
Correction Material: Ch. 3, NE0967-297-6014 to NE0967-297-6010, and

EIC Q94T000

## 1-AN/URA-53: Same as 5-AN/URA-17

1-AN/URC-7: Mike Volt Supply Modification
FA-1 NS98564
2N5820-325-
7470
SERIAL: 407-1083
IDENTITY: New resistor, R-310, 56 ohms is installed between J-303-C and R-307.

2-AN/URC-7: Modification of 52 Ohm Output
Correction Material: T-2 to NS91931
2-B YF-12 NS981185 None
SERIAL: Only when used with multicoupler having 52 ohm input impedance
IDENTITY: C103 replaced by fixed capacitor decade.
1-AN/URC-9: Changes Added to AN/URC-9 Adapts Equipment to Withstand Shock and Vibration

Correction Material: T-3, NS0967-032-5004 to TM, NS0967-032.5000

1-A FA-1 NS0967-972-4020 2N5820-986-
SERIAL: All
IDENTITY: The presence of plug cover plates in Radio Transmitter RT-581/URC-9.

2-AN/URC-9: Same as 6-AN/SRC-20
3-AN/URC-9: Provide MCW Keying for Homing Beacon Installations. (THIS FIELD CHANGE IS NO L.ONGER REQUIRED.)

Correction Material: TM changes no longer required. T-1, NS0967-050-7041 and T-2, NS0967-050-7042 to FCB for 2-AN/SRC-20,-21 apply to this FCB, NS0967-972-4030.

2-C YF-11 NS0967-972-4030
SERIAL: All used for homing beacon application. (lf this field change has not been installed, do not install.)
IDENFITY: Absence of a wire on pin 5 of K-802 in Modulator Audio Amplifier Assembly. Decal 'MCW MOD P-801' affixed to RF-581/URC-9 Assembly Plug P-801.
NOTES: T-i, NS0967-050-7041, originally appeared in EIB 682. T-2, NS0967-050-7042, originally appeared in EIB 751.

4-AN/URC-9: Same as 10-AN/SRC-20
5-AN/URC-9: Same as 11-AN/SRC-20 except

SERIAL: Radio Sets AN/URC-9 which utilize Power Supply PP-2702/URC-9. This field change is not applicable to AN/ URC-9Y or AN/URC-9AY.

## 6-AN/URC-9: Same as 12-AN/SRC-20 except <br> 2-C FA-10 NS0967-125-6150 E1C FH24000

7.AN/URC-9: Wiring Change, Elimination of Potential Safety Hazard

Correction Material: T-7, NS0967-125-6019 to NS0967-1256010

2-A FA-2 NS0967-125-6170 ElC FH24000 SERIAL: All equipments
IDENTITY: This field change may be identified by removing the RT-581/URC from its case and, with an AC voltmeter set to the 250 volt scale, check for presence of an AC voltage between pin r of J1401 and the case with power switch S1503 of the Power Supply PP-2702/URC in the OFF position. Switches S-204 and S-206 of Control Unit C3866 should be in the ON position. No voltage should be readable on the meter.

8-AN/URC-9: Same as 15-AN/SRC-20 except
2-A FA-I EIB 794
EIC QD47000
9-AN/URC-9: Same as 16-AN/SRC-20
10-AN/URC-9: Modification to Reduce Internal Operating Temperature

Correction Material: T-14, NS0967-125-6307 to NS0967125.6220

1-A FA-2 NS0967-125-6220 ElC QD47000 SERIAL: All serial numbers
IDENTITY: Presence of an air filter in the outboard sidewall of the PP-2702/URC-9 power supply compartment, holes drilled in the heat shield of the RT-581/URC- 9 transceiver compartment, and a reduced exhaust port in the outboard sidewall of the RT-581/URC-9 iransceiver compartment.

1-AN/URC-9A: Same as 10-AN/URC-9
2-AN/URC-9A: Same as 3-AN/SRC-20A except

## EIC <br> QD6K000

3-AN/URC-9A: Wiring Change, Elimination of Potential Safety Hazard

Correction Material: Included in TM, NS0967.439-0010, dated 1 January 1973

2-A FA-2 NS0967-378-3080 EIC
QD6K000
SERIAL: All serial numbers
IDENTITY: Removing the RT-581A/URC-9 from its case and with an AC voltmeter set to the 250 volt scale, check for presence of an AC voltage between pin 5 of J-1401 and the case with power switch S-1503 of Power Supply PP-2702/ URC in the OFF position. The main power source switch should be in the ON position. No voltage should be readable on the meter.

1-AN/URC-9AY: Same as 3 -AN/URC-9

2-AN/URC-9AY: Same as 6-AN/SRC-20

3-AN/URC-9AY: Same as 10-AN/SRC-20
4.AN/URC-9AY: Same as $15-A N / S R C-20$ except

2-A FA-1 EIB $794 \quad$ EIC QD48000
5-AN/URC-9AY: Same as $10-A N / U R C-9$ except
EIC QD48000
1-AN/URC-9Y: Same as 1-AN/URC-9
2-AN/URC-9Y: Same as 6-AN/SRC-20
3-AN/URC-9Y: Same as 10-AN/SRC-20
4-AN/URC-9Y: Same as 15-AN/SRC-20 except
2-A FA-1 EIB 794 EIC QD49000
5-AN/URC-9Y: Same as 10-AN/URC-9 except
EIC QD49000
1-AN/URC-16: Additional Covers for Audio Receptacles
Correction Material: None
A FA-0.5 NS98757
None
SERIAL: Al!
IDENTITY: Appearance of two connector caps SNSN N17.
C-945002-688, FSN N5935-549-1175 on each transmitter receiver RT-66/GRC, RT-67/GRC, RT-68/GRC and on each control box C-375/VRC.

2-AN/URC-16: Installation of Metal-Cal Nameplates
A FA-I NS98689 F5820-348-
F5820-348-
4935
SERIAL: All
IDENTITY: Nameplate added to equip; 'Type-serial nos'
1-AN/URC-16X: Same as 1-AN/URC-16

2-AN/URC-16X: Same as 2-AN/URC-16
1-AN/URC-16Y: Same as -AN/URC-16
2-AN/URC-16Y: Same as 2-AN/URC-16

1-AN/URC-17: Same as 1-AN/URC-16
2-AN/URC-17: Same as 2-AN/URC-16
1-AN/URC-17X: Same as 1-AN/URC-16
2-AN/URC-17X: Same as 2-AN/URC-16

1-AN/URC-17Y: Same as 1-AN/URC-16
2-AN/URC-17Y: Same as 2-AN/URC-16
1-AN/URC-18: Same as 1-AN/URC-16

2-AN/URC-18: Same as 2-AN/URC-16

1-AN/URC-18X: Same as 1-AN/URC-16
2-AN/URC-18X: Same as 2-AN/URC-16
1-AN/URC-18Y: Same as 1-AN/URC-16
2-AN/URC-18Y: Same as 2-AN/URC-16
1-AN/URC-32: See Field Change Bulletin 1-A FA-12 NS981265

2N5820-7998788

## SERIAL: I thru 359

2-AN/URC-32: Replacement of Fuse F-3 in High Voltage Power Supply

Correction Material: None
2-A FA-0.5 NS981323
None
SERIAL: 1 thru 631
IDENTITY: Substitution of the 4 -1/2-inch l-amp fuse F-3 with a 1-1/2-inch amp sand packed fuse.

3-AN/URC-32: Modification of Junction Box J-1007/U
Correction Material: T-1 to NS93285(A)
2-A FA NS981324 None
SERIAL: I thru 629

4-AN/URC-32: Internal Wiring Correction
Correction Material: None
2-A FA-0.5 NS981325 None
SERIAL: Low voltage Power Supply PP-2154/U when used with a primary power input of 230 VAC
IDENTITY: Visual inspection of the wiring in Power Supply PP-2154/U.

5-AN/URC-32: Modification of Power Amplifier AM-2061/ URT for Grid-Block Keying to Reduce Failure of High Voltage Power Supply Fuse F-3

Correction Material: Correction included in Supp 2 of NS93285A

2-A FA-3 NS981341A None
SERIAL: I thru 662 produced under NObsr 75279 and 81220
IDENTITY: Addition of insulated wires connect to the contact tenninals of relay K -2.

6-AN/URC-32: Additional Air Supply Valve for Power Amplifiers
$\begin{array}{lrr}\text { Correction Material: None } & \\ \text { 2-A } & \text { FA-0.5 } & \text { NS981384 }\end{array} \quad$ 2N5820-937-
SER1AL: 1 through 359
IDENTITY: Availability of two air valves on the air duct immediately behind the power amplifier unit, and the availability of two mating air access holes on the rear chassis plate of the power amplifier.

7-AN/URC-32: CW/FSK Unit (CU-730/URC) Modifications Correction Material: None
2-A FA-2 NS981474 None
SERIAL: 1 through approximately 690

IDENTITY: Presence of an addition IN198 diode in the teletype input line between terminal of $\mathrm{J}-1$ and $\mathrm{R}-11$.

8-AN/URC-32: Power Amplifier Keying Modification to Reduce Fuse (F3) Failures

Correction Material: Supp 2 to NS93285A
2-A FA-1 NS981475 None
SERIAL: AN/URC-32 1 through 821 and KWT-6(8) serials 1 through 79
IDENTITY: Addition of a 270 K ohm resistor and a type 1N198 diode connected to relay K2 in Power Amplifier AM2061/URT.

9-AN/URC-32: Addition of Ground Wire in High Voltage Power Supply for Positive Grounding of Switch S-1

Correction Material: T-3 to NS93285(A)
2-A FA-0.5 NS981476
None
SERIAL: 1 through 900
IDENTITY: Presence of a 10 inch bonding wire bolted to the S1 subchassis and carried back and bolted to the back plate of the Power Supply PP-2153/U.

10-AN/URC-32: Elimination of Troubles with CW Keying Correction Material: T-10 to NS93285(A)
2-A FA-2 NS981584
None
SERIAL: 1 through 822
11-AN/URC-32: Control and Drive of AN/URC-32 from Transmitter Group AN/URA-3(XN-1)

Correction Material: Supp. 2 to NS93285(A)
1-A FA-5 NS 981487
None
SERIAL: Equipments using AN/WRA-5(XN-1) as the exciting unit
IDENTITY: The transmitter transfer control will be mounted on or near AN/URC-32. Modifications nameplate will be mounted on AN/URC-32.

11a-AN/URC-32. Same as 5a-AN/WRT-2
12-AN/URC-32: Replacement of Resistor R-22 in Power Amplifier AM-2061/URT

Correction Material: Included in revised publications
2-A FA NS0967-066-7190
SERIAL: All AN/URC-32's from Ser 661 up, and Ser 1 to 661 that have applied FC 5-AN/URC-32, AN/URC-32A Ser 1 through 20, All KWT-6(8)

13-AN/URC-32: Modernization, Improved Operation, and Increased Operational Availability of Hand Set Adapter Unit and Low Voltage Power Supply

Correction Material: None required
1-A FA-I NS0967-066-7200 2N5820-953.
SERIAL: I through 981
IDENTITY: In Low Voltage Power Supply, replacement of TB1 and TB2 and the connection of leads to new terminal boards.

14-AN/URC-32: Modernization, Improved Operation, Increased Operational Availability of High Voltage Power

Supply
Correction Material: None required
1-A FA-45 NS981639
2N5820-953-
SERIAL: 1 through 664
15-AN/URC-32: Addition of Wire Jumper
Correction Material: None
2-A FA-1 NS0967-066-7190 None
SERIAL: All when used w/CU-737/URC Antenna Network 18(U-2) for the KWT-6(8) having a VSWR protective circuit addition
IDENTITY: Presence of wire jumper between terminals TBK-15 and TBH-6 in J-1007/U or $153 \mathrm{H}-3$.

16-AN/URC-32: Power Amplifier Driver Stage Tube Oscillation

Correction Material: None required
2-A FA-0.5 NS0967-066-7190
None
SERIAL: All
IDENTITY: When buss wires between pins 2 and 9 on tube sockets XV-I and XV-2 have been removed.

## 17-AN/URC-32: Modification of RF Amplifier AM-2061/ URC

Correction Material: T-2, NS0967-066-7242 to NS0967-0667240

1-B FA-8 NS0967-066-7240 2F5820-9260170
SERIAL: 1 thru 981
IDENTITY: Presence of two access holes for adjustment of screen voltage tap switch. Presence of a button plug covering access hole for adjustment of ALC circuit, on front panel.

18-AN/URC-32: Modification of Junction Box (51007) (153H2) for 600 Ohms Output

2-A FA-i ivS0967-066-7190
SERIAL: All
19-AN/URC-32: Modification of Keying Circuit
Correction Material: T- to NS93285, NS93285(A), and NS93285(B)

2-A FA-1 NS0967-066-7190
SERIAL: AN/URC-32 (ser 822 and above), AN/URC-32A, 32B which do not have a jumper wire connected between TBJ-15 and TBH-14, KWT-6(8) serial numbers 80 and above IDENTITY: The jumper wire connected between TBJ-15 and TBH-14.

20-AN/URC-32: Wiring Change to Receiver Overload Protective Device

Correction Material: T. to NS93285, NS93285(A), and NS93285(B)

2-A FA-1 NS0967.066-7190
SERIAL: All
IDENTITY: The shorted BNC connector on relay K 1 .
21-AN/URC-32: Modification to the Radio Frequency Amplifier, AM-2061/URT, RF Input Receptacle, 2J1, and Plug 15W2P1

Correction Material: NS93285, NS93285(A), NS93285(B)

```
    2-A FA-1 NS0967-066-7190
SERIAL: All
IDENTITY: Installation of TNC series connector. The TNC
connector is a screw thread adaptation of the original BNC
connector.
22-AN/URC-32: Modification to Low Voltage Power Supply
PP-2154/U Diode Rectifiers 10CR6 and 10CR7
    2-A FA-1 NS0967-066-7190
SERIAL: All AN/URC-32 (1 thru 981)
IDENTITY: By determining that 10CR6 and 10CR7 are
1N3190 diodes.
```

23.AN/URC-32: Modification of Frequency Generator CV731/URC to Accept Frequency Converter CV-1749( )/UR Correction Material: Included in revised TM

1-B FA-8 NS0967-066-7300 2F5820-9335156

## SERIAL: All

IDENTITY: Presence of Jack (J8) installed on the upper right side of Frequency Generator CV-731/URC, main chassis.

24-AN/URC-32: Addition of Constant Voltage Transformer 2T2

Correction Material: T-6, NS0967-066-7103
1-A FA-2 NS0967-066-7310 2N5820-937. 0143
SERIAL: All
IDENTITY: Presence of constant voltage transformer 252 mounted inside the right vertical main frame of the electrical equipment rack MT-2092/U when facing the front of the equipment.

25-AN/URC-32: Installation of Elapsed Time Indicator
Correction Material: T-3, NS0967-066-7011 to TM, NS0967-066-7010, Volume I (formerly NS93285B, Volume I); T-3, NS0967-066-703i to TM, NS0967-066-7030, voiume III (formerly NS93285B, Volume 111)

1-A FA-2 NS0967-066-7330
2N5820-2445167
SERIAL: All equipments aboard the following ships: DD-706, 708, 709, 729, 790, 840, 848, 876, DL-5, DLG-18, 33, MSO435, 455, 460, 468, 470, 491, 519, SS-425, and SSN-596, 613 IDENTITY: Presence of an elapsed time indicator on front panel of the AM-2062()/URC Amplifier and Control Unit.

26-AN/URC-32: Rotation of 2V3 Tube Socket Chimney Located in RF Amplifier AM-2061/URT

Correction Material: None
4-A FA-2 NS0967-066-7340 None
SERIAL: All
IDENTITY: Observing that the tube clamp clip on the right side of 2 V 3 is located approximately $3 / 4^{\circ}$ above 2 C 33 instead of just beside 2 C 33 .

27-AN/URC-32: Instaliation of Standby and Emitting Status Monitoring Relays

Correction Material: T-4, NS0967-066-7013 to TM, NS0967.066-7010; T-4, NS0967-066-7032 to TM, NS0967-0667030

2-C FA-4 NS0967-066-7350 E1C FH43000

SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: Presence of two relays installed on the partition between the Receiver Protective Device and the terminal strip blocks in the J-1007/U Junction Box.

28-AN/URC-32: Modification to FSK Circuit
Correction Material: T-10, NS0967-066-7017 to NS0967-066-7010 (TM); T-1, NS0967-066-7061 to NS0967.066-7060 (MSB); and T-2, NS0967-066-7072 to NS0967-066-7070 (ORM)

II-A FA-1 NS0967-066-7360 EIC
QD4H000

## SERIAL: All equipments

IDENTITY: Presence of an 8200 ohm resistor in series with diode 5CR6.

1-AN/URC-32A: Same as 12-AN/URC-32
2-AN/URC-32A: Same as 16-AN/URC-32
3-AN/URC-32A: Same as 17-AN/URC-32 except SERIAL: 1 thru 90

4-AN/URC-32A: Same as 18-AN/URC-32
5-AN/URC-32A: Same as 19-AN/URC-32
6-AN/URC-32A: Same as 20-AN/URC-32
7-AN/URC-32A: Same as 21-AN/URC-32
8-AN/URC-32A: Same as 5a-AN/WRT-2
9-AN/URC-32A: Same as 23-AN/URC-32 except
SERIAL: 1 thru 681
10-AN/URC-32A: Same as 24-AN/URC-32
11-AN/URC-32A: Same as 25-AN/URC-32
12-AN/URC-32A: Same as 26-AN/URC-32
13-AN/URC-32A: Same as 27-AN/URC-32 except
EIC FH44000
14-AN/URC-32A: Same as $28-A N / U R C-32$ except
EIC QD4JO0^
1-AN/URC-32B: Same as 18-AN/URC-32
2-AN/URC-32B: Same as 19-AN/URC-32
3-AN/URC-32B: Same as 20-AN/URC-32
4-AN/URC-32B: Same as 21-AN/URC-32
5-AN/URC-32B: Same as 5a-AN/WRT-2
6-AN/URC-32B: Provide an Equipment Chassis Ground to the
'Keyline' of the CV.1749()/UR for Remote Operation
Correction Material: T-8, NS0967-066-7015 to TM, NS0967.066.7010

2-C FA-2 NS0967-066.7320 2N5820.9377210
SERIAL: All serial numbers.
IDENTITY: A micro-miniature relay has been installed adjacent to filter FL 1 located in the CV-1749( )/UR assembly.

7-AN/URC-32B: Same as 24-AN/URC-32
8-AN/URC-32B: Same as $25-A N / U R C-32$

9-AN/URC-32B: Same as 26-AN/URC-32

10-AN/URC-32B: Same as 27-AN/URC-32 except
2-C FA. $4 \cdot$ NS0967-066-7350
EIC FH45000
11-AN/URC-32B: Same as 28-AN/URC-32 except
EIC
QD4K000

1-AN/URC-35: Improved Reliability of the Audio Amplifier Transistors Q9 and Q10

Correction Material: T.2, NS0967-287-5012 to NS0967-2875010

1-A FA. 2 NS0967-287-5040 EIC QD4L000 SERIAL: All serials with unmodified IF/AF amplifier assembly IA2A2. See Identification of Accomplishment.
IDENTITY: Audio amplifier transistors Q9 and Q10, located on PCB 1A2A2A2 of the IF/AUDIO amplifier electronic assembly, have been changed from 2N1183A to JAN 2 N1131.

2-AN/URC-35: Improved Antenла Overload Protection Circuitry

Correction Material: Supplement I, NE0967-287-5013 to NE0967.287.5010

1-A FA-1.5 NE0967-287-5050
EIC QD4L000
SERIAL: All serial numbers
IDENTITY: Four diodes mounted on underside of antenna overload protection assembly circuit board cover IA2A9A2.

3-AN/URC-35: Modification to Install Replacement Push-toTalk Relay

Correction Material: See E1B 923
II-A FA. 2 EIB 923
SERIAL: All serial numbers
IDENTITY: The replacement PTI relay (1A2K1) has eight solder terminals in a rectangular configuration and is mounted 'piggy back' on top of Antenna Transfer Relay K2.

1-AN/URC-35A: Same as 1-AN/URC-35 except
Correction Material: T-1, NS0967-380-5011 to NS0967-380. 5010 and EIC QD6L000

2-AN/URC-35A: Remove Capacitors 2A2A1CIO and 2A2A 1C33 to Increase Starting Reliability of DC to DC Converter Assembly

Correction Material: T-2, NS0967-380-5013 to NS0967-3805010; T-1, NS0967-878-6011 to NS0967-878-6010

IV-A FA-0.5 NS0967-380-5050 EIC QD6L000
SERIAL: All AN/URC-35As. Affected units are AM-3007/ URT with Foxtrot (F) prefix serial numbers manufactured on Contract N00039-68-C-1585
IDENTITY: Withdraw AM-3007/URT from its case and note that capacitors 2A2A1C10 and 2A2A1C33 are not installed. 2A2A1C33 is bracket mounted just behind front panel at right side of AM-3007/URT. 2A2A1ClO is bracket mounted just behind front panel at left side of AM-3007/URT.

3-AN/URC-35A: Same as 3-AN/URC-35
1-AN/URD-2: Replacement of Resistor R-235 in Receiver R-256/URD-2

Correction Material: T. 1 to NS91198
A FA.0.5 NS98152
F5825-301-
8893
SERIAL: 1-34
IDENTITY: R-235 (75K 2 watts) replaced by two resistors connected in parallel (each 150K 2 watt).

2-AN/URD-2: Replacement of Resistors in R-256/URD-2 Correction Material: T-2 to NS91198
A FA-0.5 NS98210
F5825-301- 9014
SERIAL: 1.79 less 68 and 76
IDENTITY: R-164, R-165 and R-166 are replaced by one resistor, R-164 (1,000 ohms 8 watt).

3-AN/URD-2: Modification of Dial Drive Mechanism in R-256/URD-2

Correction Material: None
A FA-2 NS98211
F5825-3018991

## SERIAL: 1-50

IDENTITY: New type stop is on dial drive or evidence of twin leads to pins 4 and 6 of $\mathrm{X}-103$ being unsoldered during field change.

4-AN/URD-2: Addition of Ground Jumper in T-202/URD-2
Correction Material: T-2 to NS91198
A FA. 1 NS98212 F5825-301.
SERIAL: 1-123
IDENTITY: A grounding lug is placed on copper clip on rear of capacitor C-301.

5-AN/URD-2: Replacement of Resistors to Reduce the Requirements for Closely Matched Vacuum Tubes

Correction Material: T-4 to NS91198
2-A FA-2 NS981262
Noле
SERIAL: All
IDENTITY: Substitution of $100 \cdot \mathrm{kw}$ resistors for $50-\mathrm{kw}$ resistors ( R -191), ( R -192), etc. in the deflection-modulation circuitry.

S-AN/URD-2A: Same as 5-AN/URD-2 except
Correction Material: T-1 to NS91521
1-AN/URD-4: Filtering Modification in R-353/URD-4 Correction Material: None
A FA-1 NS98441 None
SERIAL: 1-30
IDENTITY: Jumper from pin 9 of TB-601 to pins 2 of K-605
2-AN/URD-4: Filtering Modification
Correction Material: None
A FA-1 NS98520
SERIAL: 31-50, $52,54-56$
IDENTITY: R-615 connected in parallel with L-607 (located
on TB 601) indicates accomplishment.

3-AN/URD-4: Modification to Improve Equipment
Correction Material: T-5 to NS91912(A)
A FA-3 NS98637 F5825-325.

SERIAL: 1-253
IDENTITY: Remove monitor from recejver and capacitor $C$ 453 between tie point near XV-407 and ground. Capacitor changed to $15 \mathrm{mmfd}, 500$ vdcw. In azimuth-indicator, R-I058 attached to pin 6 and 4 of XV- 919 is changed to $91 \mathrm{~K}, 2 \mathrm{~W}$.

4-AN/URD-4: Modification to Protect Relay K-403
Correction Material: T-4 to NS91912(A)
SERIAL: 1.409
5-AN/URD-4: Modification to High Voltage Circuit Operation Correction Material: Change 1 to NS91912(A)
2-A FA-2 NS98932 None
SERIAL: Improved HI voltage transformer T903 installed from STK.

6-AN/URD-4: Reduction of Internal Heat Generation in Azimuth Indicator and Power Supply Units

Correction Material: T-10, NS0967-108-4012 to TM, NS0967-108-4010 (formerly NS91912(A))

2-A FA-1 NS0967-108.4100 None SERIAL: 1 through 615
IDENTITY: Substitution of rectifier tube types 5R4 and 6X4 with diode types 1 N1 238 and $1 N 2490$ in the Azimuth Indicator and Power Supply Units.

7-AN/URD-4: Installation of Nameplates (Converts to AN/ URD.4B)
I-A FA-12 NS981279 F5820-448-

SERIAL: All ship equipment
8-AN/URD-4: Rapid Access to Intake Air Filter and Discontinued Use of Exhaust Air Filter in Receiver Cabinet

Correction Material: T-4 to NS0967-108-6010 dtd May 1974 and T-12 to NS0967-108-4010 dtd May 1974

II-A FA-2 NS0967-108-4120 EIC N90P000 SERIAL: Ali equipments
IDENTITY: Noting that knurled head thumb screws are used to fasten intake air filter covers on the rear of receiver cabinet.

1-AN/URD-4A: Replacement of High Voltage Rectifiers
Correction Material: T-3, NS0967-108-6013 to NS0967-1086010; T-1, NS0967-108-6051 to NS0967-108-6050

2-A FA-1 NS0967-108-6060 EIC N90Q000

SERIAL: All AN/URD-4A, -4C, and -4D equipments usipg Type IP-540/URD-4A Azimuth Indicator IDENTITY: Noting that V926 and V927 are solid state rectifiers, type 4302715.

2-AN/URD-4A: Same as 8-AN/URD-4 except
Correction Material: T-4 to NS0967-108-6010 dtd May 1974 and T-12 to NS0967-108-4010 dtd May 1974

NS0967-108-4120
EIC N90Q000
1-AN/URD.4B: Same as 1-AN/URD-4

2-AN/URD-4B: Same as 2-AN/URD-4

3-AN/URD-4B: Same as 3-AN/URD-4

4-AN/URD-4B: Same as 4-AN/URD-4
5-AN/URD-4B: Same as 5-AN/URD-4

6-AN/URD-4B: Same as 6-AN/URD. 4

7-AN/URD-4B: Same as 8-AN/URD-4 except
Correction Material: T-4 to NS0967-108-6010 dtd May 1974 and T-12 to NS0967-108-4010 dtd May 1974

NS0967-108-4120
EIC N90R000

1-AN/URD-4C: Same as 1-AN/URD-4A except
2-A FA-1 NS0967-108-6060 EIC N90T000

2-AN/URD-4C: Same as 8-AN/URD-4 except
Correction Material: T-4 to NS0967-108-6010 dtd May 1974 and T-12 to NS0967-108-4010 dtd May 1974

NS0967-108-4I20 EIC N9OT000
1-AN/URD-4D: Same as 1-AN/URD-4A except
2-A FA-1 NS0967-108-6060 EIC N90T000

2-AN/URD-4D: Same as 8-AN/URD-4 except
Correction Material: T-4 to NS0967-108-6010 dtd May 1974 and T-12 to NS0967-108-4010 dtd May 1974

NS0967-108-4120
EIC N90T000

1-AN/URN-3: Operation and Maintenance Improvements Correction Material: T-3 to NS92348
B YF-75 NS98690 F5821-5011308
SERIAL: 18-400
IDENTITY: Part I: Tl001 is FTR p/n. Part II: Beam pulse 7 usec vice 9 usec. Part 111: Z-604, Z-605, Z-606, Z-607 and V624 have been removed. Part IV: C-1406, C-1415 and C-1421 have mechanical locks. Part V: Series resistor for front panel lamps. Lamp changed to $10 \mathrm{C} 7 / 1 \mathrm{DC}$ types.

[^0]1-A FA-6 NS98830
F5840-695.
9577
SERIAL: 203, 205, 207, 209-211, 213-215, 217, 218, 240, 242, 244, 246, 266-270, 273-296, 298, 300, 302, 304, 306-312, 314, $316,318,320,322-330,332,334,336,338,340-364,366,368$, $370,372,374,376,378,380,382,384,386-413,416.471,479-$ 550, 564-571, 626-648.
IDENTITY: ID tone chassis mounted on RH side of KY-101/ URN-3.

3-AN/URN-3: Replacement of Tone Identity Keyer Assembly and Addition of High Voltage Protective Circuit

Correction Material: T-13 to NS92348
1-A FA-8 NS98831 F5840-695.
9578
SERIAL: 203, 205, 207, 209-211, 213-215, 217, 218, 240, 242, 244, 246, 266-270, 273-296, 298, 300, 302, 304, 306-312, 314, $316,318,320,322-330,332,334,336,338,340-364,366,368$, $370,372,374,376,378,380,382,384,386-4!3,416.471,479-$ 550, 564-571, 626-648.
IDENTITY: (I) ID keyer motor (B-602) mounted in horizontal plane vice vertical. (2) HVPS protective circuit mounted on LH side of PP-956/URN-3.

4-AN/URN-3: 1350 Cycle Tone Circuit Modification
Correction Material: T-15 to NS92348
1-A FA-0.5 NS98893 F5840-543-
0085
SERIAL: See bulletin
IDENTITY: R-774 is 68 kilohms $1 / 2$ watt; R-764 is 1 megohm 1/2 watt.

5-AN/URN-3: Electrical Relocation of C-1310 in Amplifier Modulator AM-847/URN-3

Correction Material: Change I to NS92348(A)
2-A FA-I NS98894
None
SERIAL: 1 through 651
IDENTITY: Rewiring of C-1310
6-AN/URN-3: Ventilate and Correct Output for Special Test Equipment

Correction Material: T-1 to NS92348(A)
2-A FA-9 NS98950 None
SERIAL: All
IDENTITY: Part I: Cooling ducts in power supply/test set cabinet have vent openings in upper half. Part II: R-723 on TB-619 now 560 ohms, $/-5 \%, 1 / 2 w ;$ R 724 on TB-619 now 120 ohms, $/-5 \%, 1 / 2 w$. Part III: R-453 between J-407 and TP-404 now $6.8 \mathrm{~K}, /-5 \%, 1 / 2 \mathrm{w}$; R-454 between J-40 and gnd strap of XV-405 now 2.7k, /-5\%, 1/2w. Part IV: Lead No. 26 goes to No. 310 on TB-1001.

## 7-AN/URN-3: Cancelled

8-AN/URN-3: Installation of Capacitor Shields
Correction Material: None
2-A FA-0.5 NS98958 None
SERIAL: See bulletin
IDENTITY: Shield over C-1232 in Amp. Mod. AM-847/ URN-3. Shields over C-1469 and C-1470 in FMO video chassis.

9-AN/URN-3: Replacement of Keyer Motor B-602 in CoderIndicator

Correction Material: T-4 to NS92348(A)
1-A YF-4 NS981177
2N5825-682-
2724
SERIAL: All shore equipments
IDENTITY: B-603 is Holtzer-Cabot Part \#RBC-2505.
10-AN/URN-3: Update Kit for AN/URN-3 to AN/SRN-6 Performance (converts to AN/URN-3A)

1-B YF-40 NS98125S
F5820-799-
8589
SERIAL: All on NObsr 57103
IDENTITY: Freq Multiplier-Oscillator is CV-1012/URN; Amplifier Modulator is AM-1701A/URN; Duplexer is CU787/URN.

11-AN/URN-3: Replacement of Frequency Multiplier Oscillator CV-273/URN-3 with Frequency Multiplier-Oscillator CV-1064/URN-3

Correction Material: Change 3 to NS92348(A)
1-A FA-16 NS981285 F5820-474-
2825
IDENTITY: All units not uprated by Field Change 10-AN/ URN-3. Frequency Multiplier-Oscillator is CV-1064/URN.

12-AN/URN-3: Replacement of Filter Thermostat Heater Coil 1-A FA-3 NS981331 2N5825-893-

3728
SERIAL: Bandpass filters: Z4001 (Low Band) and $\mathbf{Z 4 0 0 2}$ (High Band) supplied with FC 10-AN/URN-3 on NObsr 75769 and 81447 - Bandpass filters: Z4001, serials 2001 thru 2049; 24002, serials 1001 thru 1049 supplied with FC 10-AN/ URN-3
IDENTITY: Replacement heater coil will read 800 ohms vice 2200 ohms for original coil.

13-AN/URN-3: Operational and Maintenance Improvements Correction Material: T-7 to NS92348(A)
1-A FA-10 NS981412 2N5825-973. 0695
SERIAL: AN/URN-3, -3(XN-3), -3(XN-5) - All serial numbers - Part I - AN/URN-3 (All serial numbers) - Not applicable to AN/URN-3(XN-3) and AN/URN-3(XN-5) serial numbers ithrough 54
IDENTITY: Part I - Presence of small keyer motor (B-603) mounted in horizontal plane in Coder-Indicator KY-101/ URN-3 in lieu of large keyer motor (B601) mounted in vertical plane. Yart II - Presence of piate assembly CBTL D-2133927-I mounted vertically on the left side of High Voltage Power Supply PP-956/URN-3, adjacent to V-1904 and V1906.

14-AN/URN-3: Update the AN/URN-3 to the AN/GRN-9 Series and AN/SRN-6 Series Performance

Correction Material: Change 4 to NS92348(A)
1-B YF-64 NS981413
None
SERIAL: All
IDENTITY: The amplifier-modulator will have a new identification plate - AM-7101A/URN.

## 15-AN/URN-3: Cancelled

16.AN/URN3: Restoration of 2700 Hertz Oscillator

Correction Material; T-2, NS0967-052-6022 to NS0967.0526020 (Vol. 1i)

2-A FA-2 NS0967-052-6280 None
SERIAL: All units not having FC 4 installed at time of production
IDENTITY: Installation of V-601 type 5751 tube.
17-AN/URN-3: Corrects Erratic Operation of Switch S. 607
Correction Material: T-9, NS0967.052-6302
1-A YF-1 NS0285.081-0900
SERIAL: All
IDENTITY: The presence of backing plates adjacent to both the normally open contact leaf and normally closed contact leaf of S-607.

1-AN/URN-3(XN-3): Same as 13-AN/URN-3
1-AN/URN-3(XN-5): Same as 13-AN/URN-3

1-AN/URN-3A: Same as 5-AN/GRN-9B except
SERIAL: All shore equipment (70)

2-AN/URN-3A: Cancelled
3-AN/URN-3A. Repair of Spectrum Filters Z.4001 and Z.4002 1-A FA-6 NS981662 2N5825-045-

SERIAL: All
4-AN/URN-3A: Same as 16-AN/URN-3
5-AN/URN-3A: Same as 17-AN/URN-3
6.AN/URN-3A: Installation of Temperature Sensitive Fuse in the Spectrum Filter Heater Circuit Correction Material: T-10 to NS0967-052-6210
1-A FA-3 NS0967-052-6200 2F5825-999.
1245
SERIAL: All with Z4001 or Z4002 (heated type)
IDENTITY: Presence of metal strap ends on terminals 3 and 4 of the heater wiring terminal block.

7-AN/URN-3A: Improve Pressure Seals of TACAN Spectrum Filters Z-4001 and Z-4002

Correction Material: NS0967.052-6230 (NS92348A)
3-C FA-40 NS0967.052-6220 2N5825-919-
9323
SERIAL: All bandpass filters Z.4001 (Hi-Band) and Z. 4002 (Lo-Band) used with AN,URN-3A
IDENTITY: The presence of 4 aluminum guide rod covers vice the original plastic covers, the replacement of the front panel heater assembly with an insulated aluminum panel cover.

8-AN/URN-3A: Cancelled
-AN/URN-3A: Replaces Heater Stabilized Spectrum Filter
with a Temperature Compensated Spectrum Filter
Correction Material: Change S, NS0967-052-6303 to NS0967-052-6010 (formerly NS92348(A))

$$
\begin{array}{rrr}
\text { 1-B FA-16 NS0967.052-6240 } & \text { 2F5825-915- } \\
& 1655
\end{array}
$$

SERIAL: CU-787/URN Duplexer (a unit of Radio Set AN/ URN-3A) 28 equipments (unspecified serial numbers)
IDENTITY: Modification nameplate located below the duplexer identification nameplate.
10.AN/URN-3A: Installation of Dehumidifier 0.4001

Correction Material: T.12, NS0967.052.6304 to TM, NS0967.052-6010 (formerly NS92348(A))

1-A FA-2 NS0967-052-6400
2Z5820.LOO
1107
SERIAL: All with Z4001 or Z4002 (heated type).
IDENTITY: The presence of one dehumidifier withis Duplexer, CU-787/URN-3A.

11-AN/URN-3A: Correction of Temporary Overload Condition PP-2502/URN-3A

Correction Material: T-11, NS0967-052-6306 to NS0967. 052-6010

2-A YF-2 NS0967-052-6440
SERIAL: All
IDENTITY: Presence of a 4 uf capacitor mounted on the drawer frame member in front of C- 1807 and wired in parallel with C-1812.

12-AN/URN-3A: Pre-Trigger Generator Installation
Correction Material: T-5, NS0967-052-6306 to NS0967-0526010; T-1, NS0967.052-6024 to NS0967-052-6020; T-1, NS0967-052-6031 to NS0967-052-6030

1-A FA-4 NS0967-052-6450 EIC L605000 SERIAL: All shipboard equipment only
IDENTITY: A pre-trigger assembly is mounted on the 1350 identity tone chassis of the KY.101/URN.3.

1-AN/URN-20: Provisions for Initial Debugging and Updating for AN/URN-20 TACAN

Correction Material: Included in revised technical manual
1-A FA-8 NS0967-041-0160 EIC L606000 SERIAL: AN/URN-20, OA-7203/URN-20 and OA-7203A/ URN-20 - AI thru A45 (see bullerin for specific equipments affected)
IDENTITY: Proper recording of the appropriate field change number on the Field Change Accomplished plate.

## 2-AN/URN-20: Modification to AN/URN-20 TACAN

Correction Material: Change 3 (NS0967-041-0013) to TM. NS0967-041-0010 (Volume 1), Change 2 (NS0967-041-0032) to TM, NS0967-041-0030 (Volume III), Change 3 (NS0967-0410043) to TM, NS0967-041-0040 (Volume IV)

1-A FAM8 NS0967.041.0150 EIC L606000
SERIAL: Al thru A30, A 32 thru A38, A42, A45 thru A47, BI thru B9, B11 and B12
IDENTITY: Presence of component board IA3AI (ITTFL P/N 2373055Gl) on upper left side of Control Drawer IA3.

[^1]NS0967-041-0010, and Change 3, NS0967-041-0053 to NS0967. 041.0050

1-A FA-4 NS0967-041.0170 EIC L606000
SERIAL: AI thru A28, A32, A34 thru A38, A42, A45 thru A47, and B1 thru B8. All other TS-2268/URN-2O(V)'s were corrected by an identical production change prior to shipment IDENTITY: Configuration letter 'B' stamped after the ITTFL Part Number 7804 G I, on the rear of the top surface of the drawer assembly when the drawer is extended from the cabinet.

4-AN/URN-20: Replaces Klystron Grid Modulator
Correction Material: Change 3 (NS0967-041-0023) to TM, NS0967-041-0020, Change 7 (NS0967-041-0018) to TM, NS0967-041-0010, Change 4 (NS0967-041-0034) to TM, NS0967.041-0030, Change 5 (NS0967-041-0045) to TM, NS $0967-04$ 1.0040

1-A FA-12 NS0967-041-0180 EIC L606000 SERIAL: Al thru A45
IDENTITY: The new KGM Transformer Driver Printed Circuit Board IAIA 15 is mounted on the lower right side of R.F. Assembly 1A I.

5-AN/URN-20: Provide EMCON Status Indicator AN/SSQ. 54

Correction Material: T-1, NS0967-041-0035 to TM, NS0967.041-0030; T-1, NS0967-041-0046 to TM, NS0967-0410040

2-C YF-4 NS0967-041-0190 EIC L606000 SERIAL: Only those AN/URN-20 equipments connected to EMCON status
IDENTITY: Presence of two relays, K-4 and K-S in the C-6636/URN-20 Control Indicator.
6.AN/URN-20: Generation of a Pre-Trigger

Correction Material: Change 10, NS0967-041-0303 to NS0967-041-00i0; Change 6, NS0967-04i-W027 to NS0967.0410020; Change 7. NSO967-041-0039 to NS0967-041-0030; Change 8. NSO967-041-0401 to NS0967-041-0040; Change 5 , NS $0967.041-0073$ to NS0967-041-0070; Change 4, NS0967-0410314 to NSO967-041-0310; Change 2, NSO967-303-9212 to NS0967-303-9210; T-1, NS0967-303-9222 to NS0967-303-9220

1-A FA. 8 NS0967-041.0200 EIC L606000 SERIAL: A! thru A47, B1 thru B15
IDENTITY: Jack 1A2J19 is installed in the receiver coder 1A2.
7.AN/URN.20: General Upgrading of the AN/URN-20 TACAN

Correction Material: Change 3, NSO967-041-0313 to NS0967.041-0310; Change 9, NS0967-041-0302 to NS0967.0410010; Change 5, NSO967-041-0026 to NS0967.041-0020; Change 6, NS0967-041-0038 to NS0967-041-0030; Change 7, NS0967.041-0049 to NS0967-041-0040, Change 5, NS0967-0410085 to NS0967.041-0080; Change 1, NS0967-303-9211 to NS0967-303-9210; Change I, NSO967-303-9221 to NS0967-3039220.

1-A FA-25 NS0967-041-0210
EIC L606000 SERIAL: A1 thru A47 and Bl thru Bls
IDENTITY: Refer to individual parts of the field change bulletin.

8-AN/URN-20: Replacement of 1A1A1S With One of Improved Mechanical Design

Correction Material: Change 2, NS0967-041-0302 to NS0967-041-0310

1-A FA.6 NS0967-041.0250 EIC L606000 SERIAL: A2, A15, A20, A46, A47, and B1 thru B15
IDENTITY: The AN/URN-20(V) Transformer Driver Board (IAIA1S) is a plug module vice a board mounted to the IA! drawer frame with all inputs, outputs and supplies soldered directly to the board.

1-AN/URN-20(V)1: Modification of IA!T3 Plastic Protective Shield

## Correction Material: None Required

4-A FA-2 EIB 772
SERIAL: A2, AIS, A20
IDENTITY: Adjustment of IA1A9C37 is accessible above filament transformer plastic protective shield.

2-AN/URN-20(V)1: Correction of Repetition Rate Generator Deficiency

Correction Material: T- to NS0967-041-0040
II-A FA-1 EIB 883 EIC L608000 SERIAL: All serial numbers
IDENTITY: Presence of a 0.25 ufd 400 VDC capacitor installed as C 2 on the 2A4A4 card.

## 3-AN/URN-20(V)1: Plexiglass Cover for Azimuth SERVO

 AssemblyCorrection Material: T-1, NS0967-LP.041-0402 to NS0967. LP-041-0040; T-1, NS0967-L.P-424-0041 to NS0967.LP-4240040

1-A FA-2 NS0967-LP-041-0430 EIC L606000 SERIAL: All serial numbers
IDENTITY: Clear plexiglass cover mounted on the 2A4A21 azimuth SERVO assembly.

4-AN/URN-20(V)I: Improvement of Frequency Multiplier-Oscillator IA IA9/2A4A25.

Correction Material: T-1, NE0967-LP.041-0402, to TM. NE0967-LP-041-0040.

2-C YF-4 NE0967-LP-549-8330 EIC L609 SERIAL: All serial numbers of the AN/URN-20(V)] and AN,URN-20(V)2.
IDENTITY: Inside the Frequency Multiplier-Oscillator (FMO), C4 is 47 pF and L9 and L13 have been replaced with 470 ohm, $1 / 4$ watt resistors ( R 24 and R29).

S-AN/URN-20(V)1: Changing of the Klystron Clamp Brackets. Correction Material: None required.
3-A FA-2 NEO967-LP-549-8140 EIC L608
SERIAL: AN/URN-2O(V)I, -2O(V)2,-20B(V)1, and -20B(V)2: all serial numbers.
IDENTITY: Verify that the support clamp which straps around the neck of the klystron has a mounting base 7.75 inches wide. Previous base width is about 6 inches.
6.AN/URN-20(V)t: Interface Antenna Group OE-273(V)/ URN.

Correction Material: To be provided.

1-A FA-8 NE0967-LP-549-8150 EIC
L608,L609
SERIAL: AN/URN-20(V)1: Al-A45. AN/URN-20(V)2: A46, A47, BI-B15.
IDENTITY: Verify installation of $\mathrm{X} / \mathrm{Y}$ MODE switch on upper sight-hand corner of TMC cabinet.

1-AN/URN-20(V)2: Power Distribution and Switching Box
Correction Material: T-1, NS0967-041-0315 to NS0967-041. 0310

1-A FA-30 NS0967.041-0260 EIC L606000
SERlAL: A46, A47, Bl thra B15
IDENTITY: Presence of switching box mounted on right side of TMC cabinet.

2-AN/URN-20(V)2: Same as 2-AN,URN-20(V)1 except
EIC L609000

3-AN/URN-20(V)2: Same as 3-AN/URN-20(V)!

4-AN/URN-20(V)2: Same as 4•AN/URN-20(V)1
5-AN/URN-20(V)2: Same as 5-AN/URN-20(V)1.
EIC L609
6-AN/URN-20(V)2: Same as 6-AN/URN-20(V)1

ElC L609

1-AN/URN-20B(V)1: Same as 2-AN, URN-20(V)1 except
Correction Material: To NS0967-424-0040

EIC L60B00
2-AN/URN-20B(V)1: Same as 3-AN, URN-20(V):
3-AN/URN-20B(V)1: Same as 5-AN/URN-20(V)I.
EIC L60B
4.AN/URN-20B(V)1: Interface for Antenna Group OE. 273(V)/URN

Correction Material: To be provided
1-A FA-10 NE0967-LP-424-0150
EIC
L60B,L60C
SERIAL: All seijal numbers of AN/URN-20B(V)1 and . 20B(V)2 which utilize Antenna Group OE-273(V), URN IDENTITY: Verify that an X $\mathcal{Y}$ MODE switch is installed on the upper right-hand comer of the TMC cabinet.

1-AN/URN-20B(V)2: Same as 2-AN/URN-2O(V)l excep:
EIC L60C000

2-AN/URN-20B(V)2: Same as 3-AN/URN-20(V)I
3-AN/URN-20B(V)2: Same as 5-AN/URN-20(V)1.
EIC L60C

4-AN/URN-20B(V)2: Same as 4-AN/URN-20B(V)]
1-AN/URR-13: Addition of Parasitic Suppression Resistor Corsection Material: T-1 to NS91270
A FA-2 NS98342
F5820.302-
0979

## SERIAL: 1-1631

IDENTITY: A new resistor, R-126, 10 ohms is inserted between pin 6 of $\mathrm{V} \cdot 106 \mathrm{~B}$ and the top end of the primary of L 115.

2-AN/URR-13: Cancelled

3-AN/URR-13: Application of Metal-Cal Nameplates Correction Material: None
A FA•1 NS98527 F5820-568. 7817
SERIAL: All
IDENTITY: Decal type nameplate added to right hand door of receiver, also, to front bottom inside cabinet.

4-AN.URR-13: Addition of Protective Covers to Preselector Correction Material: T-4 to NS91270
1-A FA.2.5 NS98880 F5820-646.
4763
SERIAL: All
IDENTITY: Covers on preselector
5A-AN/URR-13: Ventilation Improvement Correction Material: T-5 to NS91270
2-A FA-2 NS981153(A) None
SERIAL: All without FC 2
IDENTITY: Presence of Connector J-301 on blower motor leads.

6-AN/URR-13: Noise Reduction
Correction Material: T-8, NS0967-072-8012 io TM, NS0967-072-8010 (formerly NS91270)

2-A FA-1 NS0967-072-8070 None
SERIAL: When used in conjunction with Control Monitor Group AN/FRA-11
IDENTITY: Presence of a shielded lead between resistor R236 and pin 7 of V-207.

1-AN/URR-13A: Same as I-AN, URR-13 except
Correction Material: T-2 to NS91535 and SERIAL: 1-507

2-AN/URR-13A: Cancelled
3-AN/URR-13A: Same as 3-AN/URR-13
4-AN/URR-13A: Same as 4-AN/URR-13 except Correction Material: T-5 to NS91535

5A-AN/URR-13A: Same as 5A-AN/URR-13 except
Correction Material: T-6 to NS91535
6-AN/URR-13A: Same as 6-AN,/URR-13 except
Correction Material: T-9, NS0967-973-0011 to TM, NS0967-973.0010 (formerly NS91535)

## COMMUNICATIONS

1-AN/URR-13B: Same as 1-AN/URR-13 except Correction Material: T-8, NS0967.072-3011 to TM, NS0967-072-3010 (fommerly NS91829) and SERIAL: 1-600

2-AN/URR-13B: Cancelled
3-AN/URR-13B: Same as 3-AN/URR-13 Correction Material: None

4-AN/URR-13B: Same as 4-AN/URR-13 except Correction Material: T-2 to NS0967-072-3010

5A-AN/URR-13B: Same as 5A-AN/URR-13 except Correction Material: T-3 to NS0967-072-3010
6.AN/URR-13B: Same as 6-AN/URR-13 except Correction Material: T-8, NS0967-072-3011 to TM,
NS0967-072-3010 (formerly NS91829)
1-AN/URR-22: Provision for Filter Capacitors with Insulated Covering 2-A FA-0.5 NS981321 None
SERIAL: All
IDENTITY: Presence of insulating plastic coating on capacitors C-166 and C-167.

## 1-AN/URR-27: Cancelled

2-AN/URR-27: Application of Metal-Cal Nameplates Correction Material: None
A FA-1 NS98527 F5820-568-

## SERIAL: Al!

IDENTITY: Decal type nameplate added io right-hand door of receiver and to front bottom inside cabinet.

3-AN/URR-27: Addition of Protective Covers to Preselector Correction Material: T-2 to NS91771
1-A FA-2.5 NS98880 F5820.646.
SERIAL: All
IDENTITY: Covers on preselector
4A-AN/URR-27: Ventilation Improvement
Correction Material: T. 3 to NS91771
2-A FA-2 NS981 153(A) None
SERIAL: At] without FC No. 1
IDENTITY: Presence of Connector J-301 on blower motor leads.

1-AN/URR-28(X.N-1): Modifications of Ventilating Blower As. sembly

FA-4 NS98555
F5820-6653354
SERIAL: All (1-10)
2-AN/URR-28(XN-1): Same as 2-AN/URR-27
3-AN/URR-28(XN-1): Interchange of R250 and R25t

Correction Material: See NS98758
2-A FA-0.5 NS98758 None SERIAL: All
IDENTITY: R-250 will be 1 meg and R-251 will be 1.5 meg if accomplished.

1-AN/URR-35: Cancelled
2-AN/URR-35: Same as 2-AN/URR-27
3-AN/URR-35: Same as 3-AN/URR-28(XN-1)
4.AN/URR-35: Same as 3-AN/URR-27 except Correction Material: T-4 to NS91906

5A-AN/URR-35: Same as 4A-AN/URR-27 except
Correction Material: T-6 to NS91906

6-AN/URR-35: Reduction of Noise in Silencer Stage
Correction Material: T-8, NS0967.089.4012 to TM,
NS0967-089.4010 (formerly NS91906)
2-A FA-1 NS0967-089-4070 None
SERIAL: All
IDENTITY: Presence of a shielded lead connected between resistor $R-246$ and switch $S-501$ and a similar shielded lead between switch S-501 and potentiometer R-247.

1-AN/URR-35A: Cancelled
2-AN/URR-35A: Same as 2-AN/URR-27

3-AN/URR-35A: Same as 3-AN/URR-28(XN-1)
4-AN/URR-35A: Same as 3-AN/URR-27 except
Correction Material: T-4 to NS92022
5A-AN/URR-35A: Same as 4A-AN/URR-27 excepi
Correction Material: T-6 to NS92022

6-AN/URR-35A: Same as 6-AN/URR-35 except
Correction Material: T-9, NS0967-971-1012 to TM, NS0967-971-1010 (formerly NS92022)

1-AN/URR-35B: Same as 3-AN/URR-28(XN-1) except SERIAL: 1-792

2-AN/URR-35B: Same as 3-AN/URR-27
3-AN/URR-35B: Same as 6-AN/URR-35 except
Correction Material: T-9, NS0967-971-1012 to TM, NS0967-971-1010 (formerly NS92022)

1-AN/URR-44: Same as 1-AN/URR-22
1-AN/URT-2 thro 9-AN/URT-2: Cancelled
10-AN/URT-2: Addition of Production Change
Correction Material: None
B YF-18 NS98657 F5820-569.
SERIAL: All w/o 'M'

ORIGINAL
A-70

IDENTITY: Metal-cal nameplate near original nameplate of each unit.

11-AN/URT-2: Production Change Improvement Correction Material: Change 1 to NS91833(A) 1.B FA-19 NS98875<br>2N5820-5430153<br>\section*{SERIAL: All}<br>IDENTITY: Changes nomenclature to AN/URT-2A, AN/ URT-3A, and AN/URT-4A.

## 1-AN/URT-3 thru 10-AN/URT-3: Cancelled

11-AN/URT-3: Same as 10-AN/URT-2 except Correction Material: None

12-AN/URT-3: Same as 11-AN/URT-2
1-AN/URT-4 thru 10-AN/URT-4: Cancelled
11-AN/URT-4: Same as 10-AN/URT-2
12-AN/URT-4: Same as 11-AN/URT-2
1-AN/URT-7: Improvement of Operation
Correction Material: See NS98630
1-A FA-4 NS0967-114-9020
2N5820-346-
SERIAL: All, except those equipments on which Field Changes 3 and 5-AN/URT-7 are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors (P-404 and P-405) in series with the blower motor power cord and located within the blower motor compartments.
NOTES: This field change is identical to 4-AN/URT-7 except for the maintenance precautions nameplate: the reference to checking the brushes of the blower in Field Change 4-AN/ URT-7 is deleted.

2-AN/URT-7: Addition of Metal-Cal Nameplates Correction Material: None

## 1-A FA-1 NS0967-114-9030

SERIAL: All, except those equipments on which Field Change 3-AN/URT-7 is installed
IDENTITY: Installation of high voltage warning decals on C410 and C-412, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-AN/URT-7 except for the maintenance precautions nameplate: the reference to checking the brushes of the blower in Field Change 4-AN/ URT-7 is deleted.

3-AN/URT-7: Improvement of Operation
Correction Material: Change 4 to NS91684
1-B FA-4 NS0967-114-9040
2F4140-6912207
SERIAL: All
IDENTITY: The phenolic retaining plates securing the plate
caps of the high voltage rectifiers ( $\mathrm{V}-401$ and $\mathrm{V}-402$ ) are replaced with aluminum retaining plates.
NOTES: Field Change 1-AN/URT-7, NS0967-114-9020
(formerly NS98630), must be accomplished prior to the installation of this field change.

4-AN/URT-7: Application of Warning and Caution Instruction Plates

Correction Material: None
1-A FA-I NS0967-114-9050 None
SERIAL: All equipments on which Field Change 3-AN/ URT-7 is installed and Field Change 2-AN/URT-7 is not installed.
IDENTITY: Installation of high voltage waming decals on C410 and C-412, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-AN/URT-7 except for the maintenance precautions nameplate: in Field Change 2. AN/URT-7, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

5-AN/URT-7: Improvement of Operation
Correction Material: Included in field change kit
1-A FA-4 NS0967-114-9060 2N5820-893-
2625
SERIAL: All equipments on which Field Change 3-AN/ URT-7 is accomplished and Field Change 1-AN/URT-7 is not accomplished.
IDENTITY: Installation of thermal relay K-404 (K-105 for TED series) located adjacent selenium rectifier CR-401, installation of $4300-$ ohm, $1 / 2$-watt resistor (R-195) connected between terminal 2 of transformer T-102 and terminal post adjacent T-102, and installation of $0.5 \mathrm{uF}, 600$-volt capacitor (C195) mounted on top rear of the front panel of the modulator unit.
NOTES: This field change is identical to l-AN/URT-7 with the exception that this fietd change does not include connectors P-404 and P-405. These connectors are not required if 3-AN/URT-7 is installed. See, also, 'notes' of 1 -AN/URT-7.

## 6-AN/URT-7: Cancelled

7-AN/URT-7: Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T-8, NS0967-971-5012 to TM, NS0967-971-5010; T-1, NS0967-071-0012 to TM, NS0967-0710010

2-C YF-8 NS0967-971-5060 EIC FK13000
SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: Keying Relay K-101 has been changed to a 4 PDT sealed type.

1-AN/URT-7A: Same as 1-AN/URT-7 except
SERIAL: All, except those equipments on which Field
Changes 3 and 5-AN/URT-7A are installed.

IDENTITY: Installation of type AN/3106A-12S male and female connectors ( $\mathrm{P}-404$ and P-405) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-AN/URT-7A with the exception that S-AN, URT-7A does not include the blower motor connectors (P-404 and P-405). Field Change 3-AN/ URT-7A replaced the original blower motor with one of extended life. If 3-AN/URT-7A is installed, then S-AN/URT7A should be accomplished instead of 1-AN/URT-7A.

## 2-AN/URT-7A: Same as 2-AN/URT-7 except

SERIAL: All, except those equipments on which Field Change 3-AN/URT-7A is installed.
NOTES: This field change is identical to 4-AN/URT-7A except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in Field Change 4-AN/URT-7A is deleted.

3-AN/URT-7A: Same as 3-AN/URT-7
4-AN/URT-7A: Same as 4-AN/URT-7 except
SERIAL: All equipments on which Field Change 3-AN/ URT-7A is installed and Field Change 2-AN/URT-7A is not installed.
NOTES: This field change is identical to 2-AN/URT-7A except for the maintenance precautions nameplate: in Field Change 2-AN/LRT-7A, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

5-AN/URT-7A: Same as 5-AN/URT-7 except SERIAL: All equipments on which Field Change 3-AN/ URT-7A is accomplished and Field Change 1-AN/URT-7A is not accomplished.
NOTES: This field change is identical to 1-AN/URT-7A with the exception that this field change does not inciude connectors P-404 and P405. These connectors are not required if 3-AN/URT-7A is installed. See, also, 'notes' of 1-AN/URT7A.

## 6-AN/URT-7A: Cancelled

7-AN/URT-7A: Same as 7-AN/URT-7 except
2-C YF-8 NS0967-971-5060 EIC FK41000
1-AN/URT-7B: Same as 1-AN/URT-7 except
SERIAL: All, except, those equipments on which Field Changes 3 and 5-AN/URT-7B are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors (P. 404 and P.405) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-AN/URT-7B with the exception that 5-AN/URT-7B does not include the blower motor connectors ( $p-404$ and 405 ). Field Change 3-AN/URT7B replaced the original blower motor with one of extended life. If 3 -AN/URT-7B is installed, then 5-AN/URT-7B should be accomplished instead of 1-AN/URT-7B.

2-AN/URT-7B: Same as 2-AN/URT-7 except

SERIAL: All, except those equipments on which Field Change 3-AN/URT-7B is installed.
NOTES: This field change is identical to 4-AN/URT-7B except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in Field Change 4-AN/URT-7B is deleted.

## 3-AN/URT-7B: Same as 3-AN/URT-7

## 4.AN/URT-7B: Same as 4-AN/URT-7 except

SERIAL: All equipments on which Field Change 3-AN/ URT-7B is installed and Field Change 2-AN/URT-7B is not installed.
NOTES: This field change is identical to 2-AN/URT-7B except for the maintenance precautions nameplate: in Field Change 2AN/URT.7B, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

5-AN/URT-7B: Same as 5-AN/URT-7 except
SERIAL: All equipments on which Field Change 3-AN/ URT-7B is accomplished and Field Change 1-AN/URT-7B is not accomplished.
NOTES: This field change is identical to IAN/URT-7B with the exception that this field change does not include connectors P-404 and P.405. These connectors are not required if 3-AN/URT-7B is installed. See, also, 'notes' of 1 -AN/URT-7B.

6-AN/URT-7B: Cancelled

| 7-AN/URT-7B: | Same as 7-AN/URT-7 except |  |  |
| :--- | :--- | :--- | :--- |
| 2.C | YF-8 | NS0967-971-5060 |  |
| EIC FK4A000 |  |  |  |

1-AN/URT-7C: Same as 3-AN/URT-7 except
Correction Material: Change 2 to NS92832
2-AN/URT-7C: Cancelled
3-AN/URT-7C: Same as 7-AN/URT-7 except
2.C YF-8 NS0967.971-5060 EIC FK43000

1-AN/URT-7D: Same as 7-AN/URT-7 excep:
2-C YF-8 NS0967-971-5060 EIC FK44000
1-AN/URT-18: Same as 4-AN/URC-32

2-AN/URT-18: Protective screen for the air duct exhaust
Correction Material: None
2-A FA-2 NS0967-207-1040 None
SERIAL: Where the air exhausted duct on top of the linear power amplifier is normally left open and the air is exhausted directly into the room
IDENTITY: Presence of a protective screen installed over the exhaust duct of the linear power amplifier of the AN/URT-18.

3-AN/LRT-18: Modification of keying circuit
2.A FA.0.5 NS0967-207-1040 None

SERIAL: Only to equipments whose antenna systems do not provide a DC ground for the keying circuit

IDENTITY: The presence of a ground lead, added by this lield change, on terminal 4 of the DR-TUNE-PA TUNE-OPERATE switch (S9).

4-AN/URT-18: Same as 10 -AN/URC-32 except
Correction Material: T-2 to NS93541
SERIAL: I through 1761
5-AN/URT-18: Same as 7-AN/URC-32
6-AN/URT-18: Modification to FSK Circuitry
Correction Material: T-3, NS0967-207-1013 to NS0967-2071010

II-A FA-1 NS0967-207-1050 EIC QEIM000
SERIAL: All serial numbers
IDENTITY: Presence of an 8200 ohm resistor in series with diode SCR6.

1-AN/URT-23(V): Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T-2. NSO967-191-7013 to TM, NS0967-191-7010

2-C FA-6 NS0967.191-7050 EIC FK64000 SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: Two relays and receptacle installed on rear of AM-3924(P)/URT Case.
2.AN/URT-23(V): Elimination of Shock Hazard on Power Input Filter 1A2FL-I

Correction Material: T.3, NS0967.191-7014 to TM, NS0967.191-7010; T-1, NSO967.191-7061 to NS0967-191-7060
1.A FA. 2 NS0967-191-7060 EIC FK64000 SERIAL: Equipments procured under NObsr 93367 and N00039-68-C-1584, No.'s A 1.B336
IDENTITY: Phenoioc cover over terminals of power input Filter 1A2FL-1 marked DANGER HIGH VOLTAGE.

3-AN/URT-23(V); Addition of Elapsed Time Indicator (0.9999 hrs) Observable on Front of Panel of AM-3924(P)/URT (P/O AN/URT-23(V))

Correction Material: T-1, NS0967-879-5011 to NS0967-879. 5010; T-4, NS0967-191-7016 to NSO967-191-7010

I-A FA-2 NS0967-191.7070 EIC QEINOCO SERIAL: All serial numbers
IDENTITY: Presence of a miniature elapsed time indicator, located in the upper right corner area of the front panel of the AM-3924(P)/URT, and to the right of the RF output meter, when facing the front of the AN/URT-23(V) in question.

4-AN,/URT-23(V): Removal of 220,000 Ohm Bleeder Resistors from Power Supplies PP-3916/UR and PP-3917/LR

Correction Material: T-7, NS0967-191-7101 to NSO967-191. 7010

4-A FA-1 NS0967-191-7080
SERIAL: All
IDENTITY: Absence of the 220,000 ohm bleeder resistors 2AIAiR3 thre R7 in PP.3916/UR and 1AIA8A2R1 thru RS in PP-3917/UR.

5-AN/URT-23(V): Same as 12-AN/WRC-1 except
Correction Material: T-1, NSO967-200.3011 and EIC QEINOOO
6.AN/URT-23(V): Madification to FSK Circuit

Correction Material: T-I, NS0967-032-0011 to NS0967.032-
0010 (TM for T-827/URT); T-1, NS0967-032-0031 to NS0967-
032.0030 (MSB for T-827/URT); T-2, NS0967-200-3012 to NS0967-200-3010 (TM for T-827B/URT); T-1, NS0967-2003031 to NSO967-200-3030 (MSB for T-827B/URT)

II-A FA-1 NSO967-191-7110 EIC QEIN000
SERIAL: All
IDENTITY: Observing that a 51,000 ohms. $1 / 2$ watt resistor (R30) is connected between 2A2A9A1E5 and the junction of 2A2A9AIR28, 2A2A9AIQ2 base and 2A2A9AIR7.

7-AN/URT-23(V): Addition of Fuse and Relay in AM3924(P)/URT and Replacement of High Voltage Rectifier Stacks in PP-3916/UR and PP-3917/UR.

Correction Material: T-7, NSO967-191-7301 to NS0967-1917010; T-2, NS0967-879-5013 to NS0967-879-5010

1-A FA-S NS0967.191-7100 EIC QEINOOO SERIAL: All serial numbers
IDENTITY: Presence of an additional fuseholder on the front panel of AM-3924(P)/URT. Presence of a small vacuum relay near large plug IA2P3 in AM-3924(P)/URT. Presence of two new type high voltage bridge rectilier stacks in PP-3916/UR and PP-3917/UR power supplies.
NOTES: FCB, NS0967-LP-191-7100, dtd 8 March 77
supersedes FCB, NS0967-LP-191-7100, did 10 July 72.
8-AN/URT-23(V): Same as 7-AN/WRC-1B except
EIC QEINOOO
9-AN/URT.23(V): Removal of PA BIAS Control Knob on Front Panel and Modification of Metal Cover Plate in AM3924(P)/URT

Correction Material: T-10, NS0967-191-7306 to NSO967-191-7010; T-4, NS0967-879-5016 to NS0967-879-5010

4-A FA-1 NS0967-191-7140 EIC QEINOOO SERIAL: All
IDENTITY: Note the absence of the PA BIAS control knob under the front panel access door, and a small slot cut out of the right-hand edge of the metal cover plate over the power amplifier tubes in the AM/3924(P)/URT.

10-AN/URT-23(V): Replacement and Relocation of interlock Switches in AM-3924(P)/URT and Addition of Terminal Board and Interlock Covers in PP-3916/UR

Correction Material: T-9, NS0967-191-7305 to NS0967-1917010; T-3, NS0967-879-5014 to NS0967-879-5010

1-A FA-8 NSO967-191.7120 EIC QEIN000 SERIAL: All serial numbers
IDENTITY: Presence of covers on ferminal boards 2A1-TB1 and 2A2.TB1 in PP-3916/UR and interlock switches on right side of case for AM-3924(P)/UR.

11-AN/URT-23(V): Cooling Madilication and Suppression of High Voltage Transient in PP. 3916/UR Power Supply.

Correction Material Revised TM's, NE0967-LP-191-7010
dtd 07-75, for AN/URT-23(V) equipment serial numbers presixed with letter 'A'; and NE0967-LP-879-5010 dtd 07-75, for AN/URT-23(V) equipment serial numbers prefixed with letter 'B'.

1-A FA-8 NE0967-191-7130 EIC QEINOOO
SERIAL: All serial numbers equipped with Power Supply PP-3916/UR
IDENTITY: An air filter and a $\mathrm{FAN}, 1 / 4 \mathrm{~A}$ ' label are mounted on the front panel of the PP-3916/UR power supply. A blower package is installed on the left side of the case alongside the power transformers within the PP-3916/UR.
NOTES: See EIB 919 for correction to FCB.
12-AN/URT-23(V): Cooling of PP-3917/UR and AM-3924(P)/ URT

Correction Material: None required
IV-A FA-2 EIB 887
EIC QEINOOO
SERIAL: All serial numbers
IDENTITY: Presence of two $3 / 4$ inch diameter holes in the AM-3924(P)/URT chassis left wall plenum.

13-AN/URT-23(V): Modification to Install Replacement Push-to-Talk Relay 3A2K4

Correction Material: See EIB 927
II-A FA-2 EIB 927 None
SERIAL: All serial numbers prefixed with ' $A$ ' or ' $B$ '
IDENTITY: Push-to-Talk Relay 3A2K4 has eight solder terminals in a rectangular configuration and is mounted on two $1 / 2$-inch hex spacers.

14-AN/URT-23(V): Removal of High Voltages from 66 Pin Connector. (See EIB 952.)

Correction Material: Corrections to NE0967-879-5010 included in FCB, NE0967-LP-191-7150.

1-A FA-8 NE0967-LP-191-7150 EIC QEIN
SERIAL: All serial numbers of AN/LRT-23(V) equipped with PP-3916/UR Power Supply.
IDENTITY: Installation of 10 -lug terminal board and high voltage standoff near K1 on underside of AM-6909/URT chassis. Nomenclature of AM-3924(P)/URT changed to AM6909/URT.
NOTES: Prerequisite field change: $10-A N / U R T-23(V)$.
15-AN/URT-23(V): Addition of High Voltage Filter Capacitor.

Correction Material: To be provided.
1-A FA-2 NE0967-LP-191-7160
ElC QEIN
SERIAL: All AN/URT-23(V) Radio Transmitting Sets used with PP-3917/UR 400 Hz Power Supply.
IDENTITY: Verify installation of $0.5 \mathrm{SF}, 3000 \mathrm{VDC}$ capacior inside PA screen grid chamber.

1-AN/URT-23A(V): Modification to RATT Circuit
Correction Material: T- to NS0967-428-0010
II-A FA-1 EIB 888
SERIAL: All serial numbers
IDENTITY: This field change may be identified by a 51,000 ohm, 1/2 watt resistor (R26), connected between A2A9A1ES and the junction of A2A9AIR6, A2A9A IR24, and the base of A2A9A1Q2 in T-827F/URT.

2-AN/URT-23A(V): Modification to Install Replacement Push-to-Talk Relay. (EIB 922, 923, 957, 982.)

Correction Material: See EIB 922, 923.
2-A FA-2 EIB 922, 957, 982
SERIAL: All serial numbers
IDENTITY: The replacement relay (3A2K4) has eight solder terminals in a rectangular configuration and mounted on two $1 / 2$-in. hex spacers.

3-AN/URT-23A(V): Improved Performance of APC/PPC Board IAIA6. (EIB 941 and 950.)

Correction Material: EIB 941.
2-A FA-2 EIB 941, 950
EIC QE4K
SERIAL: All seriat numbers.
IDENTITY: Transistor type 2N1309 replaces type 2N2905A in 1A1A6Q7. Installation of a shielded pair of wires on the rear of the PWR control on the AM-3924A(P)/URT.

4-AN/URT-23A(V): Replacement and Relocation of Interlock Switch in AM-3924A(P)/URT and addition of High Voltage filter capacitor.

Correction Material: Chg. 2, NE0967-LP-456-9012, to TM, NE0967-LP-456-9010 and Chg. 1, NE0967-LP-428-0011, to TM, NE0967-LP-428-0010.

1-A FA-12 NE0967-LP-456-9050 EIC QE4K SERIAL: All serial numbers.
IDENTITY: Verify installation of interlock switches on right side of case of AM-3924A(P)/URT, and fuse for Tl primary located on front panel of AM-3924A/URT adjacent to blower intake.

1-AN/URT-24: Installation of STANDBY and EMITTING Status Monitoring Relays

Correction Material: T-1, NS0967-LP-878-5011 to NS0967-LP-878-5010

2-C FA-6 NS0967-LP-878-5070
SERIAL: Applies to all AN/URT-24 equipments installed aboard ships with the AN/SSQ-54 Emission Status Indicator Set
IDENTITY: Presence of two additional relays in upper left corner of $\mathrm{J}-1265 / \mathrm{U}$ interconnection box.

2-AN/URT-24: Modification of FSK Circuit
Correction Material: T-1, NS0967-LP-878-4011 to NS0967-LP-878-4010 (TM for T-827D/URT); T-1, NS0967-LP-878. 4051 to NS0967-LP-878-4050 (RSB for T-827D/URT)

## 2-A FA-1 NS0967-LP-878-5080

SERIAL: All equipments
IDENTITY: Observing that a 51,000 ohm, $1 / 2$ watt resistor (R30) is connected between 2A2A9A1E5 and the junction of 2 A2A9AIR28, 2A2A9A1Q2 base and 2A2A9A1R 7 .

3-AN/URT-24: Same as 2-AN/URC-35A
4-AN/URT-24: Modification to Install Replacement Push-toTalk Relay

Correction Material: See EIB 923
II-A YF-2 EIB 923
SERIAL: All serial numbers
IDENTITY: The replacement PTT relay (IA2K4) has eight
solder terminals in a rectangular configuration and is mounted on two $1 / 2$-in. hex spacers.

1-AN/URT-24A: Same as 1-AN/URT-23A(V)
2-AN/URT-24A: Same as 2-AN/URT-23A(V)
1-AN/USH-23(V): Reduction of Compromising Emanations.
Correction Material: Corrections to TM, NE0967-LP-5461010, to be supplied.

1-A FA-2 NE0967-LP-546-1020 EIC WL3F SERIAL: All serial numbers.
IDENTITY: On the J10 board of each drive (four drives max.), verify that diodes B79 and B81 each have a ferrite bead on the anode side.

1-AN/USQ-36iV): Incorporation of Factory Modifications 4, $5,8,19,21,22,23,25,29$ and 30

Correction Material: None
2-A FA-24 NS0967-163-8120
SERIAL: C2, C5, C6 and C7, buile under Contract NObsr 93283 and serial D2, built under Contract NObsr 95244 IDENTITY: Observing that the individual modifications have been installed in the equipment.

2-AN/USQ-36(V): Data Terminal Set - Incorporation of Factory Modifications 31, 32, 33, 34, 35, 36, and 37

Correction Material: Included in technical manual
4-A FA. 4 NS0967-163-8140 EIC QH08000
SERIAL: Equipment serial numbers B-1 thru B-4, C-1 thru C7, and D-1 thru D-20
IDENTITY: By observing that the individual modifications have been installed in the equipment.

3-AN/USQ-36(V): MJ-1 and MJ-2 Test Cards, Installation
Correction Material: T-3, NS0967-163-8!23 :o NS0967-163. 8120; T-1, NS0967-163-8012 to NS0967-163-8010; T-2, NS0967-163-8043 to NS0967-163-8040; T-1, NS0967-163-8052 to NS0967-163-8050

1-A FA-1 NS0967-163-8150 EIC QH08000 SERIAL: Equipments BI thru B4, CI thru C7, DI thru D32, and El thru E3
IDENTITY: Extend the wire rack 2AI C-6706/U (right wire rack) to the service position. Locate card cage 2A0IA04A0A02 and 2A01A04-A04 (the first card cage from top of rack.) Observe that the MJ-s and MJ-2 cards have been installed.

## 4-AN/USQ-36(V): Selectable Net Busy Reinitiate Timing

Correction Material: T-2, NS0967-163-8013 to NS0967-1638010; T-1, NS0967-163-8022 to NS0967-163-8020; T-3, NS0967-163-8044 to NS0967-163-8040; T-2, NS0967-163-8053 to NS0967-163-8050, T-1, NS0967-163-8062 to NS0967-163. 8060; T-4, NS0967-163-8124 to NS0967-163-8120

I-A FA-4 NS0967-163-8160 EIC QH08000 SERIAL: Serial numbers BI through B7, Ci through C7, DI through D32 and El through E3
IDENTITY: Extend the data control unit 2 (C-6706/U) equipment rack. Observe that the net busy card is installed in card jack 2AIA12A03.

1-AN/UXC-2: Thermostat S1002 mtg bkt, repl
Correction Mater ial: None
A FA-0.5 NS98590
F5805-3257494
SERIAL: 1-65
IDENTITY: To replace thermostat mounting bracket with an improved type.

2-AN/UXC-2: Exhaust blower B3001, install Correction Material: Change I to NS92153
A FA-4 NS98622
F5805-311-

SERIAL: 1-25
IDENTITY: Presence of B3001

3-AN/UXC-2: Inductor LIOOI, rep!
Correction Material: None
A FA-0.5 NS98653
F6625-642-
6059
SERIAL: 1-25
IDENTITY: Presence of radio frequency coil LIOO1 SNSN NI6-C-76763-1239

1-AN/UXH-2: Modification of Wiring
2-A FA-0.5 NS0967-098-7070 None SERIAL: I through 118
IDENTITY: Changes in connections at pins 2 and 7 of XC-
219 and the addition of a jumper lead from pin 4 of XV-206 and pin 7 of XC-219.

2-AN/UXH-2: Reducing Radiation of AN/UXH-2 Equipment (Modifies Equipment to AN/UXH-2A)

Correction Material: Sup. 1 to NS93158(A)-1
1-A FA NS0967-098-7080 F5815-226. 5716
SERIAL: Serials 119 and up
IDENTITY: Equipment becomes AN/UXH-2A.
1-AN/UYA-5(XN-1)(V): Replace Time Meter
Correction Material: Change 2, NS0967-306-4052 io NS0967-306-4050

1-C YF-5 NS0967-306-4070 EIC QKPQ000 SERIAL: CI through CI2
IDENTITY: Instatlation of ELAPSED TIME meters IAIAIMI and IA2A1M1.

2-AN/UYA-5(XN-1)(V): Audible Alarm Filter and HCC Plate Timing Modification

Correction Material: Ch. 3, NS0967-306-4053 to NS0967306.4050

1-C FA-16 NS0967-306-4080 EIC
QKOQ000
SERIAL: All serial numbers C thru Cl 2
IDENTITY: Addition of back pan wiring and two FTN-3 modules in J105 and $\mathbf{J 1 0 6}$ of the CMC plate assembly No. 398-12877-1 in location IAIA2AI2. Addition of back pan wiring and a BDT module in position J004 of the HCC plate assembly No. 398-12874.

1-AN/UYA-9(V): Cabinet Cooling Modification and Deflection

Amplifier High Reliability Component Change. Correction Material: To be provided.
1-A FA-2 NE0967-LP-317-1040
ElC QU39
SERIAL: All serial numbers.
IDENTITY: The louver at the lower rear section of the input/output converter cabinet will be replaced with an external fan. The two section air filter in front of the louver located on the left side of the Data Display Unit cabinet will be replaced with a large single section air filter and the louver section cut out. The louver section on the right side of the Data Display cabinet will also be cut out. The deflection amplifier heat sink assembly circuit boards No. 17321688 will have resistors N1R5, N2R5 and N2R6 changed from values 0.25 ohms or - $10 \%, 12$ watts to 0.25 ohms or - $1 \%, 25$ watts. Transistors N1Q3. N1Q4. N2Q3, and N2Q4 will be changed from types 17200536 to 2 N5959.

1-AN/UYK-20(V): Add Switch Guard Assembly.
Correction Material: None required.
1-A FA-1 NE0967-LP-598-1070 EIC
QKOV,QK35
SERIAL: All serial numbers.
IDENTITY: The new guard shield is clear in coior and mounts on the front of the computer.

2-AN/UYK-20(V): Shock and Vibration Improvements.
Correction Material: None required.
1-A FA-2 NE0967-LP-598-1620
EIC QKOV
SERIAL: AN/UYK-20(V) and AN/UYK-20X(V): All serial numbers prefixed with ' $A$ ' and ' $A A$ '.
IDENTITY: Verify that improved shock.block alignment hardware has been installed in the upper right-hand area as viewed from the front of the cabinet. The new shock block has a beveled nylon lifting (or guide) block which mates with a notch in the new shock bar to help align the holes for the securing bolts.

1-AN/UYK-20X(V): Same as 1-AN/UYK-20(V)
2-AN/UYK-20X(V): Same as 2-AN/UYK-20(V).
1-AN/VRC-2: Freq mg chg: makes AN/VRC-26()
Correction Material: T-1 to TM11-607
2-A FA-8
NS98617
F5820-325.
7500

SERIAL: All at NAS
IDENTITY: Freq range changed

## 1-AN/VRC-2X: Same as 1-AN/VRC-2

1-AN/VRC-32: Installation of Power Rheostat in the AN/ VRC+32 Transceivers

$$
\text { 2-A FA.1 } 981229 \quad \text { None }
$$

SERIAL: All
IDENTITY: Power sheostat installed immediately in front of vibrator located in the AN/VRC-32 power supply.

## 1-AN/VRC-33: Modification of Squelch Circuit

Correction Material: T-2, NS0967-210-8012 to TM,
NS0967-210-8010 (formerly NS92922(A))
2-B FA-1 NS0967-210-8020
None

SERIAL: All
IDENTITY: Installation of a 1 -meg resistor connector in series with a neon glow lamp and resistor R. 44 to pin I of V. 12 in the receiver.

1-AN/VRC.33A: Same as 1-AN/VRC-33
1-AN/VRC-37: Provide for Ignition Switch Power Control
Correction Material: T- to NS93302
2.A FA NS

SERIAL: All
IDENTITY: An insulated wire connected between terminal 52 of J402 in Radio Set Control C-2405/URC and accessories terminal of vehicle ignition switch; AN/VRC-42. An insulated wire connected between terminal 4 of TS- 401 mobile control box 624-4 and accessories terminal vehicle ignition switch and AN/VRC-51. Presence of an external relay installed as shown in figure Fs-2 of NAVSHIPS 94121.

1-AN/VRC-42: Same as 1-AN/VRC-37 except
Correction Material: T. to NS93557
1-AN/VRC-46: Installation of Capacitor in Isolation Amplifier Stage of RT-524/VRC

Correction Material: None
2-A FA-0.5 NS0967-375-1080
SERIAL: All serials below 31033
IDENTITY: Applies to RT-524/VRC, A6400 assembly, a . 001 ufd capacitor connected between terminal one and terminal two of P6401.

1-AN/VRC-51: Removing Stray Capacitive Coupling Between Plate Lead of V-12 and Grid Lead of V-10A

Correction Material: T-1, NS0967-210-9012 to TM, NS0967.210-9010 (formerly NS94121)

2-A FA-1 NS0967.210.9020
SERIAL: All
IDENTITY: Check to see if resistor R-33 has been relocated and if the grid lead from R-33 to pin 2 of V-10A has been rerouted.

2-AN/VRC-51: Same as I-AN/VRC-37 except
Correction Material: T. to NS9412!
1-AN/VRC-51X: Same as 1-AN/VRC-51
1-AN/HRC.60: Addition of Pin Jacks to Front Panel
Correction Material: T-1, NS0967-210-6011 to TM, NS0967-210-6010 (formerly NS94966)

2-A FA.0.5 NS0967-210-6020 None SERIAL: All
IDENTITY: Presence of two pin jacks on the front panel of the receiver/control unit, R-1240/VRC-60.

1-AN/VRQ-3: Type BCN conn, repl w/type $N$
2-A FA-2 NS98573
SERIAL: All permanently installed on ACG, AKA, APA, APD, LCU, LSIL, LSFF, LSSL, LSMR, LST \& LSV ships IDENTITY: BNC type connector changed to N type connector.

1-AN/WPN-5: Same as l-AN/SPN-38

2-AN/WPN-5: Same as 2-AN/SPN-38

3-AN/WPN-5: Same as 3-AN/SPN-38
4-AN/WPN-5: Same as 4-AN/SPN-38

5-AN/WPN-5: Same as 5-AN/SPN-38 except (Equipment nomenclature change to AN/WPN-5A)
NOTES: Prerequisite Field Changes: 1-AN/WPN-5, 2-AN/ WPN-5, and 3-AN/WPN-5

1-AN/WRA-1: Adding B Line Fuse to Receiver-Transmitter and Addition of Tuning Meter to Transmission Line Coupler

2-A FA-4 None
SERIAL: All AN/WRA-1/TBL Field Change Kits manufactured by Naval Repair Facility, San Diego, California
IDENTITY: Fuse located within the receiver-transmitter and a meter installed on the transmission line coupler.

1-AN/WRA-3(XN-1): Same as 11-AN/URC-32

2-AN/WRA-3(XN-1): Same as 5-AN/WRT-2
1-AN/WRC-1: (Initial Production Units) - Production Wiring Change

Correction Material: T-3, NS0967-971-0013 to TM, NS0967-971-0010 (formerly NS94840A)

2-A FA. 4 NS0967-971-0050 None SERIAL: All equipments procured under NObsr 87614
IDENTITY: Proper recording of the field change number on Field Change Record Plate.

2-AN/WRC-1: Superseded by 2A-AN/WRC-1
2A-AN/WRC-1: Fibergiass Saiield for High Voleage Protection 1-A FA-I NS0967.034-2010 F5820-999-

SERIAL: All equipments on General Dynamics/Electronics Contracts NObsr-87614 and NObsr-89368
IDENTITY: All AM-3007/URT R.F. Amplifiers modified per this field change may be identified by the presence of the epoxy impregnated fiber glass plate immediately back of the amplifier front panel and over the heat sink casting into which both amplifier vacuum tubes are mounted.

3-AN/WRC-1: Reliability Increase of AF Amplifier Output Circuit

Correction Material: T-1, NS0967-970-9012 to TM, NS0967-970-9010 (formerly NS94841(A))

2-A FA-1 NS0967-971.0050 None
SERIAL: A and $B$ series serial numbers produced under NObsrs 87614 and 89368
IDENTITY: Observing that R37 has been changed to 100 ohms and R29 is shunted by a . 01 mfd capacitor on the A2 boards of the lower and upper sideband IF/AF Amplifier Electronic Assemblies (1A2A2).

4-AN/WRC-1: Reduction of Panel Lamp Failures
Correction Material: T-5, NS0967-970-9016 to TM.

NS0967-970.9010 (formerly NS94841(A))
2-A FA-0.5 NS0967-971-0060
SERIAL: All serial numbers of the $A, B$, and $C$ series, produced under BUSHIPS Contracts NObsr-87614, 89368, and 93015
IDENTITY: Observing that R2 has been changed to 120 ohms on the A8 power supply board located on the bottom left rear side of the receiver main frame.

5-AN/WRC-1: Installation of Elapsed Time Indicator
Correction Material: T-4, NS0967-971-0014 to TM, NS0967-971-0010 (formerly NS94840(A))

1-A FA-2 NS0967-971-0080 2F5820-0561383
SERIAL: Equipments installed aboard the following ships: DD-706, 708, 709, 729, 790, 840, 848, 876; DL-5; DLG-18; 33; MSO 426, 432, 435, 455, 460, 468, 470, 491, 519; SS-425, 522; SSN-596 and 613
IDENTITY: Presence of an elapsed time indicator in front panel of the RF Amplifier assembly on the T-827/URT chassis and the R.1051/URR chassis.

6-AN/WRC-1: Protection of 12 Volt Power Supply
Correction Material: T-5, NS0967-971.0015 to TM, NS0967-971.0010

1-A FA-8 NS0967-971-0090 2N5820-086. 4884
IDENTITY: Presence of indicating fuseholder on front cover of J-1265/U Interconnection Box.

7-AN/WRC-1: Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T-7, NS0967-971.0017 to TM, NS0967-971-00!0 (formerly NS94840(A))

2-C FA NS0967-971-0100 ElC FH37000 SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator $\mathrm{Se}_{\hat{t}}$
IDENTITY: Presence of two additional relays in upper corner of J-1265/U Interconnection Box.

8-AN/WRC-1: Improve Switching Circuit Reliability in the DC-TO-DC Converter

Correction Material: T-8, NS0967-971-0019 to TM, NS0967.971.0010
1.A FA-2

NS0967-971.0110
EIC FH37000
SERIAL: Equipments Al thru A28, Bl thru B306, and Cl thru C322
IDENTITY: Presence of two 2N3792 transistors mounted on the bottom of the DC-TO-DC converter base plate.

9-AN/WRC-1: Improved Antenna Overload Protection Circuitry

Correction Material: Supplement \#1, NS0967-970-9018 to NS0967.970-9010

1-A FA-1 NS0967-971-0140
EIC QD4T000
SERIAL: All serial numbers of AN/WRC-1, AN/WRC-1B, R-1051/URR, and R-1051B/URR.
IDENTITY: Fous diodes mounted on underside of antenna overload protection printed circuit board cover A2A9A2.

10-AN/WRC-1: Elimination of Diode to Prevent Burnout of

## Resistor 2A2A15RI

Correction Material: T-11, NS0967-971-0122 to NS0967-971-0010; T-4, NS0967-971-0024 to NS0967-971-0020

4-A FA.0.5 NS0967-971-0170
SERIAL: All
IDENTITY: Note that diode 3A2AICR2 is not installed in the AM-3007/URT

11-AN/WRC-1: Same as 6-R-1051/URR except
EIC QD4U000

12-AN/WRC-1: Improve Reliability of the Low Voltage Power Supply A2A8

Correction Material: T-12, NS0967-971-0123 to NS0967971.0010

1-A FA-2 NS0967.971-0180 EIC QD4T000
SERIAL: All serial numbers
IDENTITY: Diodes A2A8CR5-CR8 located on the Power Supply Printed Circuit Board have been changed to type IN5199. PCB is located at bottom left hand corner of T-827( )/URT and R-1051()/URR.

13-AN/WRC-1: Modification of FSK Circuit
Correction Material: T-13, NS0967-971-0124 to NS0967-971-0010 (TM); T.5, NS0967-971-0025 TO NS0967-971-0020 (MSB)

11-A FA-1 NS0967-971-0220
SERIAL: All equipments
IDENTITY: Observing that a 51,000 ohm, $1 / 2$ watt resistor (R30) is connected between 2A2A9A1E5 and the junction of 2A2A9AIR28, 2A2A9A1Q2 base and 2A2A9AIR7.

14-AN/WRC-1: Modification to Install Replacement Push-toTalk Relay 2A2K4

Correction Material: See ElB 92?
11-A FA-2 E1B 921
SERIAL: Ali serial numbers
IDENTITY: The replacement PTT relay (2A2K4) has eight solder terminals in a rectangular configuration and is mounted on two 1/2-in. hex spacers.

1-AN/WRC-1B: Same as 9-AN/WRC-1
2-AN/WRC-1B: Same as 10-AN/WRC-1
3-AN/WRC-1B: Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T-10, NS0967-971.0121 to NS0967. 971-0010

2-C FA-6 NS0967-971-0160 E1C QD4U00 SERIAL: All AN/WRC-1B equipments installed aboard ships with the AN/SSQ-54 Emission Status Indicator Set
IDENTITY: Presence of two additional relays in upper corner of J-1265/U interconnection box.

4-AN/WRC-1B: Same as 6-R-1051/URR except
EIC QD4U000

5-AN/WRC-1B: Same as 12-AN/WRC-! except

EIC QD4U000

6-AN/WRC.1B: Modification to FSK Circuit
Correction Material: T-14, NS0967-971-0125 to NS0967.
971-0010; T-2, NS0967-971-0042 to NS0967-971-0040
11-A FA-1 NS0967-971-0200 E1C QD4U000 SERIAL: All
IDENTITY: 51,000 ohm, 1/2 watt resistor (R30), connected between 2A2A9A1E5 and the junction of 2A2A9A1R28, 2A2A9AIQ2 base and 2A2A9AIR7.

7-AN/WRC-1B: 4 VDC Power Supply Modification
Correction Material: Included in technical manuals
II-A FA-1 NS0967-971-0210 EIC QD4U000
SERIAL: Applicable to the early versions of T-827B/URT transmitters furnished with AN/WRC-1B and AN/URT. $23(\mathrm{~V})$. Additionally, this field change is applicable to the early versions of R-1051B/URR Radio Receivers furnished either as a single unit or as a unit of AN/WRC-1B Radio Sets.
IDENTITY: Presence of a heat-sink type resistor located on the metal partition that extends across the chassis directly behind the front panel. The chassis will have to be pulled out of its case to see the resistor. Facing the front panel of the T827B/URT or R-1051B/URR, the resistor will be located on the side of the partition that is away from the plug-in modules, in the area of the partition that is behind and to the left of the CPS switch. In the T-827B/URTs if the resistor is installed, it should be identified as 'R5' (A2R5); in R-1051B/URRs if the resistor is installed, it should be identified as 'R23' (A2R23).

## 8-AN/WRC-1B: Same as 14-ANi/WRC-1

1-AN/WRN-5(V): Circuit Card Color Coding
Corsection Material: None required
3-A FA-4 NE0967-LP.453-9050
SERIAL: All AN/WRN-5(V)1 and AN/WRN-S(V)2 serial numbers
IDENTITY: Cosor coded circuit card extractors one side of the circuit cards, 1A1A2Al thru 1AIA2A19 and 1AIA3Al thru IAlA3A19.

1-AN/WRR.2: Provide Tuning Capability Similar to AN/ WRR-2A. AN/FRR-59A

Correction Material: Change 1, NS0967-106-2011; T-1, NS0967-137-3041; T-1, NS0967-106-2031

1-A NS0967-078-5060 F5820-9408784
IDENTITY: When this field change has been accomplished an identification nameplate is affixed to top of equipment behind original nameplate.

## 2-AN/WRR-2: Same as 2-AN/FRR-59

3-AN/WRR-2: Relocation of Test Points
Correction Material: T- to NS0967-137-3010
II-A FA-6 EIB 859 ElC QB1D000
SERIAL: All equipments
IDENTITY: Inspect the IF injection amplifier assembly in the Converier CV-920( )/URR. Five test jacks will be located on the top surface. See figure 1 of this article and refer to figure $6-2$, page 6.13 of NA VSHIPS 94715 for location of assembly.

1-AN/WRR-2A: Same as 2-AN/FRR-59

2-AN/WRR-2A: Same as 3-AN/WRR-2 except
EIC QBIE000
3-AN/WRR-2A: Same as 3-AN/FRR-59A except
ElC QBIE000
1-AN/WRR-2B: Same as 2-AN/FRR-59

2-AN/WRR-2B: Same as 3-AN/WRR-2 except
EIC QB1F000
1-AN/WRR-3: Improved RF Oscillator Stabilization
Corsection Material: T-1, NS0967-055-0013 to TM, NS0967.055-0010 (formerly NS94543)

2-A FA-2 NS0967-055-0040
None
SERIAL: B-1 thru B-4, B-6 thru B-14 and B384
IDENTITY: Checking the value of resistor R403. Resistance should be 1200 ohms.

2-AN/WRR-3: Reduction of 120 Hertz Noise Interference
Correction Material: T-2, NS0967-035-1013 to NS0967-035. 1010

4-A FA-1 NS0967.05S.0060

## SERIAL: All

IDENTITY: Note that pin 8 of JllOl is connected to the shield of coaxial cable which is connected to pin 6 of 31101.

## 1-AN/WRR-3A: Same as 2-AN/WRR-3

1-AN/WRR-3B: Same as 2-AN/WRR-3
1-AN/WRT-1: Relocation of Resistors R-737 and R-738
Correction Material: T-1 to NS93484(A)
2-B FA-4 NS981314 None
SERIAL: 1 through $\mathbf{i 3 7}$
2-AN/WRT-1: Modification of Wiring
Correction Material: T-2 to NS93483(A)
2.A FA-0.5 NS9813is None

SERIAL: 1 through 100 and 102
3-AN/WRT-1: Cancelled
4-AN $\cap$ NRT-1: Disable PA Screen Voltage Keying
Correction Material: T-3 to NS93483(A)
2-A FA-0.5 NS981337
None
SERIAL: 1 through 144
IDENTITY: Buss wire jumper installed between TB-801-1 and TB-801-2.

5-AN/WRT-1: Oven Insulation and Bandswitch Replacement Correction Material: NS93483.42
1-A FA. 45 NS0967-972-0090
SERIAL: I through 155
IDENTITY: Any neoprene coated fiberglass insulation material replaced with clean uncoated fiberglass. This uncoated fi-
berglass can be detected by the uniform canary yellow color of both sides of the fiberglass as opposed to neoprene coated fiberglass which has one surface of light tan, burnt brownish or black color. The neoprene coating also feels still to the touch.

6-AN/WRT-1: Lock-in Performance lmprovement at Exact 100 KC Points

Correction Material: T-4 to NS93483(A)
1-A FA-1.5 NS981468 2N5820-064.
SERIAL: 142 through 307
IDENTITY: R720 and R721 in the frequency comparator subchassis of the Electrical Frequency Control C-2861/WRT-1 will be changed from 220 ohm $1 / 2$ watt to $2.2 \mathrm{~K} 1 / 2$ watt. Resistors R605 and R606 will be changed from 200 ohm $1 / 2$ watt to 820 ohm $1 / 2$ watt. Diode mounting board, E665, with four type IN457 diodes, CR627, CR628, CR629, and CR630, mounted on it will be located just above terminal board TB602A in the comparator subchassis.

7-AN/WRT•1: Eliminating Key-Up Radiation in Radio Transmitter

Correction Material: T-6, NS0967-050-5015 to TM, NS0967-050-5010 (formerly NS93483A)

2-A FA-I NS0967-050-5080
SERIAL: All serial numbers in which key-up radiation is found a problem
IDENTITY: Substitution of 680 -ohm resistors R S11, RS12, and RS13 in Power Supply AM-2198/WRT-1 with 820 -ohm 2 watt resistors.

## 8-AN/WRT-1: Cancelled

9-AN/WRT-1: Replacing Defective Ledex Switch Actuator Symbol B3303

Correction Material: None

## 1-A FA-4 NS0285-077-2000 2N5820-788-

 8420SERIAL: Radio Frequency Tuners TN-345/WRT-1 Ser AI, A3, A4, A8, A10 thru A16, A21, A22, A24, and A26 (15 units)
IDENTITY: Tuners in which the deficiency has been corrected will be marked with a letter $R$ stamped on the exterior of the drive end casting adjacent to pressure gauge M3301.

10-AN/WRT-1: Tone Generator - (After completion of field change, nomenciature becomes Radio Transmitting Set AN/ WRT-1A)

Correction Material: None required
1-A FA-6 NS0967-050-5110
2N5820-918-
1602
SERIAL: ( 50 equipments at random). Accomplish this change on transmitters requiring aircraft capabilities only. The number of field changes available are limited.
IDENTITY: Those equipments which have this field change installed have a five-position EMISSION SELECTOR Switch nameplate on the front panel of Amplifier-Power Supply AM-2198A/WRT-1.

11-AN/WRT-1: R.F. Tuners; Venting of Guide Shoe
2-A FA-0.5 NS0967-972-0160 None
SERIAL: All

IDENTITY: Presence of a $1 / 32^{\circ}$ hole in the guide shoe.
12-AN/WRT-1: Modification of FSK Keyer Circuit
Correction Material: T.7 to NS0967-972-0015 to NS0967. 972-0010

2-A FA.1 NS0967-972.0150
SERIAL: All Amplifier-Power Supplies AM-2198/WRT-I and AM-2198A/WRT-1A, except those sets with serial numbers Dl and up, as this change was included in the manufacture of these sets.
IDENTITY: Substitution of the 200 ohm resistor (RS08) with a 3000 ohm, 14 watt resistor.

13-AN/WRT-1: Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T.4, NS0967-972-0017 to NS0967-972. 0010

2-A FA-12 NS0967-972.0180 ElC QF1U000
SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: Two relays mounted on the chassis frame adjacent to the bus switch S-501 located in the top center section of AM-2198/WRT-1.

14-AN/WRT-1: Rewiring of Fuse F502 to the Primary of Transformer T503

Correction Material: T-6, NS0967-050-5012 to NS0967-0505010

2-A FA. 2 NS0967-050-5120 EIC QEIV000 SERIAL: All equipments
IDENTITY: Presence of label above fuse F502 which reads 'PRIMARY FUSE T-503 2 AMP.'

15-AN/WRT-1: Modification to FSK Circuit
Correction Material: T-9, NS0967-972-0204 to NS0967-972. 0010 (TM); T.4, NS0967-972.0044 to NS0967-972-0040 (MSB) IV-A FA-1 NS0967-972-0210 EIC QEIU000 SERIAL: All equipments
IDENTITY: Observing that the wires on terminals 13 and 14 of terminal board (TB) 450 have been reversed as indicated by lead markings.

16-AN/WRT-1: Provides C-R-E.S Mounting Clamp Assemblies for TN-345/WRT and CU-760/WRT-2

Correction Material: T-1, NS0967-050-5011 to NS0967.0505010

1-A FA-4 NS0967-972.0!90 ElCQE!U000
SERIAL: All serial numbers
IDENTITY: Presence of slotted hex bolts in clamp assemblies.
17-AN/WRT-1; Ceramic Antenna Insulator
Correction Material: T-7, NS0967.050-5013 to NS0967-0505010; T-10, NS0967-972-0205 to NS0967.972-0010

1-A FA.8 NS0967.972.0200 EIC QEJU000 SERIAL: All serial numbers
IDENTITY: Presence of ceramic antenna insulators having marking 'BERYLLIUM OXIDE' on both TN-345/WRT-1( ) and CU-760/WRT-1( ).

18-AN/WRT-1: Modification to Component Mounting Boards E303 and E45!

Correction Material: None required
1I-A FA-2.5
EIC QEIU000
SERIAL: All serial numbers
IDENTITY: Note that resistors R349, R350, and R479 are mounted on standoff terminals.

19-AN/WRT-1: Installation of Safety Ground Wire Correction Material: None required
II-A FA-1 EIB 888
EIC QEIU000
SERIAL: All equipments
IDENTITY: Presence of a wire connected to the ground lug associated with K-206 on the front panel and secured to the main chassis by R-203 mounting hardware.

1-AN/WRT-1A: Modification for MCW Operation Correction Material: T- to NS95900(A)
2-A FA-0.5 NS0967.972.0050
SERIAL: All when used as Low Frequency Beacons
IDENTITY: Presence of a jumper connected between $S$. 508A-1 and S-590A-5 in the AM-2198A/WRT-1.

2-AN/WRT-1A: Same as 12-AN/WRT-1 except
Correction Material: T-2, NS0967-972-0014 to NS0967-972. 0010

## 3-AN/WRT-1A: Same as 11-AN/WRT-1

4-A:N/WRT-1A: Installation of Standby and Emitting Status Monitoring Relays

Correction Material: T-3, NS0967-972-0016 to TM, NS0967.972-0010

2-C FA-12 NS0967-972-0170 ElC FK86000
SERIAL: Alf equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: Two relays mounted on the chassis frame adjacent to the bus switch S-501 located in the top center section of AM-2198A/WRT-1A.

5-AN/WRT-1A: Same as 15-AN/WRT-1 except
EIC QEIV000
6-AN/WRT-1A: Same as 16-AN/WRT-1 except
Correction Material: T-8, NS0967-972-0202 to NS0967-972. 0010 and

EIC QEIV000
7-AN/WRT-1A: Same as 17-AN/WRT-1 except
Correction Material: T-10, NS0967-972-0205 to NS0967. 972-0010 and

EIC QEIV000
8.AN/WRT-1A: Same as 18-AN/WRT-1 except

EIC QEIV000
9-AN/WRT-1A: Same as 19-AN/WRT-1 except

EIC QEIV000 SERIAL: Only those equipments using the AN/WRA-3(XN. 1) for external excitation

IDENTITY: Transmitter-Transfer Control mounted on or near Radio Transmitting AN/WRT-2 or Radio Set AN/URC32.

2-AN/WRT-1B: Same as 17-AN/WRT-1 except
EIC QE4E000

3-AN/WRT-1B: Same as 18-AN/WRT-1 except
EIC QE4E000
4-AN/WRT-1B: Same as 19-AN/WRT-1 except
EIC QE4E000
1-AN/WRT-2: Modification of Printed Circuit Boards E-1301 and E-1303

Correction Material: T-1 to NS93319A

> 2-A FA-3 NS981280

None
SERIAL: 1 through 234
2-AN/WRT-2: Removal of Diodes CR-1342 and CR-1343
Correction Material: T-2 to NS93319A
2-B FA-0.5 NS981317 None
SERIAL: I through 355

## 3-AN/WRT-2: Cancelled

4-AN/WRT-2: Oven Insulation and Bandswitch Replacement Correction Material: NS93483.42
1-A FA-40
SERIAL: I through 417 RFO Insulation: F5820-856-3451 RFO Bandswitch: F5820-856-3450 EFC Insulation: F5820-8563449 EFC Bandswitch: F5820-856-3448
IDENTITY: Any neoprene coated fiberglass insulation material replaced with clean uncoated fiberglass. This uncoated fiberglass can be detected by the uniform canary yellow color of both sides of the fiberglass as opposed to neoprene coated fiberglass which has one surface of light tan, burnt brownish or black color. The neoprene coating also feels still to the touch.

5-AN/WRT-2: Control and Drive of Radio Transmitting Set AN/WRT-2 from Transmitter Group AN/WRA-3(XN-1)

Correction Material: Supp. I to NS93319(A)
1-A FA-16 NS0967.067-3080
SERIAL: Equipments authorized which use AN/WRA-3(XN1) as the exciting unit

IDENTITY: Transmitter-Transfer Control C-4359(XN-1/ WRT-2) mounted near Radio Transmitting Set AN/WRT-2.

5A-AN/WRT-2: Control and Drive of Radio Transmitting Set from Transmitter Group AN/WRA-3(XN-1)

Correction Material: Supplement 5 to NS93285(A), Supplement 2 to NS93319(A)

1-A FA-21 NS0967-067-3080 2N5820-884. 2120

6-AN/WRT-2: Information Relative to this change is included in Secret Manual NS94546

7-AN/WRT-2: Replacement of Thermostatic Switches S-305 and S-602

Correction Material: T-4 to NS93319(A)
1-A FA-4 NS981685
2N5820.056.
7148
SERIAL: All equipments now installed and intended for installation in nuclear-powered submarines
IDENTITY: The new thermostatic switches are contained in 4 -sided aluminum capsules which are $1 / 2^{4} \times 1 / 2^{\prime} \times 9^{*}$. The capsules are mounted in the same general area of the equipment as the initially installed thermostatic switches.

8-AN/WRT-2: Cancelled

9-AN,WRT-2: Replacement of Defective Ledex Switch Actuator, Symbol B3303

Correction Material: None
1-A FA-6 NS0967-073-3120 2N5820-7888421
SERIAL: Radio Frequency Tuners TN-342/WRT-2 Ser CI, A2(C2)*, A3(C3)*, C7 through C13, A 15 (C15)*, A16 (C16)*, C17 through C20, C22, and C26 (20 unit)
IDENTITY: Tuners in which the deficiency has been corrected will be marked with a letter ' $R$ ' stamped on the exterior of the drive and casting adjacent to pressure gauge M3301.

10-AN/WRT-2: Relocation of Phase Splitter Capacitor C862 for Tuner Blower Motor

Correction Material: T-9, NS0967-073-3017 to TM, NS0967-073-3010 (formerly NS93319A)

2-A FA-4 NS0967-050-5080 None SERIAL: All
IDENTITY Absence of the Blower Motor Capacitor formerly mounted on the right rear lower comer - to the immediate right of Relay K804 - of the Radio Frequency Amplifier chassis.

11-AN/WRT-2: Replacement of RG-58/U Neutralizing Cable with RG-141A/U

Correction Material: T-5 to NS93319(A) - NS0280.5157011

1-A FA-1 NS0285-079-020 2N5820-909. 3901
SERIAL: 1 through 702, B1 through B151, Cl through C20 IDENTITY: Presence of RG-141A/U cable between C909 and C882 in Radio Frequency Amplifier drawer. The RG141A/U can be identified by its light colos and rough to the touch fiberglass jacket. The RG-58/U is dark in color and has smooth finish.

12-AN/WRT-2: Replacement of 90 Phase Shift Network FL-

603
Correction Material: T-7, NS0967-073-3015
1-A FA NS0967-073-3150
SERIAL: 1 through 60
IDENTITY: New network FL-603 is marked with Westinghouse Drawing \#376A439H01

13-AN/WRT-2: Power Amplifier Cathode Current Equalizing Correction Material: T-8, NS0967-073-3016
1-A FA NS0967.073-3160 None
SERIAL: I through 263
IDENTITY: Location of cathode bias adjust potentiometers on left side cover plate of PA compartment in the AM-2121/ WRT-2.

14-AN/WRT-2: Replacement of Printed Circuit Board E-4404 with New Board E-1412

Correction Material: T-6 to NS0967-073-3014 (formerly NS93319(A))

1-A FA-1 NS0967-073-3170
SERIAL: 1 through 154
IDENTITY: The new 425 cps Test Oscillator, Printed Circuit Board E-1412 does not have L-1401 and transistor Q-1411 mounted on the right front corner.

15-AN/WRT-2: Elimination of Constant Keyed Condition in FSK Mode

Correction Material: T-11, NS0967-073-3019 to NS0967. 073-3010

2-A FA.0.5 NS0967.073-3200
SERIAL: 1 through 263, Al through A178 and D1 through D327
IDENTITY: Tune AN/WRT-2 using the normal tuning procedure. Unkey transmitter. Position the EMISSION SELECTOR switch on AM-2122~WRT-2 to the FSK position, and if a keyed condition results, the field change has not been accomplished.

## 16-AN/WRT-2: Same as 11-AN/WRT-1

17-AN/WRT-2: Coil Form Improvement
Correction Material: T-10, NS0967-073-3018 to TM, NS0967-073-3010; T-1, NS0967-073-3181 to NS0967-073-3180

1-A FA.4 NS0967-073-3180 2N5820-879. 7671
SER1AL: Al?
IDENTITY: Instalkation of improved coil form L3302 ALT A.

18-AN/WRT-2: FSK Termination Modification and MarkSpace Equalization

Correction Material: T-13, NS0967-073-3201 to TM, NS0967-073-3010

1-A FA.4 NS0967-073-3190 2N5820-0543465
SERIAL: All - NOTE: AN/WRT-2 Series, Serial Nos. I thru 122 witl recejve kits with item 7 of MATERIAL REQUIRED supplied directly from the manufacturer
IDENTITY: Two potentiometers marked SPACE and MARK located above E1401 under the cover plate on the right side of Amplifier Power Suppiy AM-2122/WRT-2.

19-AN/WRT-2: Replaces Transistor QS02, (2N95, 2N1330) and Resistor R505 ( 33,000 ohms, 2W)

Correction Material: T-14, NS0967-073-3202 to TM, NS0967-073-3010 (formerly NS93319(A))

1-A FA-1 NS0967-073-3210 2NS820-226.
SER1AL: 1 through 702
IDENTITY: Addition of a mounting plate with replacement transistor Q502 (2N657) mounted in clip and resistor R505 (on resistor board ESO7) changed to a higher resistance value of 39,000 ohms. Change is located in Amplifier-Power Supply AM-2122/WRT-2.

20-AN/WRT-2: Frequency Comparator Mixer Diode Replacement on Circuit Board E601

Correction Materiak: T-15, NS0967-073-3203 to TM, NS0967-073-3010 (formerly NS93319(A))

1-A FA-3 NS0967-073-3220 2NS820-226.
3109
SERIAL: 1 through 702, B! through B151, and C1 thru C129 IDENTITY: Diodes CR601 through CR604 on E601 are Type 1 N914. Circuit Board E601 is located under cover, left side of the Electrical Frequency Control C-2764/WRT-2.

21-AN/WRT-2: Addition of Capacitors C1363 and C1364 on Circuit Board E1301; 10:1 Frequency Divider

Correction Material: T-16, NS0967-073-3204 to TM, NS0967-073-3010 (formerly NS93319(A))
1-A FA-3 NS0967-073-3230
2N5820-226-

3112
SER1AL: 1 through 449
IDENTITY: Addition of capacitors Cl363 (.OI uf) and C 1364 (470 uuf) on circuit board E1301 of the Electrical Frequency Control C-2764/WRT-2.

22-AN/WRT-2: Provide Stainless Steel Mounting Clamp Assemblies for TN-342~WRT-2 RF Tuners

Correction Material: T-17, NS0967.073-3205 to TM, NS0967-073-3010 (formerly NS93319(A))
1-A FA-1 NS0967-073-3240 225820-119-

$$
1291
$$

SERIAL: TN-342~WRT-2 - all serial numbers
IDENTITY: The retainer straps of the clamp assembly are secured with slotted hexagon head cap screws instead of socket head cap screws.

23-AN/WRT-2: Modification of PA Grid Bias and Screen Voltage Circuits. Addition of Button Hole-Plug

Correction Material: T-18, NS0967-073-3206 to TM\&, NS0967-073-3010 (formerly NS93319(A))

1-C FA-24 NS0967-073-3250 EIC FK1S000 SERIAL: All serial numbers
IDENTITY: Three zener diodes, type $1 N 3007 B$ and a 500 ohm resistor installed in AM-2122/WRT-2. Four PA bias adjust controls installed on left side cover of AM-2121/WRT2. Button hole plug installed on top of 1850 V high voltage protective cover of AM-2121/WRT-2.

[^2]
## NS0967.073-3010

## 2.C FA-I2 NS0967-073-3260 <br> EIC FKISO00

SERIAL: All equipments installed aboard ships with AN/ SSQ-54 Emission Status Indicator Set
IDENTITY: Two relays mounted on the chassis frame adjacent to the bus switch S5O1 located in the top center section of AM-2122/WRT-2.

25-AN/WRT-2: Rewiring of Fuse FSO2 to the Primary of Transformers T-503

Correction Material: T-I, NS0967-073-3011 to NS0967.073. 3010

2-A FA-2 NS0967-073.3270 EIC
QEIW000
SERIAL: All equipments except those with serial numbers Cl thru C458
IDENTITY: Presence of a label above fuse FSO2 which reads 'PRIMARY FUSE T503 2 Amp.'

## 26-AN/WRT-2: Modsfication to FSK Operation

Correction Material: T-2, NS0967-073-3012 to NS0967.0733010

IV-A FA-] NS0967-073-3280 EIC
QEJWOOO
SERIAL: All equipments
IDENTITY: Observing that the labeled wires on terminal 20 and 21 of terminal board (TB) 14018 have been reversed.

27-AN/WRT-2: Installation of Safety Ground Wire Correction Material: None required
11-A FA-1
EIC
QEIWOOO
SERIAL: All equipments
IDENTITY: Presence of a wire connected to the ground lug associated with K-206 on the front panel and secured to the main chassis by R-203 mounting hardware.

1-AN/WRT-4(XN-3): Simplification of Driver Neutralization Procedure

Correction Material: T•I, NS0967-063-8014 to NS0967-063. 8010

II-A FA-2 NS0967-063-8060 ElC QQ0A000 SERIAL: All serial numbers
IDENTITY: Presence of a toggle switch on a bracket secured to the tube shield of $V 5$ above the cable clamp.

2-AN/WRT-4(X.N-3): Radio Transmitting Set - Simplification of Driver Neutralization Procedure

Correction Material: T-2, NS0967-063-8015 to NS0967-0638010

II-A FA. 2 NS0967-063-8070 EIC QQ0A000 SERIAL: All
IDENTITY: This field change can be identified by the presence of a toggle switch on a bracket secured to the tube shield of VS above the cable clamp.

1-AN/WSC-5(V): Running Time Meter $\{A|A| M \mid$ Wiring Change

Correction Material: T-I, NE0967-LP-455.001I to NE0967-LP-4SS 0010

4-A FA-1 NE0967-LP-455-0020 EIC QPOA

SERIAL: All serial numbers
IDENTITY: Upon removal of fuse lAlAlFl from meter panel, Radio Set AN/WSC-S(V) becomes inoperative.

2-AN/WSC-5(V): Filter Suppors Screen Wise Installation
Correction Material: T-2, NE0967-LP-455-0012 to NE0967-LP-455-0010

I-A FA-I NE0967-LP-45s-0030 EIC QPOA SERIAL: All serjal numbers
IDENTITY: The support screen wire is installed behind the mesh air filter.

1-AN/WSN-1(V)1: Addition of EMI Filers 10 Navigation Control Console

Correction Material: Ch. 1, NS0967-LP-529-6011 to NS0967-LP-529-6010; Ch. I, NS0967-LP-529-7011 to NS0967. LP-529.7010

I-C FA-16 NS0967-LP-529-6020
SERIAL: Serial number Al (Single), Al3 (Dual Control Console, Tooling). (Previously accomplished by Autonetics.) IDENTITY: Note installation of warning plate at top center of console and EMI filters installed behind control panels.

2-AN/WSN-1(V)1: Elimination of Noise on Clock 4-Line AN/ WSN-1(V)] and AN/WSN-l(V)2

Correction Material: Chg. 2, NS0967-LP-529-7012, to NS0967-529-7010, and Chg. 2. NS0967-LP-529-6012, to NS0967-529-6010.
1.C YF-16 NS0967-LP-529-6030 EIC L90F

SERIAL: AN/WSN-I(V)] serial Al; AN/WSN-I(V)2 serial Al thru A30.
IDENTITY: Installation of 10095-201-1 Capacitor Assembly on 85!62-201-21 Test Panel Assembly.

3-AN/WSN-1(V)1: Modification of Control Panel to Install Replaceable Display Digits

Correction Material: Ch. 2, NS0967-LP-529-6012 to TM. NS0967-LP.529.6010 and Ch. 2, NS0967-LP-529-70!2 to TM, NS0967-LP.529.7010

1-C YF-16 NS0967.LP-529-6040
EIC L90F
SERIAL: AN/WSN-1(V)] serial AI. AN/WSN-1(V)2 serial Al thru Al3.
IDENTITY: Part number of control panel is 68728-501-11 and the part number of the subassembly is 68728-501-205.
4.AN/WSN-1(V)1: Addition of Synchro Conversion Limiting AN/WSN-1 $(V) 1$ and AN/WSN-1(V)2.

Correction Material: Chg. 3, NS0967-LP-529-7013, to TM, NS0967-529-7010, and Chg. 3, NS0967-LP-529-6013, to TM, NS0967-529.6010.
1.C YF. 4 NS0967-LP.529-6050 EIC L90F SERIAL: AN/WSN-1(V)] serial A1. AN/WSN-I(V)2 serial AJ-A30.
IDENTITY: Installation of eight FO3B2SOV, $1 / 4 \mathrm{amp}$ fuses on 85162-201-31 Test Panel Assembly.

1-AN/WSN-1(V)2: Same as 1-AN/WSN-1(V)] except
SERIAL: AI thru Al2 (Dual)
2-AN/WSN-1(V)2: Same as 2-AN/WSN-I(V)I

## 3-AN/WSN-1(V)2: Same as 3-AN/WSN-I(V)1

4-AN/WSN-i(V)2: Same as 4-AN/WSN-1(V)t.
1-AN/WSQ-2: Removal of Pump Noise Monitor Alarm Function

Correction Material: Advanced Change Notice No. 1 included in field change kit

IV-A FA-2 NS0967-892-9020 E1C
SERIAL: All serial numbers
IDENTITY: Front panel alarm lights 1101 de-energized under all conditions.

1-ANALYZER MARK IV-N, DISS LVED OXYGEN: Printed Circuit Board Upgrading.

Correction Material: New TM, NS0967-LP-101-7010 dtd 1 Aug 77.

> 2-A FA-1 NS0965-LP-101-7020

SERIAL: All serial numbers.
IDENTITY: The new amplifier board can be identified by capacitor C-5 with a value of 0.1 uF . The new switch board can be identified by the addition of transformer T-2. The new alarm circuit board can be identified by the change of location of potentiometers P-4 and P-S requiring opening of cabinet to make adjustments.

1-AS-390/SRC: Replacement of RG-81/ U Feedline Correction Material: None
1-A FA-1 NS981176 F5985.724.
SERIAL: All
IDENTITY: Presence of new coaxial feedine
1-AS-468B/B: Substitution of an Improved or Modified 'Spark Plug ${ }^{2}$

Correckion Materias: None
2-A FA-i NS0967-953-9020 None
SERIAL: See field change
IDENTITY: Visually checking to see that the spark plug instalied is the new improved type described herein.

1-AS-493/U: Pressure Proofing
Correction Material: T-1 to NS91569
A FA.2 NS98325 F5895-346.
SERIAL: 1-30
IDENTITY: Pressure proof lines
1-AS-535/B: Replacement of Spacers 0-301 and 0-302
Correction Material: None
F5985-3242068
SERIAL: 1-64
1-AS-2112/FRC: Installation of Antenna Positioner Telephone Ringer Circuit

Correction Material: T-1, NS0967-174-0241 to TM, NS0967-174-0240

1-A FA-1 NS0967-174.0340
SERIAL: All equipments

IDENTITY: Presence of a chassis mounted push-button switch and toggle type switch mounted adjacent to the sound powered telephone jackbox. Presence of a chassis mounted push-button switch mounted on the side of the Main Junction Box located inside the antenna positioner.

1-AS-2187/FRC: Rotater Clutch Tension Check Correction Material: None required
Ill-A FA-3 NS0967-434-2050
SERIAL: Serials A-1 through A-115
IDENTITY: Visual Tension Check
2-AS-2187/FRC: Erection Boom Guy Installation
Correction Material: Change 1, NE0967-434-2011 to NE0967.434-2010

II-C YF-10 NS0967.434-2060 EIC Q151000 SERIAL: Al thru Alls
IDENTITY: Visual inspection - Observe that two stiffener plates and one support plate have been added to the T-strut and flange.

1-AS-3018/WSC-1(V): Exchange Cam Clamp on Sector Switch Cam Assembly from Round to Special Hexagonal.

Correction Material: None required.
1-A FA-2 NE0967-LP-467-9040
EIC Q15S
SERIAL: NOKOI-N0298.
IDENTITY: When examining the cam assembly through the access opening in the elevation housing, a hexagonal clamp rather than a round clamp indicates accomplishment of this field change.

2-AS-3018/WSC-1(V): Painting Caution Label.
Correction Material: None required.
3-A FA-1 NE0967-I.P-467-9050 EIC QiSS SERIAL: All serial numbers.
IDENTITY: Presence of painting caution label on the ground screen cover plate indicates acmplishment of this field change.

3-AS-3018/WSC-1(V): RF Overide Block Interlock.
Corsection Material: Chg. 3, NE0967-LP-467-9013, to TM, NE0967-LP-467-9010.

4-A FA-2 NE0967-LP-467-9080 EIC QP30
SERIAL: All serial numbers.
IDENTITY: Check continuity, SAFETY switch at 'PWR
ON' position: For single AN/WSC-3 -- zero ohms between 1A6P1-M and 1A6PI-N; and between 1A6P3-M and 1A6P1N. For stacked AN/WSC-3 cabinet -- zero ohms between P8M and P8-N, and between P6-M and P6-N.

4-AS-3018/WSC-1(V): Change Safety Switch on Antenna Pedestal.

## Correction Material: EIB 005

2.A FA-2 EIB 005 EIC QP30

SERIAL: Ali serial numbers.
IDENTITY: Verify that the antenna safety switch 1A1A2WISi and/or 1A2A2W1Si contains a dust/moisiuse boot.

1-AS-3018A/WSC-1(V): Change Safety Switch on Antenna Pedestal.

Correction Material: EIB 005

ORIGINAL
A-84

2-A FA-2 EIB 005
EIC QP4s
SERIAL: All serial numbers.
IDENTITY: Verify that the antenna safety switch 1A1A2W1S1 and/or 1A2A2WIS! contains a dust/moisture boot.

1-AT-150/SRC: Replacement Coaxial Feedline E104
Correction Material: None
1-A FA-1 NS981175
F5985-724-

8125
SERIAL: All
IDENTITY: Presence of new coaxial feedline

1-AT-592/URN-3: Adjustable Mount for Monitor Test Antenna

Correction Material: None required
2-A FA-8 NS0967-053-4020 None
SERIAL: All used in conjunction with MX-1627/URN-3
IDENTITY: Installation of an adjustable antenna mount which provides vertical and horizontal adjustments.

1-BC-348-J: Fuse and Filament Warm-up Modification SERIAL: NRTC units
IDENTITY: 1 amp 4AG fuse located in AC power supply pack.

2-BC-348-J: BFO Control Modification
SERIAL: NRTC units
1-BC-348-R: Same as 1-BC-348-J

2-BC-348-R: Same as 2-BC-348-J

1-C-1004A/SG: This Field Change is CANCELLED. (Replacement of Box Assembly.)

Correction Material: T-1 to NS92279
1-A FA-1 NS98931 2N58i5-571-

SERIAL: All
IDENTITY: Box assembly with dimensions of $4 \times 4-13 / 16 \times$ 7-1/2 inches.

1-C-1138/UR: Elimination of Audio Feedback During Voice Transmissions

Correction Material: T-3 to NS92243
II-A FA-1 NS0967-986-0010
None
SERIAL: All
IDENTITY: 12 -volt relay K-102 installed.
1-C-1180/GRC-27: Shock and Vibration Protection Improvement

Correction Material: None
A FA-4 NS98516
None
SERIAL: BUSHIPS 1-115
IDENTITY: In radio set control unit, the left and right side end panels are each secured to the subchassis with $6-32$ brass screws. These are replaced with $6-32$ steel screws.

2-C-1180/GRC-27: Addition of Isolation Relay
Correction Material: T-1 to NS92175

A FA-1 NS98535
F5820-642-
6987C
SERIAL: All w/AN/GRC-27, AN/SIC-1 and TED'S
IDENTITY: Presence of nameplate indicating change just below front panel nameplate.

3-C-1180/GRC-27: Replacement of Stop-Start Relay Correction Material: Change 1 to NS92175
A FA-2 NS98836 F5820-695.
9021
SERIAL: 1-115
IDENTITY: K-105, R-148 and 1-101. I-101 should have a rating of 120 volts, 6 watts.

1-C-1207/UR: Elimination of Audio Feedback
Correction Material: T-1 to NS92198
A FA-i NS98855 None
SERIAL: All
IDENTITY: Swing front panel forward and observe if muting relay K-102 is installed on handset housing. Speaker muting control, R-104, is replaced by R-105, $25 \mathrm{~K}, 2 \mathrm{~W}$ variable resistor.

1-C-3413/USQ-29(V): Computer Set Console Incorporation of Factory Service Orders as a Unit Field Change

> Correction Material: None

2-A NA NS0967-213-8060 None
SERIAL: 1 through 9
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-C-3674/USQ-20(V): Control Introducer, Computer Set (System Monitor Panel) - Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: None
2-A NA NS0967-213-8060
SERIAL: i through 4
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-C-3674/USQ-20(V): Computer Set Control Introducer (Systems Monitoring Panel) - Improvement of Data Entry Rate

Correction Material: T-3, NS0967-985-2014 to NS0967-9852010

2-A FA-3 NS0967-985-2060
SERIAL: All used in NTDS
IDENTITY: Energizing the SMP, activating a Computer Select and Command Key, then depressing TRANSMIT. If the WAIT indicator lights or if the entry is accepted, this field change is incorporated.

3-C-3674/USQ-20(V): Keyboard Overlay Kit for Computer Set Control Introducer (System Monitor Panel)

1-A FA-3.5 NS0967-985-2050
None SERIAL: Serial numbers 1 through 4
IDENTITY: 1. Inspect the keyboard and determine if a thin black overlay (plastic), is superimposed over a thick underlay (paste), secured by iwo thumbscrews. 2. Test the readout of the Computer Select/Command module and determine if numbers 1 through 4 are displayed for the associated computer select keys; and letters A through $H$ are displayed for the
computer command keys. 3. Test the left most identifier/code module and determine if numbers 0 through 9 are displayed. 4. If all the above displays as stated in this field change has been accomplished, proceed to the routing instructions of this bulletin.

1-C-3674A/USQ-20(V): Computer Set Control Introducers (Systems Monitor Panels) Spacer for Cable Clearances Correction Material: None required
2-A FA-4 NS0967-213-8060 None
SERIAL: Al through A8
2-C-3674A/USQ-20(V): Systems Monitoring Panel; Improvement of Data Entry Rate

Correction Material: T-3, NS0967-985-2014 to NS0967-9852010

2-A FA-3 NS0967-985-2060
SERIAL: A-I used in NTDS
IDENTIIY: Energizing the SMP, activating a Computer Select and Command Key, then depressing TRANSMIT. If the WAIT indicator lights or if the entry is accepted, this field change is incorporated.

3-C-3674A/USQ-20(V): Changeable Legend Key Caps for Computer Set Control Introducer

Correction Material: Change 2, NS0967-985-2013 to TM, NS0967-985-2010 (formerly NS94089(A))

1-A FA-2.5 NS0967-985-2040
SERIAL: AI - A30 and B1-B61
IDENTITY: If yellow caps are installed on the Computer Select Keys; green caps are on the Command Keys; red caps are on the Identifier and Code Keys; and the Computer Select/Command Display contains alpha-numeric coding.

4-C-3674A/USQ-20(V): Permit Setting Proper Computer Select Bits where Computers 'C' and 'D' are connected as ' $A$ ' ane ' $B$ ' in a 4 Computer 2SMP Configuration

Correction Material: T-4, NS0967-985-2015 to NS0967-9852010 (formerly NS94089(A))

2-A FA-I NS0967-985-2090
SERIAL: A7 and other serial numbers as designated by NAVSEC where computers ' $C$ ' and ' $D$ ' are connected to the SMP as ' $A$ ' and ' $B$ '
IDENTITY: Continuity between TB4D2 and TB4C5 in logic chassis 6 indicating that logic element 12 KOI has been bypassed.

1-C.3675/USQ-20(V): Control Introducer Computer Set (System Monitor Panel) Computer Incoıporation of Factory Field Change Service Orders as a Field Unit Change

Correction Material: None
2-A NA NS0967-213-8060
SERIAL: I and 2
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-C-3675/USQ-20(V): Same as 2-C-3674/USQ-20(V)

3-C-3675/USQ-20(V): Same as 3-C-3674/USQ-20(V)
1-C-3675A/USQ-20(V): Same as 1-C-3674A/USQ-20(V) except

SERIAL: Al through A13
2-C-3675A/USQ-20(V): Same as 2-C-3674A/USQ-20(V)
3-C-3675A/USQ-20(V): Same as 3-C-3674A/USQ-20(V) except SERIAL: A1-A24 and B1-B3

4-C-3675A/USQ-20(V): Incorporation of UNIVAC Field Change Order MPL-653 as a Field Change

Correction Material: None
1-C FA-40 NS0967-985-2100
EIC FR04000
SERIAL: Applies to equipments when a two-computer system is converted to a three-computer system
IDENTITY: Observing that the third indicator panel is not blank.

1-C-4386/ISQ-18: Modification of Radar Set Control C-4386/ TSQ-18

NS0967-266-6370
SERIAL: All serial numbers
IDENTITY: Presence of 270 pF capacitor (CI5) and 500 pF capacitor (CI7) in countdown blocking oscillator of C-4386/ TSQ-18 Radar Set Control.

1-C.4621/SR: Provision for Simplex and Duplex Operation Capability

Correction Material: T-1, NS0967-213-9012 to TM, NS0967-213-9010 (formerly NS94794)

2-A FA-2 NS0967-213-9030 None SERIAL: All (Where both simplex and duplex operation is desired)
IDENTITY: Installation of a SIMPLEX-DUPLEX toggle switch on the control panel.

2-C-4621/SR: Keytine Ground Removal. (EIB 909, 911, 922) Correction Material: EIB 909
2-A FA-3 EIB 909 EIC

## SERIAL: All

IDENTITY: This field change may be identified by the relay installed adjacent to C-111 and TB-102.

1-C-6683/UYK: Changeable Legend Key Caps for Computer Set Control Introducer (System Monitor Panel)

Correction Material: Change 2, NS0967-985-2013 to TM, NS0967-985-2010

1-A FA-2.5 NS0967-985-2030
SERIAL: AI and A2
IDENTITY: This fietd change is installed if yellow caps are installed on the computer select keys; green caps are on the command keys; red caps are on the identifier and code keys; and the computer select/command display contains alpha/numeric coding. Inspect the Field Change Record Plate and determine if this change number is recorded on it.

2-C-6683/UYK: Improvement of Data Entry Rate
Correction Material: T-4, NS0967-985-2015 to NS0967-9852010

2-A FA-3 NS0967-985-2090
EIC FROEOOO
SERIAL: All equipments

IDENTITY: Energizing the SMP, activating a Computer Select and Command key, then depressing TRANSMIT. If the WAIT indicator lights or if the entry is accepted, this field change is incorporated.

1-C-7147/UYK: Changeable Legend Key Caps for Computer Set Control Introducer (System Monitor Panel)

Correction Material: Change 2, NS0967-985-2013 to TM, NS0967-985-2010

## 1-A FA-2.5 NS0967-985-2070 <br> EIC FR0D000

 SERIAL: AI and A2IDENTITY: This field change is installed if yellow caps are installed on the computer select keys; green caps are on the command keys; red caps are on the identifier and code keys; and the computer select/command display contains alpha-numeric coding. Inspect the Field Change Record Plate and determine if this change number is recorded on it.

2-C-7147/UYK: Improvement of Data Entry Rate
Correction Material: T-4, NS0967-985-2015 to NS0967-9852010

2-A FA-3 NS0967-985-2909 EIC FR0D000
SERIAL: All equipments
IDENTITY: Energizing the SMP, activating a Computer Select and Command key, then depressing TRANSMIT. If the WAIT indicator lights or if the entry is accepted, this field change is incorporated.

1-C-7400/UYA-4(V): Replace Pan Head Screws Correction Material: None
1-A FA-1 NS0967-238-7300 EIC FU09000
SERIAL: A6, AI0 through A14
IDENTITY: Checking for flat head screw holding the $\mathbf{J 2}$ connector in place. If these countersunk screws appear, this field change has been accomplished.

1-C-8086/U: Motor Generator Controller (UNIVAC 1553); Incorporation of Factory Field Change Orders (MPLs) as a Unit Field Change

Correction Material: Correct NS0967-303-8910 in accordance with instructions in MPL-312

2-A NA NS0967-303-8920 EIC FR05700 SERIAL: As designated in Table I of field change bulletin IDENTITY: Noting that terminal board TB-6 in the controller has been replaced by an RF filter block.

2-C-8086/U: Regulator and Over/Under Voltage Protection
Correction Material: Supplement 1, NS0967-303-8911 to TM for KATO 810-34321-01 Transistor Switching Voltage Regulator, NS0967-303-8910, and Supplement 2, NS0967-3038912 to TM for KATO 511-01020-00 Overvoltage - Undervoltage Assy., NS0967-303-8910

1-A FA-22 NS0967-303-8930 ElC QM38000 SERIAL: All (FC 1-C-8086/U must be accomplished prior to the installation of this field change)
IDENTITY: Presence of Over/Under Voltage Assy, part number 51t-01020-00, and a 4PDT relay in the upper righthand side of the controller.

1-C-8120(P)/G: Insure Proper Data Transmission in the Joint

Uniform Military Pay Systems (JUMP). Correction Material: Changes required. 1-A FA-2 NE0967-LP-324.0550

EIC QHOA SERIAL: 1-1046.
IDENTITY: On PC card A1A36(SM-E-546807), verify that integrated circuits Z 21 and Z 22 are $\mathrm{p} / \mathrm{n}$ 's 7580 K and 7090 K , respactively.

1-C-8979/URT-30: Audible Alarm Mounting Change to the Front Panel.

Correction Material: TM, NE0967-421-9070, dtd 30 April 74.

1-A FA-4 NE0967-LP-421-9150
SERIAL: AI-A4.
IDENTITY: Modified units are identified with a nameplate with part number 619-1703-002.

2-C-8979/URT-30: Incorporation of Diverter Assembly for Fan Noise Reduction into Control-Power Supply.

Correction Material: T-1, NE0967-LP-421-9073, to TM, NE0967-LP-421-9070; T-1, NE0967-LP-42!-9062, to TM, NE0967-LP 421-9060.

1-A FA-1 NE0967-LP-421-9170 EIC QEIR SERIAL: A1 thru A4 (contract N00039-70-C-1507), 81 thru B27 (contract N00039-74-C-0152).
IDENTITY: The louvered front entry-type airvent replaced by a bottom-entry airduct (diverter).

1-C-9597/WSC-1(V): Removal of Capacitors Suspected of Having Delamination Tendency

Correction Material: None Required
3-A FA-1 NE0967-LP-467-9030 EIC QP08
SERIAL: Serial numbers N0137 thru N0156 and N0158.
IDENTITY: A statement 'CAP OK' appearing near the nameplate of the C-9597/WSC-I(V) Antenna Control should indicate acccomplishment of this field change. If one-microfarad capacitors C9, C10, C17, and C18 of Switch Assemblies 1A6A1 and 1A6A2 are imprinted with initials 'WC' and date code ' $75-21$ ', then this field change has not been accomplished.

2-C-9597/WSC-1(V): Installation of Transient Voltage Suppression Diodes in Antenna Control C-9597/WSC-l(V)

Correction Material: Change 2, NE0967-LP-467-9012, dtd Jun 1974, to TM, NE0967-LP-467-9010.

1-A FA-2 NE0967-LP-467-9060 EIC QP30
SERIAL: All serial numbers
IDENTITY: Verify installation of ten type 1 N 4245 diodes ( $1 \mathrm{~A} 6 \mathrm{CR1}$ thru 1 A 6 CR 10 ) between terminals X 1 and X 2 of relays IA 6 K 1 thru 1A6KI0. Verify installation of a grounding terminal stud located at 1 A 6 E 1 .
3.C.9597/WSC-1(V): RF Override Block Interlock

Correction Material: Change 3, NE0967-LP-467-9013, to TM, NE0967-LP-467-9010.

I-A FA-2 NE0967-LP-467-9070 EIC QP30 SERIAL: All serial numbers.
IDENTITY: Associated transimtter unit (AN/WSC-3) will not key when Antenna Control C-9597/wSC-1(V) is in OVRD RF BLK and associated AS-3018/WSC-1(V) SAFETY switch is placed in the SAFE position. NOTES: Prerequisite Field Change: 3-AS-3018/WSC-1(V).

1-C-9597A/WSC-1(V): Instailation of Ground for 28 V DC Return.

Correction Material: Chg. to TM, NE0967-LP-614-0010.
1-A FA-2 NE0967-LP-614-0080 EIC QP45
SERIAL: All serial numbers.
IDENTITY: Verify that a ground lug has been installed between TB1 and TB2.

2-C-9597A/WSC-1(V): Installation of Chassis Grounding Stud. Correction Material: Chg. to TM, NE0967-LP-614-0010
I-A FA-I NE0967-LP-614-0090 EIC QP45 SERIAL: All serial numbers. (Accomplishment on a asneeded bases.)
IDENTITY: Verify that a $1 / 4-20$ ground stud has been installed at the rear of the antenna control.

1-C-USQ-20(V): Format Control Unit - Incorporation of Factory Field Service Order No. 196 as a Unit Field Change.

Correction Material: Incorporated in the revised publications

2-A NA EIB 654 None
SERIAL: I and 2
IDENTITY: Change number stamped on the Field Change
Accomplished plate.
1-CCAG-7029-A: Simultaneous/Independent Switch Provision
Correction Material: T-1, NE0969-157-9011 to NE0969-157-9010

II-A YF-4 NS0969-157-9020
SERIAL: All serial numbers
IDENTITY: A switch in the lower left corner of the CCAQ-7029-ADC, dual channel adapter, labeled 'Simultaneous Operation' and 'Independent Operation'

1-CP-642/USQ-20(V): Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: Corrections to applicable technical manuals have been incorporated in revised publications

2-A FA-2 NS0967-096-6030 None
SERIAL: Equipments on which all changes have not been accomplished (16 at present)
IDENTITY: See field change bulletin.
1-CP-642A/USQ-20(V): Computer - Incorporation of Factory
Field Service orders as Unit Field Change
Correction Material: None
1-A NA NS0967-096-6030 None
SERIAL: Equipments 19 through 27 and AI through All
IDENTITY: Change number stamped on the Field Change
Accomplished plate.
2-CP-642A/USQ-20(V): Digital Data Computer Switch Lamp Assembly Replacement

Correction Material: T- to NS94101A
1-A FA-5.5 NS0367-007-7080 None
SERIAL: 19 through 27 and Al and subsequent, used in NTDS installations only
IDENTITY: If Indicator Lens on computer console can be unscrewed for removal of lamp, this change has been accomplished.

3-CP-642A/USQ-20(V): Universal Computer; Provision Loading Bootstrap Program from Magnetic Tape Capability

1-A FA-12.5 NS0367.007-7080 None SERIAL: 19 through 27; A! and subsequent, installed in NTDS complexes.
IDENTITY: Observing the wired program indicators on the computer maintenance panel. When the computer is placed in the 'ON' condition the wired program ' C ' light should be lit. This indicates wired program magnetic tape Bootstrap has been installed.
NOTES: If it is determined this change has been accomplished proceed to Routine Instructions, Step No. 2.

4-CP-642A/USQ-20(V): RD-294 Magnetic Tape Unit Bootstrap Compatibility

Correction Material: None required
I-A FA-8 NS0367-007-7090 EIC
OK0G000
SERIAL: 21, 22, 23 and others as designed by NAVSEC
IDENTITY: This field change has been accomplished if Bootstrap Program ' $C$ ', addresses 00000 through 00017 contain the following instructions: 0. 13470, 0001 , I. 13470, 00007; 2. 73470, 00006; 3. 17470, 00037; 4. 13470, 00017; 5. 62440,00005; 6. 11030, 00107; 7. 12674, 00011; 10. 20036; 00000; 1I. 71620, 00111 ; 12. 61000, 00010; 13. 17470, 00037; 14. 21030, 00110; 15. 60500, 00000; 16. 61720, 00107; 17, 00001, 62611

5-CP-642A/USQ-20(V): Expanded Addressing Modification
Correction Material: Supplement to NS0367-LP-007-7010 thru NS0367-LP-007-7040

1-A YF-216 NS0367-007-7100 EIC QK06000 SERIAL: Equipments as designated by NA VSEC
IDENTITY: This change has been accomplished if the control indicator panel utilizes a memory modiffication indicator panel replacing the X register and the D -register.

## 6-CP-642A/USQ-20(マ): Reai Tune Clock Contrù.

Correction Material: Supplements to NS0367-007-7010, 7020, -7030, and -7040 will be provided.

I-A FA-8 NS0367-LP-007-7110 EIC QK05 SERIAL: As designated by NAVSEC.
IDENTITY: Verify that card locations A38, A39, A40, B39, and B40 of chassis A2 contain card types 070, 080, 080, 5520, and 2880, repectively. Functional Check: Verify that each of the RTC push-button indicators (MASTER, SLAVE, and INTERNAL) on the front panel will light and remain lit when depressed, and the other two are extinguished.
NOTES: Prequisite Field Change: 5-CP-642A/USQ-20(V).
1-CP-642B/USQ-20(V): Computer (UNIVAC 1212/1212A); Incorporation of Factory Field Change Orders (MPLs) as a Unit Field Change

Correction Material: Included in Technical Manual
2-A FA-1 NS0967-033-1180
SERIAL: See EIB 723
IDENTITY: By either visual inspection, testing, and/or records of accomplishment.

[^3]1-A FA-8 NS0967-033-1170
SERIAL: A1, 2, 3, 4, Bl-B61, CI-C7, Di-D17. UNIVAC S/N 1-48 except $9,12,16,25,26,42$
IDENTITY: This change has been accomplished if the lenses of the switch lamp assemblies listed in the procedures of this field change bulletin can be unscrewed to allow lamp replacement.

3-CP-642B/USQ-20(V): Computer Reliability Improvement
Correction Material: T-1, NS0967-280-4051 to NS0967-2804050

4-A FA-2 NS0967-280-4070 EIC FRO4K00
SERIAL: A1, C1 thru C7, D1 thru D21, D25 thru D34, D36, D47, D48, and/or UNIVAC serial nos. 1 thru 8, 10, 11,13 thru 15, 17 thru 24, 27 thru 41, 43 thru 76, and 86
IDENTITY: Check for electrical continuity between 6J04-86 and $6 \mathrm{~J} 13 \mathrm{E}-14$. Continuity indicates this field change has not been accomplished.

4-CP-642B/USQ-20(V): Computer Bootstrap Configuration Correction Material: None
2-A FA-1 NS0967-033-1200
5-CP-642B/USQ-20(V): Bootstrap Program I1I Capability
Correction Material: T-1, NS0967-280-4011 to NS0967-2804010; T-1, NS0967-280-4021 to NS0967-280-4020; T-1, NS0967-280-4041 to NS0967-280-4040

1-A FA-8 NS0967-280-4090 EIC QK05099 SERIAL: All serial numbers
IDENTITY: This field change has been accomplished if main memory addresses 00540 through 00577 can be utilized with the STOP switch (SIS) in its 'Lock-Up' position.
6.CP-642B/USQ-20(V): To prevent Noise Pick-up in Pulse Reset Amplifiers

Correction Material: None required
i-A FA-4 NS0967-280-4i00
EIC QK05099
SERIAL: Navy serial numbers B1 through B14, B17, B21, B22, B23, B30, B36, Cl through C7, D1 through D34, D36, D40, D47, UNIVAC Serial numbers 1 through 77, 86 and 87 IDENTITY: Visual inspection of chassis A8 and verifying that twisted pair wire is present in accordance with the wire changes listed under procedure.
7.CP-642B/USQ-20(V): Reduce Amplitude of the Recovery Pulse of the Pulse Reset Amplifiers

## Correction Material: None

1-A FA-4 NS0967-280-4120 ElC QK05099
SERIAL: Navy serial numbers 1 through 4, Bl through B61, Cl through C7, Dl through D79; UNIVAC serial numbers 1 through 125
IDENTITY: Remove bottom cover of chassis A8 and verify that a fixed ceramic dielectric capacior of $820 \mathrm{PF} / 10 \%$, 200 V , with insulation sleeving has been installed between J35G-13 and ground for Navy serials 1 through 4 and between J41F-15 to 340G-01 for all other serials.

8-CP-642B/USQ-20(V): Correct Operation of Master Clock when Operating in Marginal Clock Condition

Correction Material: T- to NS0967-308-6010
2-A FA-I NS0967-280-4130 EIC QKOHOOO

SERIAL: Equipment serial numbers B1 through B61
IDENTITY: Visual inspection of chassis A5 and verifying that no connections are made to card jack E39 pin 12.

9-CP-642B/USQ-20(V): Termination of I/O Cable Shielding Correction Material: None required
2-C YF-20 NS0967-280-4140 EIC QK05099
SERIAL: Equipments used in the Message Processing Distribution System (MPDS)
IDENTITY: This field change has been accomplished if continuity exists between pins 45 and 69 of the I/O jacks ( J i through 533 on top of the computer) and chassis ground, with the I/O cables removed.

10-CP-642B/USQ-20(V): Prevent Corrosion of Power Supply Connections

Correction Material: None required
1-A FA-16 NS0967-280-4150
EIC QK05099 SER1AL: NAVY equipment S/N AI, 2, 3, 4, B1 through B61, CI through C7, D1 through D59. D61 through D64. UNIVAC equipment S/N i through 105
IDENTITY: Presence of a lockwasher inserted between the terminal lug and the hex nut (as shown in Figure 1) on Ll-1, L1-2, L2-1, L2-2, L3-1, L3-2, T1-31, T1-32 and T3-31 of the power supply chassis 1A25 at the bottom of the computer.

11-CP-642B/USQ-20(V): Correct Operation of the Master Clock

Correction Material: None
1-A FA-6 NS0967-280-4160
EIC QK05000
SERIAL: Serial numbers Bl thru B6l
IDENTITY: Scope the master clock using the following test points on chassis 5; TB!5-07(01), TB15-N8(02), TB15-08(03), and TB14-08(04). The master clock should have a cycle time of 680NS /-15NS for normal clock and marginal condition and phase pulse width of $130 \mathrm{NS} /-15 \mathrm{NS}$ for normal clock and 120NS /-15NS for marginal clock. The time between phases should be a minimum of $20 N S$ at the one volt level. Printed circuit module 7002013 should be at ASJ36E and ASJ37G.

12-CP-642B/USQ-20(V): Replace 7104991 Driver Amplifiers
Correction Material: T-\}, NS0967-308-6011 to NS0967-308. 6010

1-A FA-1 NS0967-308-6030
EIC QK05000 SERIAL: Equipment serial numbers A1, 2, 3, 4, Bl thru B61, Cl thru C7, D! thru D123 (UNIVAC S/N 1 thru 182, Sylvania S/N 1 thru 61).
IDENTITY: This change has been installed if the PC card at location J35E of each memory chassis (A9 thru A13) is revision B or later. The revision letter is located on the connector of the PC card following the part number (e.g. 7104991-00B).

13-CP-642B/USQ-20(V): Enable Skip of Repeat Instruction
Correction Material: T-1, NS0967-308-6021 to NS0967-3086020
1.A FA-2 NS0967-308-6040 EIC QK05000 SERIAL: Navy serials I thru 4, Bl thru B61, Cl thru C7, Dl thru D106 and UNIV AC serials I thru 159
IDENTITY: Load the following program into the computer: XXXX0-12700 00020; XXXX1-11500 00001; XXXX2700000100; XXXX3-12000 00000; XXXX4-71700 00020;

XXXX $5.6150000000, \mathrm{XXXX6.61700} 00000$. Set address of first instruction of the above program in the 'P' register. Select STOP switches 5 and 7. Set RUN mode and depress START switch. The lield change has been accomplished if a 7-STOP occurs. A S-STOP indicates this field change has not been ac. complished.
14.CP-642B/USQ-20(V): Computer - Remove Test Points from Outputs of 7002581 PC Cards in Control Memory Correction Material: T- to NS0967-308-6020
4-A FA-3 EIB 861 EIC QK05000

SERIAL: Serial numbers I thru 4, Bi thru B61, Cl thru C7, D1 thru D133 and UNIV AC serial numbers I thru 201 IDENTITY: Visual inspection of chassis A8 and verifying that the test point wires have been removed from test points TB15-I02 thru TBI5-105, TB10-J0I thru TBI0-J08, TB10-106 thru TBIO-108, TBI0-K0I thru TBI0-K08, and TBIQL0I thru TBI0-L07.

15-CP-642B/USQ-20(V): Warning Temperature Shutdown with Battle Short

Correction Material: T-2, NS0967-308-6012 to NS0967-3086010; T-2, NS0967-308-6022 $\frac{10}{}$ NS0967-308-6020

1-A FA-6 NS0967-308-6060 EIC QK05000
SERIAL: All serial numbers
IDENTITY: Presence of wire installed between IA14K3-17 and IA14K I-T3.

16-CP-642B/USQ-20(V): Expanded Addressing Modification
Correction Material: Supplement to NS0967-LP-308-6010 and NSO967.LP-308-6020

I-C YF-216 NS0967-LP-308.6070 EIC QK05000 SERIAL: Equipments as designated by NAVSEC
IDENTITY: This change has been accomplished if the control indicator panel utilizes a memory modification indicator panel replacing the $X$-register and the $D$-register.

17-CP-642B/USQ-20(V): Add Test Point to 40N11 Logic Element in Command Enable Circuits. (ElB 923, 930)

Correction Material: None
2-A FA-I EIB 923, 930
SERIAI: Bi thru B-61, Cl thru C7, D1 thru D131, D133, D134, D138, and D140. (Univac serial numbers 1 thru 198.) IDENTITY: Perform continuity check between A6 TB19-L07 and Card Jack A6 J62F-14 on Logic Chassis A6. Zero ohms indicaies change has been accomplished.

18-CP-642B/USQ-20(V): Real Time Clock Control.
Correction Material: Supplements to NS0967-308-6020, and -6040 will be provided.

1-A FA-8 NS0967-LP-308-6080 EIC QK05 SERIAL: As designated by NAVSEC.
IDENTITY: Verify that card liocations B5, B6, B7, C5, and D34 of chassis A5 contain card types 2070, 2050, 2060, 5520, and 2020, respectively. Functional Check: Verify that each of the RTC push-button indicators (MASTER, SLAVE, AND INTERNAL) on the front panel will light and remain lit when depressed, and the other two are extinquished.
NOTES: Prerequisite Field Change: 16-CP-642B/USQ-20(V).
1-CP-719A/CYK.4(V): Digital Data Computer - Incorporation
of a Bit Position Coding Scheme
Correction Material: T+2, NS0967-436-6035 to NS0967-436. 6030
4.A FA-I NS0967.436-6110

SERIAL: All
IDENTITY: The identification of computers number I and 2 shall be accomplished as follows: (I) Locate logic ' $D$ ' cards in Burroughs Computer Unit Number 6 at rack location AI, row location 100, slot location 20 (All20) and observe new wire from pin 55 to pin 14. (2) In Burroughs Computer Unit Number 7, slot location 21 (A1121), observe new wire from pin 55 to pin 14.

1-CP-789(V)/UYK: Same as 1-CP-789/UYK excep: 2-A FA NS0967.059.5140 EIC FR0B000

2-CP-789(V)/UYK: Installation of Air Balfle Plate

## Correction Material: None

1-A FA-1 NS0967-059-5300
SERIAL: All CP-789(V)/UYK equipments that are under Navy cognizance
IDENTITY: Observe after opening up chassis A2 and extending it fully, that a metal plate is attached to the tight air blower output of blower B-1 and rests upon the top of the upper side of the chassis extender assembly.

3-CP-789(V)/UYK: Incorporation of UNIVAC Field Change
Order (FCO) MPL-698 as a Navy Field Change
Correction Material: None required
2-C YF-8 NS0967.059-5430 EIC QK0C000
SERIAL: Serial numbers B14, B15, B18, B21, B46, B54 and B68
IDENTITY: Observing the 1/O control panel (1AIA3) and verifying that toggle switch, SYNC/ON/OFF, and toggle switch SYNC EXT/INT are installed.
4.CP-789(V)/UYK: Incorporation of UNIVAC Field Change

Order (FCO) MPL-5!3 as a Navy Field Change
Correction Material: None required
2-C YF-200 NS0967-059-5430
EIC QK0C000
IDENTITY: Observing the 1/O control panel (IAIA3) and
verifying that the 18 even numbered output channels (CE
Register) Pushbutton/Indicators are installed.
5-CP-789(V)/UYK: Provide Additional Bootstrap Capability
Correction Material: T-1, NS0967-059-5001 to NS0967.059.
5000; T-1. NS0967-059-5011 to NS0967-059-5010
1-A FA-1.5 NS0967-059-5400 EJC QK0C000 SERIAL: All serial numbers
IDENTITY: On the upper right logic drawer (IA2). observe the two rows of switches at the bottom. The middle switch in the bottom row will be labeled 'AUTO RECOVERY' above the switch and 'AUXILJARY LOAD' below the switch.

1-CP-789/UYK: Computer (UNIVAC 1218); Incorporation of Factory Field Change Orders (MPLs) as a Unit Field Change Correction Material: Included in revised technical manual 2-A FA NS0967-059-5140 EIC FR0A000
SERIAL: As designated in table shown in field change IDENTITY: Visual inspection and testing.

2-CP-789/UYK: Provide a 'COMPUTER RUN' Status Signal for FCS MK74 MOD 4

Correction Material: None
1-A FA.4 NS0967-059-5130
ElC FROA000
SERIAL: A8 and A9 and other serials specifically designated by the Naval Ship Engineering Center where this requirement may subsequently arise
IDENTITY: Presence of a Phillips Advance Relay Type MV2C-120D-11 mounted above 1A5TB2.

1-CP-800/SYQ: Wiring Change to Chassis Mechanical Power Box

Correction Material: T-1, NS0967-291-1011 to NS0967-2911010

4-A FA-1 NS0967-291-1030 EIC QKOJ000
SERIAL: Equipment serial numbers I through 45
IDENTITY: Presence of socket contact installed in pin five position of connector J l.

1-CP-967(V)/UYK: Addition of Protective Cover
Correction Material: T-4, NS0967-312-0024 to NS0967-3120020
2.A FA-i NS0967-312-0150 EIC QKOP000

SERIAL: Serial numbers Al thru A69
IDENTITY: Pull the chassis from the cabinet far enough to verify that a plexiglass cover has been installed covering voltage distribution assembly IA4A4 on the right side of the chassis.

1-CP-967(V)1/UYK: Slow Interface Driver Overvoltage Protection (SIDOP) Circuit

Correction Material: T-1, NS0967-312-0011 to NS0967.312. 0010; T•3, NS0967-312-0023 to NS0967-312-0020
1.A FA-2 NS0967-312-0140

EIC QK06000
SERIAL: Serial numbers Al thru A49 (All other serial numbers were corrected by an identical production change)
IDENTITY: The circuit PWB assembly is mounted on terminals E12 and E14 of the power distribution board (1A4A4).

## 1-CP-967(V)2/UYK: Same as 1-CP-967(V)I/UYK

1-CP-1071/WR: Correction of Shield Terminating Connection to Preclude Potential Hazard Not Affecting Normal Operation Correction Material: None
IV-A FA-4 NS0967-LP-421-9140 EIC
QM4M000
SERIAL: Equipment serials Al thru A26 and A28 thru A55. B1, B2, B4 thru B8, B10, B12, B13, B14, B16 thru B20, B22 thru B31, B33, B35, B37 thru B40, B59, B60
IDENTITY: The modified units can be identified by referring to the retrofit connection configuration of figure 6 B and noting the wires that are connected to pin E6. The wire connections of the modified units should be of the same configuration as that noted in figure 6B.

2-CP-1071/WR: Incorporation of Magnetic Tape Transport Modified Connectors and Processor Guide Pins for Improved Alignment.

Correction Material: T-1, NE0967-LP-421-9034, to TM, NE0967-421-9030 (NAVAIR TM 16-35CP1072-1)
1.A FA. 4 NE0967-LP.421-9220

## EIC QM4M,

QQ4G
SERIAL: CP-1071/WR: Al-A26, A28-A55, BI-B147 and ClC68. CP-1072/AR: Al-A3, A5-A22, BI-B39, CI-C16, 001, 002, GXU-1 and JEX001. RD-350/URC: A1-A154, Bl-B297, Cl-C84, 001, 002, GXU-1 AND JEX001.
IDENTITY: CP-1071/WR and CP-1072/AR: Verify that four guide pins, protruding upward adjacent to the magnetic tape transport mating connectors, have been installed. RD.350/ URC: Verify that a red-lettered caution label has been applied to the top of the unit. Caution label reads, in part, '2. FC 1 -RD-350/URC (CPN 619-6660-001) installed. Use only in processor with four protruding guide pins per FC 2-1071/WR or FC 1.1072/AR.'

1-CP-8979/URT-30: Audible Alarm Mounting Change to the Front Panel

Correction Material: Included in manual
1-A FA-4 NE0967-LP-421-9150 EIC QEIR000 SERIAL: Serial equipment numbers Al thru A4
IDENTITY: Audible location on the power supply panel and nameplate with part number 619-1703-002.

1-CU-255/UR: Elimination of Auto Tuning Feature and Facilitate Manual Tuning; Provide Positive Locking Device for Coupler Tuning Control

$$
\text { 1-A FA-3 NS981062 F5985.542- } 7093
$$

SERIAL: All not requiring auto tuning
IDENTITY: Auto tuning feature eliminated by moving gears 0.713 and 0.714 to a position on the shaft where the autotune doesn't operate.

1-CU-284/UR: Prevention of Coupling Loop Disengagement Correction Material: None
2-A FA-1 NS0967-212-7020 None SERIAL: All
IDENTITY: Presence of a setscrew in the tuned cavity enclo. sure that retains the Connector-Adapter UG-30/U.

1-CU-352/BRR: Replacement of Antenna Loop Selector Switch S•10:

Correction Material: Change 3 to NS92182
2-A FA-12 NS981296 None
SERIAL: All
IDENTITY: Presence of 'WHIP' position on the antenna loop selector switch nameplate.

1-CU-355(X.N-1)/UR: Modification for Use With Radio Set Control

Correction Material: See NS98872
B YF-8 NS98872 None SERIAL: 1-4A
IDENTITY: An-3102A-18-1P replaced $w / J 301$ on sw pan.
1-CU-691/U: Access Holes for RF Power Adjustment
Correction Material: None
2-A FA-2 NS0967-212-7020 None
SERIAL: All
IDENTITY: Four Holes with snap buttonhole plugs located
opposite the control shafts of potentiometers R-110, R-111, R-
112, and R-113
2-CU-691/U: Replacement of Knobs
Correction Material: NS93235A (NS0280-495-4001)
1-A FA-0.5 NS0285-080-0200 F5985-9030300
SERIAL: Al1
IDENTITY: The new knobs have a safety clutch and a fixed spinner.

1-CU-692/U: Same as 1-CU-691/U except
IDENTITY: Two holes with snap buttonhole plugs located opposite the control shafts of potentiometers R-110 and R-111.

2-CU-692/U: Replaces Knobs
Correction Material: NS93243A (NS0280-496-4001)
1-A FA-0.5 NS0285-080-0300
None
SERIAL: All
IDENTITY: The new knobs have a safety clutch and a fixed spinner.

1-CU-737/URC: Change of Connections and Cable Routing to Changeover Relay K-I

Correction Material: T-1 to NS93628
2-A FA-2 NS981478
None
SERIAL: Applies primarily to sublime installations where it is operationally desirable to utilize the associated antenna system for a receiver that may be operated on a frequency other than that of the associated transmitter
IDENTITY: Repositioning of the relay K-1 on the mounting.
2-CU-737/URC: SWR Protector Modification
Correction Material: None required
1-A FA-3 NS0967-214-1030 2N5820-078-
5510
SERIAL: it through 574 approximateiy
IDENTITY: Presence of an indicator light and reset button installed on front panel and labelled XMT ANT ALARM and XMT ANT RESET.

3-CU-737/URC: Modification to VSWR Protection Device Correction Material: T-1, NS0967-214-1011
2-A FA-1 NS0967-214-1040 None
SERIAL: All installed on submarines
IDENTITY: Presence of a transmitter antenna alarm light and a transmitter antenna reset switch on the front of the CU-737/ URC.

1-CU-872A/U: Failure Rate Reduction of Rectifiers CR1 thru CR4

Correction Material: T-2, NS0967-214-0012 to TM, NS0967-2 14-0010 (formerly NS94490)

2-A FA-2 NS0967-214-1040 None
SERIAL: All
IDENTITY: Proper recording of the appropriate field change number on Field Change Record Plate.

2-CU.872A/U: Wising Circuit Changes
Correction Material: None
2-A FA-2 NS0967-214-1040

SERIAL: All
IDENTITY: Proper recording of the appropriate field change number on Field Change Record Plate.

3-CU-872A/U: Meter M-1, Failure Rate Reduction
Correction Material: T-3, NS0967-214-0013 to NS0967-2140010

2-A FA-0.5 NS0967-214-0030
SERIAL: All
IDENYITY: Field change number on the field change record observing that shielded wire is connected to meter terminal M-1.

4-CU-872A/U: Antenna Coupler Noise Level Reduction
Correction Material: T-3, NS0967-214-0013 to NS0967-2140010

2-A FA-1 NS0967-214-0030
SER1AL: All
IDENTITY: Field Change Record card or an observation to confirm that star type lockwashers were utilized in securing the component mounting sockets, grounding lugs or other grounding points to the chassis.

5-CU-872A/U: Meter M-1, Failure Rate Reduction
Correction Material: T-3, NS0967-214-0013 to NS0967-2140010

2-A FA•0.5 NS0967-214-0030
SERIAL: All
IDENTITY: Field change number on the Field Change Record card and observing that there is a capacitor across the terminals of meter M-1.

1-CU-937/UR: Pressurization of Antenna Coupler CU-937/UR Correction Material: T-1, NS0967-287-5011 to TM. NS0967-287-5010, T-9, NS0967-971-0120 to TM, NS0967-9710010

1-A FA-2 NS0967-971-0130 EIC FD230* SERIAL: All equipments
IDENTITY: Presence of pressure gauge on front panel of CU-937/UR.

2-CU-937/UR: Installation of Pressure Relief Valve.
Correction Material: Chg. 3, NE0967-LP-971-0126, to TM, NS0967-971-0010, and T-3, NE0967-LP-287-5014, to TM, NS0967-287-5010.

1-A FA-1 NE0967-LP-971-0230
EIC Q93Y SERIAL: All serial numbers
IDENTITY: Venfy installation of a pressure relief valve on the front panel.
NOTES: Prerequisite Field Change: 1-CU-937/UR.

1-CU-1169/SRC-16: Leadscrew Clamp and Switch Ac ator Modification. (EIB 854, 865, 918)

Correction Material: Will be done by installing team after completion of modifications

1-A FA-2 NS0967-LP-304-3200 EIC Q94Le00 SERIAL: All equipments under Contract NObsr-95244
IDENTIYY: Refer to Collins Factory Modification Bulletin \#32: Remove the two RF circuit assemblies in accordance with Technical Manual for AN/SRA-34A(V), (NAVSHIPS 0967-304-3010, Chapter C, Paragraph 5-4.1.) Remove dust
cover and locate switches S8 and S9. Observe that the actuator arrns are steel springs in lieu of aluminum.
1.CU-I382A/FRR: Cancelled

## 1-CU-1382B/ERR: Cancelled

1-CU-1396/BRA-16: EMI/EMC Reduction in CU-1396/BRA16.

Correction Material: Change to TM, NS0967-064-7010.
1-A FA-8 SE110.AL-FCB-010
EIC Q96J SERIAL: All serial numbers.
IDENTITY: Verify that an insulated standoff has been installed at IA IJ47. Previously, there was no standoff.
NOTES: Prerequisite Change: ShipAlt SSBN 1612 R1.
1-CU-1441/BRR: Replaces Navigation Module and Adds Connector Housing

1-C FA-36 NS0967-2:5-4050 EIC FD73000
SERIAL: Equipment serial numbers 1 through 79. All other sets corrected by an identical production change
IDENTITY: The new navigation module has two connectors on the rear (not one) and contains seven printed circuit cards (not three). The multicoupler has an added connector housing on the rear connector panel.

2-CU.1441/BRR: Replaces Low Noise Loop Amplifiers Correction Material: Included in technical manual
1-A FA-2 NS0967-215.4060
EIC Q943000
SERIAL: I through 79
IDENTITY: New low noise loop amplifiers are identical and have both a transformer and filter assembly mounted between the printed circuit card and back plate. The old amplifiers have only a transformer assembly.

3-CU-1441/BRR: Replaces Floater Assembly, Unit IA1 and Modifies Navigation Assembiy, Unit 1A5

Correction Material: To be supplied
1-A FA-3 NS0967-215-4070
EIC Q943000
SERIAL: Serial numbers I through 123
IDENTITY: The new floater module has a front panel meter whereas the original equipment floater module does not.

1-CU-1441A/BRR: Modify Floater Assembly, Unit 1 AI.
Correction Material: Change 3, NS0967-LP-215-4013, to TM, NS0967-LP-215.4010
1.A FA-10 NS0967-LP-215-4080

SERIAL: Serial numbers 1 thru 134.
IDENTITY: Installation of a surge protection circuit board in the rear below the chassis and installation of back-to-back capacitor assemblies below the chassis and on PC-2 and PC-S circuit boards of the Floater Module.
NOTES: See EIB 945 for changes to the FCB prerequisite Field Change: 3-CU-1441/BRR, which converts equipment to CU-1441A/BRR.

1-CU-1559/SRC: Panel Meter and Test Cable Modifications
Correction Material: Ch. 1, NE0967-238-0011 to NE0967. 238-0010; Ch. I, NE0967-238-0021 to NE0967-238-0020; Ch. I, NE0967-238-0031 to NE0967-238-0030; Ch. I, NE0967-2380051 to NE0967-238-0050

## 1-A FA-6 NS0967-238-0060

SERIAL: All serial numbers
IDENTITY: Identification plate marked with field change number on units A1, CY-6240/SRC and A2 thru AS, FR-173/ SRC.

1-CU-2065/BRR: Coupler Modifications
Correction Material: Ch. 1, NS0967-LP-484-3011 to NS0967-LP-484-3010

1-A FA-10 NS0967-LP.484-3020 EIC Q953000
SERIAL: Serial numbers 1 thru 47
IDENTITY: The modified coupler has an isolation transformer on the left outside of the case; a surge protection board inside the case on the right; and back-to-back capacitor assembties below the chassis and on PC-2 circuit board.

2-CU-2065/BRR: EMI/EMC Reduction in CU-2065/BRR Coupler.

## Correction Material: Change to TM, NS0967-484-3010

1-A FA-2 SEI 10-AK-FCB-010 EIC Q953
SERIAL: All serial numbers
IDENTITY: Verify that a black nylon insulator has been installed at Jl. Previously, there was no standoff.
NOTES: Prerequisite Changes: Field Change l-CU-2065/BRR and ShipAlt SSBN 1612 R1.

1-CV-172A, TJ: Modification of Frequency Shift Converter CV-172A/U to Accommodate 60/120 RPM Operation of Associated Facsimile Equipment (Modifies equipment to CV1066/UX)

Correction Material: T-2 to NS91628
1-A FA-2 NS981510
F5815-973.
0135
SERIAL: All modified to accommodate $60 / 120 \mathrm{rpm}$ facsimile equipment for 60 to 120 rpm operation
IDENTITY: The modified equipment has a label affixed to the front panel, upper right-hand corner stating that equipment has been modified to CV-1066/UX for 60 or 120 rpm oper. ation.

1-CV-591/URR: Installation of a Protective Cover Over Screw Termina! 10 on TBE-1

Correction Material: None
2-A FA-I NS0967.051-2050 None SERIAL: All
IDENTITY: Nylon cable strap covering screw terminal 10 on TBE-j on the outside rear apron on chassis.

2-CV-591/URR: Single Side Band Convertor - Replacement of a Primary Power Cable and Connectors

Correction Material: NS93112
2-A FA-1 NS0967-051-2050 None
SERIAL: All
IDENTITY: Presence of a MS series, 3 pin connectors for the power cable.

1-CV-591A/URR: Addition of Output Load Resistor Correction Material: T-1 to NS932:0
2-A FA-0.5 NS0967-051-2020
None
SERIAL: All

IDENTITY: Presence of a 2 -watt 2000 -ohm resistor connected across terminals 5 and 6 on the inside of terminal strip E-I.

2-CV-591A/URR: Same as 1-CV-591/URR

3-CV-591A/URR: Power Connection Modification
Correction Material: T.4, NS0967-051-2014 to TM, NS0967-051-2010 (formerly NS93210)

2-A FA-1 NS0967-051-2050 None
SERIAL: 1 through 20854
IDENTITY: Pins A and C of J2 and P2 being connected to 115 V AC with Pin B of J2 and P2 connected to ground.

4-CV.591A/URR: Elimination of Undesirable Side-Band Switching

Correction Material: T.4, NS0967-051-2014 to TM, NS0967.051-2010 (formerly NS93210)

2-A FA-1 NS0967-051-2050 None
SERIAL: All
IDENTITY: Noting that momentary removal of power does not cause side band switching.

5-CV-591A/URR: Reduction of Heat and Power Supply Failures

Correction Material: T-2 to NS93210 (NS0967-051-2012)
1-A FA-2 NS0967-051-2060 2N5821-930.
3415
SERIAL: All
IDENTITY: Presence of a $1 N 2389$ Silicone Rectifier in V10 Socket. Also tubes V8 (6J6) and V9 (I2AU7) have been removed from sockets.

6-CV-591A/URR: Reduction of 17 KC Feed-Thru
Correction Material: T-3 to NS0967-051-2013
1-A FA-1 NS0967-05!-2070 2N5820.937.
0142
SERIAL: AlI shipboard installed equipments
IDENTITY: Presence of Choke L3 mounted on underside of chassis between R60 and Socket XV5.

1-CV-760/(XN-1): Cancelled
2-CV-760/(XN-1): Cancelled
3-CV.760/(XN.2): To be Provided
2-CV-760/(XN-2): Cancelled

1-CV-760/SS: Incorporation of Factory Field Change Service Orders as a Unit Field Change

Correction Material: Incorporated in revised publication
2-A FA-1 NS0967-104-6030
SERIAL: 1 and 2 and A1 through A4
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-CV-760/SS: Signal Data Converter (Video Processor) - Correction of Wiring Errors

Correction Material: None
2-A FA-2 NS0967-104.6030
None
SERIAL.: Al through A6

IDENTITY: Visual inspection of the Panel-Control Indicator, chassis A2A1A2, and determine if a wire exists between A2. B16 and A2-B17. Secondly with the CV-760/SS in operation, place the $A N / S P S-12$ radar outer range switch to 64 miles and the AN/SPS-37A radar inner range switch to 32 miles. Check the output of 07S5! (319-D.11) with an oscilloscope to determine: if the output is a ' $!^{‘}$ at 32 miles and remains so until the 32 mile overlap is complete. At 64 miles the output returns to a '0' (zero volts).

## 3-CV-760/SS: Video Processor Logic Chassis Change

Correrition Material: T.1. NS0967-104-6012 to TM, NS0967-104-6010 (NS4099)

2-A FA. 4 NS0967-104-6030 None SERIAL: All equips where AN/SPS-43, 43A, AN/SPS.37, 37A, or AN/SPS-37A/SPA-63 Radar Set are installed as part of NTDS configuration
IDENTIIY: Check for continuity between 5TB-3-16 and JSD28-9.

4-CV-760/Ss: Signal Data Converter (Video Processor) - Duplexer Rellease Remote Modification

## Correction Material: T- to NS94099

2.A FA-2 NS

None
SERIAL: 1, 2, Al through Al6
IDENTIYY: Removing the circuit cards located at J5A5 and JSA2. Test for continuity from J5A5-10 to JSA29. If continuity exists this change has not been accomplished.

5-CV-760/SS: Signal Data Converter (Video Processor) Remove Voltage from Unused Data Lines
Correction Material: T- to NS94099
2-A FA-2 NS

SERIAL: 1, 2, AI through A 16 used in the NTDS
IDENTITY: Checking the Video Processor Output Channel Iacks A3J. 4 for Computer A and A3J5 for Computer B. With the Video Processor Power on. no voltage will be present on pins 31, 3:2,47, 71, and 72. Prior to this field change, these unused data lines were tied to -15 VDC.

6-CV-760/isS: Signal Data Converter (Video Processor) Oscilloscope External Trigger Input
Correcrion Material: None

## 2-A FA-2 EIB 754

EIC FU02000
SERIAL: Equipments seriais 1,2 , and Al through A ll
IDENTITY: Visually checking for a jumper wire between S14C-10 and S14C-1l of the Panel Scope Input switch. The presence of a jumper wire indicates this field change has been accomplishied.

7-CV-760/: is: Signal Data Converter; Proper Operation of Memory Test Functions

Correction Material: T-2, NS0967-104-6023 io NS0967-1046020 (Vol. II)

2-A FA-4 NS0967-104-6060
EIC FU02000
SERIAL: $1 /, 2$, and A1 through A17
IDENTIT'Y: Checking continuity between card jack SA22 pin 15 and test point 5TB1F2.

1-CV-1056/SYA-1(V): Analog to Digital Converter. Incorpo-
ration of Factory Field Bulletins as a Unit Field Change
Correction Material: Incorporated in the sevised publication

2-A NA NS0967-959-1020 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-CV-1056/SYA-1(V): Modification of Range Mark Generator Correction Material: T- to NS93737(A)
2-A FA-1 NS0967-959-4040
SERIAL: All
IDENTITY: Noting that R15 on the Range Mark Generator printed circuit card P/N 577491 is 820 ohms resistor.

1-CV-1057/SYA-1(V): Incorporation of Factory Field Change Bulletins as a Unit Field Change Correction Material: None
2-A NA NS0967-959-1020 None
SERIAL: All serials with 'A' prefix
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-CV-1057/SYA-1(V): Same as 2-CV-1056/SYA-1(V)
1-CV-1123/USQ-20(V): Converter, Digital Data (Keyset Central) - Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: None
2-A FA NS0967-076-4050
SERIAL: 1 through 6 and Al through As
2-CV-1123/USQ-20(V): Overtemperature Alarm Audible Activation Capability
2-A FA-1 NS0967-076-4050 None

SERIAL: I through 8 and Al through A18
IDENTITY: Appropriate marking on the Field Change Accomplished plate.

3-CV-1123/USQ-20(V): Converter, Digital Data (Keyset Central)

Correction Material: None
2-A FA-I NS0967-076-4050 None
SERIAL: AI through A 14
IDENTITY: Visual inspection in the converter drawer Al2 at the Ratio Angle Tie in Logic Assembly at location A32. This card will bear an ' $A$ ' Suffix on the Sperry part number, and diodes will be present at CR-85 and CR-86.

3a-CV-1123/USQ-20(V): Converter, Digital Data (Keyset Central)

Correction Material: T-2, NS0967-076-4011 to TM, NS0967-076-4010 (formerly NS94105)

2-A FA-I NS0967-076.4050 None SERIAL: 1 through 8
IDENTITY: Visual inspection in the converter drawer Al2 at location A32 on the Ratio Angle Tie-in Assembly, there will be a diode between $\mathrm{P} 1-12$ and P2-15 and another diode between P1-13 and P2-15, if this change has been accomplished.

4-CV-1123/USQ-20(V): Digital Data Converter (Keyset Cen-
tral)
Correction Material: None 2-A NS0967-076-4050

None
SERIAL: 1 through 8 and AI through A20
IDENTITY: Inspection of the field change record plate for this field change number, also by inspection of the wiring on chassis A2AIA2 jacks A6, A7, A8, A9, pins 10 and 11 and/or chassis A2AIAI jacks C-15, C-17, E-15, E-17.

5-CV-1123/USQ-20(V): Kit to Expand Radar Input to 30 BITS Correction Material: T-1 to NS94093(A) (NS0967-0764011)

## 1-A FA-12 NS0967-076-4070

SERIAL: Ser 1 through 8 and Al through A34
IDENTITY: Visual inspection of chassis AlA!AI and determine if circuit jacks J25G through J30G, and J17F, J18F contain circuit modules.

6-CV-1123/USQ-20(V): Plug-in Module Color Code Correction Material: T-6, NS0967-284-2015
1.A FA-12 NS0967-076-4080

EIC FR04000
SERIAL: Multiplexer and Analog to Digital Converter part of CV-1123/USQ-20(V), all serial numbers
IDENTITY: Presence of color coded modules in the Multiplexer and Analog to Digital Converter.

7-CV-1123/USQ-20(V): Provide Reference for the AN/UYM-2 Test Set

Correction Material: T-4, NS0967-076-4014 to NS0967-0764010

1-A FA-3 NS0967-076-4090 EIC QK0508A
SERIAL: All serial numbers
IDENTITY: A three contact male connector will be located at the lower right cover of the multiplexer drawer (Chassis A2A2).

8-CV-1123/USQ-20(V): 'Danger High Voltage' Waming
Correction Materal: None requised
1-A FA-2 NS0967-076-4100 EIC QM13000
SERIAL: All serial numbers
IDENTITY: A Red and White 'DANGER HIGH VOLTAGE' decal on the metal cap of $37, \mathrm{~J}$, and 39 on the left side of the power supply drawer A2A2.

1-CV-1158/USQ-20(V): Digita! to Digital Converter (USC-2 Link Adapter) Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: None
2-A NA NS0967-998-9020 None
SERIAL: I through 6
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-CV-1320/SYA-4(V): Analog to Digital Converter - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in revised Technical Manual

2-A NA NS0967-959-1020 None SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-CV-1320/SYA-4(V): Improved Grounding Method in RAC's Reduces Sweep Disturbance

Correction Material: T. to NS94634(A)
2-A FA.0.5 NS0967-959-3020
SERIAL: Al through A 12
IDENTITY: Field change number stamped on Field Change Accomplished plate.

3-CV-1320/SYA-4(V): Modification to Prevent Erratic Sweeps Correction Material: None
1-A FA.5 NS0967-959-3030 EIC DQ02800
SERIAL: Al through Al2
IDENTITY: Noting on 10MC counter flip-flop cards that capacitor $\mathrm{C} 2, \mathrm{C} 8, \mathrm{Cl4}, \mathrm{C} 20$, and C 26 have been removed and transistor $\mathrm{Q} 1, \mathrm{Q} 5, \mathrm{Q} 9, \mathrm{Q} 13$, and Q 17 have been changed to 2N964 type transistors.

4-CV-1320/SYA-4(V): Modification to Prevent Spoking of Sweeps

Correction Material: T-4, NS0967-183-4027 to TM, NS0967-183-4020

1-A FA-3 NS0967.959.3040 EIC DQ02700
SERIAL: Al through A 12
IDENTITY: Noting that AN/SYA-4(V) Data Display Equipment is utilizing cards of the new design 580684.j10 and 580695-110 in the slots that previously required the 580684-100 and 580695-100.

5-CV-1320/SYA-4(V): Improved Frequency Response of 580695-110 P.C

Correction Material: T-7, NS0967-183-4101 to NS0967-1834020

1-A FA-0.5 NS0967-959-3050 EIC P804900
SERIAL: Equipment numbers Al through A 12
lDENTITY: Noting on the counterclock regenerator card, 580695-110, that CR24, a 1 N 3063 diode was replaced by a 100 PF capacitor and a 1 N 3063 diode is now in parallel with R2.

1-CV-1321/SYA-4(V): Analog to Digital Converter - Incorporation of Factory Field Change Bulletins as a Unit Change Correction Material: Incorporated in revised publications
2-A NA NS0967-959-1020 None
SERIAL: A1 through A39
IDENTITY: Change number stamped on the Field Change
Accomplished plate.
2-CV-1321/SYA-4(V): Same as 2-CV-1320/SYA-4(V) excep: Correction Material: T- to NS94633(A) and
SERIAL: A1 through A82
3-CV-1321/SYA-4(V): Replaces Coarse Control Cam in the Servo Gear Train Assembly

Correction Material: None
1-A FA-2 NS0967-182-0013
SERIAL: All
IDENTITY: This field change can be identified by measuring the cam width: Should be 3/16* thick Vice $1 / 8^{\circ}$

4-CV-1321/SYA-4(V): Same as 2-CV-1979/SYA-4(V) except
1-A FA-2 NS0967-046-1030 EIC DQ02800

5-CV-1321/SYA-4(V): Same as 3.CV-1 320/SYA-4(V) except

## 1-A FA-5 NS0967-959-3030 EIC DQ02900

SERIAlL: Al through A82

6-CV-1321/SYA-4(V): Same as 4-CV-1320/SYA-4(V) except 1-A FA.3 NS0967-959-3040

EIC DQ02800
SERIAIL: A1 and A82
7-CV-1321/SYA-4(V): Same as 5.CV-1320/SYA-4(V) except 1-A FA-0.5 NS0967-959-3050 EIC P804A00
SERIAL: Al through A82

8-CV-1321/SYA-4(V): Removal of Circuit Breaker CB-1
Correction Material: T-2, NS0967-182-0015 to NS0967-182. 0010

2-A FA-1.0 NS0967-959-3060 EIC P80K000
SERIAL: All serial numbers
IDENTITY: Noting absence of CB-1 in the synchro-to-digital convertcr (575528).

9-CV-1321/SYA-4(V): Advance Assignment
10-CV-1.321/SYA-4(V): ASMD Servo Modification ( 60 Hz ) and Addition of North Crossing Reset and Self Test Capability

Correction Material: Supplemental Technical Manual
I-A FA-24 NS0967-182-0040 EIC P804000
SERIAL: Equipments selected by NAVSEC 6175D02
IDENT:ITY: Pull out the cardbox drawer and observe the installation of servo assembly 361035.001 in card slot J13 of area A1. For location of the 361035.011 assembly, refer to the card location on the top, main drawer guide.

11-CV-1.321/SYA-4(V): Solid State Servo Conversion
Corrisction Material: To be supplied
1-A FA-1 NS0967-LP-182-0070
SERIAL: All serial numbers
IDENTIITY: Check to see that the servo assembly is a 361289 . 011

1-CV-15:19/SRC-16(U): FSK Polarity Reversal
Correction Material: T-1, NS0967-086-3024 to NS0967-0863020; T-6, NS0967-086-3069 to NS0967-086-3060; T-2, NS0967-086-3202 to NS0967-086-3200

I-A FA. 4 NS0967-086-3320 EIC QD3J000 SERIAL: Serials A-1 thru A17, B1 and B2 (AN/SRC-16(U)); serials A-1 thru A-6, B1 and B2 (AN/SRC-16A)
IDENTIITY: Loosen the four thumb screws at the corners on the front panel of converter-indicator. Press the thumb releases located near the top of each handle, and pull the unit straight out of the control cabinet to the stops where the slide rails will lock. Observe that the transistor inverter circuit board has been installed left of the (CRT) $\mathrm{V}_{1}$.

1-CV-15 $45 /$ SYA-4(V): Digital To Digital Converter; Standardization of

Correction Material: None
2-A FA.3 NS0967-959-1020 None
SERIAL: Al through A8
IDENTITY: Presence of card assembly 581364 in A2. slot 31
of the affected equipment and caxd number '581364' indicated on the Card Replacement Chart.

2-CV-1545/SYA-4(V): Data Display Group - Changes required for proper operation with Radar Set AN/SPS-48

1-A FA-40 NS0285-081-1100
SERIAL: A2 through A9
IDENYITY: On Height Size, Check J44 in deflection control unit in A38. If it contains a blocked nip-flip assembly (the Nos. 590600), this field change has been previously accomplished.

3-CV-1545/SYA-4(V): Improved Grounding Method in RCA's Correction Material: T-2, NS0967-138-2011
2.A FA-0.5 NS0967-138-2080

SERIAL: Al through A9
IDENTITY: Checking for the presence of black jumpers from 40 to 42 on slots 48 and 49 of the 575519 box (A2).

4-CV-1545/SYA-4(V): Correct Fluctuating Digital Theta Due to Roll and Pitch

Correction Material: Change I to NS95748 (HAC P/N 575550-901)

## 1-A FA. 16 NS0967-138-2070

SERIAL: A I through A9
IDENTITY: Prior accomplishment of this change may be identified by visual inspection of the Al unit for the presence of the toggle switch marked with NORMAL and HORIZON positions located in the upper center portion of the front panel, presence of digital cards in siots 47 through 51, and a modification decal or marking adjacent to the Al unit serial number indicating installation of HAC FB 122.

5-CV-1545/SYA-4(V): Provide Additional Output Jacks for 'Two KCMX' Type Installations

Correction Material: T-3, NS0967-138-2012 to TM, NS096?-138.2010

1-A FA NS0967-138-2090
SERIAL: CI and C2
IDENTITY: Inspecting AS connector housing for the presence of Connectors JIA, J7A, and J8A are electrically in parallel with connectors $\mathrm{J}, \mathrm{J} 7$, and J . If these connectors have been added, this change has been accomplished.

6-CV-1545/SYA-4(V): Same as 3.CV-1320/SYA-4(V) except 1-A FA-5 NS0967-959-3030 EIC DQ02F00
SERIAL: AI through A9
7-CV-1545/SYA-4(V): Same as 4-CV.1320/SYA-4(V) except 1.A FA-3 NS0967.959-3040 EIC DQ02090
SERIAL: AI through A9
8-CV-1545/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except 1-A FA-0.5 NS0967-959-3050

EIC P804G00
SERIAL: Al through A9
1-CV-1979/SY A-4(V): Replaces Coarse Control Cam in the Servo Gear Train Assembly Correction Material: None
1-A FA-2 NS0967-046-1020 None SERIAL: All

IDENTITY: This field change can be identified by measuring the cam width: Should be $3 / 16^{\circ}$ thick vice $1 / 8^{\circ}$.

2-CV-1979/SYA.4(V): Modification of Switch (SI) Actuator Correction Material: None
1.A FA.2 NS0967-046-1030

EIC DQ02M00
SERIAL: All equipments
IDENTITY: Presence of a hard nylon rolier on the switch actuator.

3-CV-1979/SYA-4(V): Same as 3-CV-1320/SYA-4(V) except<br>1-A FA-0.S NS0967-959-3030<br>EIC<br>DQ02M00

SERIAL: Al through A3
4-CV-1979/SYA-4(V): Same as 4.CV-1320/SYA-4(V) except
1-A FA-3 NS0967-959-3040
EIC DQ02000

SERIAL: A1 through A3
5-CV-1979/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except
1-A FA-0.5 NS0967-959-3050 EIC P804N00
SERIAL: Al through A3
1-CV-1980A/USQ-20(V): Blower Motor and Air Filter Assembly Installation

1-A FA-2 NS0967-306.9060 EIC FRO4000 SERIAL: All serials
IDENTITY: A blower motor, గiler assembly and housing is located on the left rear of the converter top cover.

2-CV-1980A/USQ-20(V): Capacitor Addition to Scott 'T' Transformer

## 1-A FA-2 NS0967-306-9070 EIC FR04000

SERIAL: All equipments
IDENTITY: Capacitors C5, C6, C7, and C8 are mounted on a board in the front, right hand comer of the converter.

1-CV-1980B/USQ-20(V): Blower Motor and Filter Assembly Installation

> Correction Matenial: None required

1-A FA-3 NS0967-306-7060
ded 01-69
SERIAL: All serials
IDENTITY: A metal housing containing a fitter and fan is mounted on top of the converter cabinet.

2-CV-1980B/USQ-20KV): Digital to Analog Converter Logic Board Resistor Change

Correction Material: Included in technical manual
1.A FA-0.5 EIB 735

EIC FR04000
SERIAL: All serials
IDENTITY: Noting a 3.3 K ohm resistor in place of a 15 K -hm resistor in the R23 position of logic board \#2.

3-CV-1980B/USQ-20(V): Ribbon Cable Psotector Installation Correction Material: None
1.A FA-2 NS0967.306-7080

EIC FR04000
SERIAL: All
IDENTITY: A teflon bar is mounted on heat radiating fins of power supply number 1 .

## 4-CV-1980B/USQ-20(V): Switch Card, Current Limiting

Correction Material: None
1-A FA-2 NS0967-306-7090 EIC FR04000
SERIAL: All serial numbers
IDENTITY: A fuse is installed on circuit card No. 101-1466-1 between the collector of Q-8 and the circurt board as shown in figure 1-C.

5-CV-1980B/USQ-20(V): Power Supply Cover Modification Correction Material: None
1-A FA-5 NS0967-306-7100 EIC QK05000
IDENTITY: Lower portion of perforated cover is held by spring clips instead of screws.

1-CV-2019/UYA-1(V): Improvement of Coarse Control CAM

## Correction Material: None

I-A FA-2.5 NS0967-078-7400
SERIAL: All serial numbers
IDENTITY: CV-2019/UYA-1(V) - This field change can be identified by removing the Servo Gear Train Assembly, 104437, from area AI of the converter and measuring the coarse control cam width which should be $3 / 16$ inch vice $1 / 8$ inch and by noting a hard nylon roller on the microswitch actuator. For location of the servo gear train assembly, refer to the assembly location diagram on page 3.98 of NAVSHIPS 0967-078-7140. For location of the cam and switch actuator, refer to figures 1 and 2.

2-CV-2019/UYA-1(V): ASMD Servo Modification ( 400 Hz ) and Addition of North Crossing Reset and Self Test Capability

Correction Material: Supplement Technical Manual NAVSEA 0967-LP-078-7440

I-A FA-16 NS0967-LP-078-7450 EIC QM05000 SERIAL: Equipments selecied by NAVSEC 6175D02
IDENTITY: Pull out the cardbox drawer and observe the installation of serve assembly 361035-021 in card slot J13 of area A1. For location of the 361035-021 assembly, refer to the card location decal on the top main drawer guide.

3-CV-2019/UYA-1(V): Same as 11-CV-1321/SYA-4(V) except SERIAL: All serials

1-CV-2036(V)/USQ-20(V): Digital Data Converter (KCMX); Change Orders (MPLs) as a Unit Field Change Correction Material: Included in revised publication.
4-A FA-1 NS0967-051-5200 EIC FR04N00
SERIAL: Al through A18
IDENTITY: Visual inspection, testing, and/or record of accomplishment

2-CV-2036(V)/USQ-20(V): Increase Digital Output Channel 4 (Doc-4) Time Out Delay

Correction Material: T-1, NS0967-051-5131 to NS0967.051. 5130; T-2, NS0967-051-5112 to NS0967-051-5130

1-A FA-I NS0967-051-5160
SERIAL: A-10, A-12 and other equipments as designated by NAVSEC
IDENTITY: Presence of 710-4860 card as replacement for $710-4850$ card in location 35A1A2034 of chassis 2.
3.CV-20136(V)/USQ-20(V): Digita! Data Converter (KCMX); Incorporation of Factory Field Orders (FCO/MPLs) as Field Changers

Correction Material: None Required
Il-A FA-19 NS0967-051-5310
EIC QK0509C
SERIALL: Equipments Al through A38
IDENTITY: Overtemp Sensor (A6S3) has only one (1) wire on each pin.

## 4-CV-2036(V)/USQ-20(V): Correct Fuse Wiring

Correction Material: None required
IV-A FA-1 NS0967-051-5320
EIC QK05000
SERIAIL: Serial numbers Al thru A80, A91, B1 thru B13
IDENTITY: Open the power supply drawer PSI at the bottom of the unit. Locate fuseholder PSIXF1 (left front), remove fuse and replace cap. With a voltmeter measure from the fuseholder cap to chassis ground. No voltage reading indicates this change has been accomplished. Approximately 20 volts will be indicated if the change has not been accomplished.

5-CV-2036(V)/USQ-20(V): AN/UYM-2 Analog/Digital Converter T'est Set Interface

Correction Material: T•3, NS0967-051-5115 to NS0967-051. 5110; T-2, NS0967-051-5124 to NS0967-051-5120; T.2, NS0967.051-5134 to NS0967.051-5130

1-A FA-20 NS0967-051.5350 E1C QM17000 SERIALL: All serial numbers
IDENTITY: Note that a three-contact connector and a sixcontact connector are mounted on the front panel in the upper right quadrant of the Multiplexer-Converter Assembly A4.

6-CV-2036(V)/USQ-20(V): Prevent DlC Intesrupt from Merging with. DIC Data

Correction Material: Changes to TM, NS0967-LP.051-5130 and TM. NS0967-LP-577-0030 required.

1-A FA-2 NS0967-051-5360 EIC QK05000 SERIA1_: CV-2036(V): A1-A81, A91. CV-3253(V): Al-A25.
IDENTITY: Electrical continuity exists between the follow. ing poinits on chassis 3 (A2AI): J34F-06-J32B-11; J32B-11 -J31A-15; J32B-15 - J33B-10; J33B-15 - J31B-09; TB01-F18 -J32B-15.
NOTES: FCB ded 15 March 77 supersedes FCB dtd 20 May 73.

7-CV-2036(V)/USQ-20(V): Improve EIC/EOC \{nterrupt Stability

Correction Material: None required
1-A FA-2 NS0967-051-5370 ElC QK05000 SERIAl_: CV-2036(V): A1-A74. CV-3253(V): Ai-A5.
IDENTITY: The following two wises present in chassis 6(A3A2): FROM J25A-10-2 TO J23A-06-2; FROM J23A-12-2 TOJ11A-12-2.
NOTES: FCB dtd 15 March 77 supersedes FCB did 25 April 73.

8-CV-2036(V)/USQ-20(V): DIC/DOC-Time-Out Delay Changes.

Correction Material: Included in Technical Manual
1-A FA-1 NS0967.051-5380 ElC QR05000

SERIAL: CV-2036(V) and CV-3253(V): Serial numbers designated by NAVSEC.
IDENTITY: Presence of a time-out delay printed circuit card, other than a UNIVAC P/N 7104850, in one or more of the sixteen (16) DIC/DOC delay circuits, at the chassis locations listed under Procedure Step 2 of the FC Bulletin.
NOTES: FCB dtd 15 March 77 supersedes FCB dtd 24
August 73.
9-CV-2036(V)/USQ-20(V): Correct Test Point Wiring Correction Material: None required.
1-A FA-1 NS0967-051-5390
EIC QK05000
SERIAL: CV-2036(V): Al-A78. CV-3253(V): Al-Al7.
IDENTITY: Presence of a wire between TB02-E32-1 and J12G-07-1 of chassis A3A1(5).
NOTES: FCB dtd 15 March 77 supersedes FCB dtd 25 May 73.

10-CV-2036(V)/USQ-20(V): Change to Slow-Blow Fuses Correction Material: None
1-A FA-I NS0967-051-5400 EIC QK05000
SERIAL: Serial numbers AI thru A61 and A67
IDENTITY: Fuses F5, F6, F7 in power supply PSI are changed from normal blow to slo-blow.

11-CV-2036(V)/USQ-20(V): Prevent Noise Induced Enables
Correction Material: Changes to TM, NS0967-LP-051-5120 and TM, NS0967-LP-577-0020, required.

1-A FA-1 NS0967-051-5410
EIC QK05000
SERIAL: CV-2036(V): Al-A59. CV-3253(V): A1-A4.
IDENTITY: In A IA2 (chassis 2), verify installation of jumper wire between pins 5 and 6 at card locations J31B and J32B. In A3A2, verify installation of a 40 uF capacitor (C2) between pins 15 and 19. In A3A2, verify that resistor R14 has been changed from 33 ohms to 470 ohms.
NOTES: FCB dtd 15 March 77 supersedes FCB dtd 26 June 73.

1-CV-2095(V)/UYA-4(V): Same as 5-OA-7979(V)/UYA-4(V) except
SERIAL: CV-2095(V)1/UYA-4(V) - A1, BI, and D1; CV-2095(V)2/UYA-4(V) - A1; CV-2095(V)3/UYA-4(V); CV-2095(V)4/UYA-4(V) - Al thru A3; CV-2095(V)5/UYA-4(V) A1, B1, and B3; CV-2095(V)6/UYA-4(V) - B1

2-CV-2095(V)/UYA-4(V): Same as 6-®A-7979(V)/UYA-4(V) except
SER1AL: CV-2095(V)]/UYA-4(V) - Al and Bl; CV. 2095(V)2/UYA-4(V) - A1; CV-2095(V)3/UYA-4(V) - A1; CV-2095(V)4/UYA-4(V) - A! thru A3; CV-2095(V)5/UYA4(V) - B2 and B3; CV-2095(V)6/UYA-4(V) - B1
3.CV-2095(V)/UYA-4(V): Improved Coarse Control Cam Correction Material: None required
1-A FA-2 NS0967-238-7230
SERIAL: CV-2095(V)l/UYA-4(V) - AI and BI; CV-2095(V)2/UYA-4(V) - A1; CV-2095(V)3/UYA-4(V) - A1; CV-2095(V)4/UYA-4(V) - Al thru A3; CV-2095(V)5/UYA$4(V)$ A 1 and B3
IDENTITY: 581353-100 Analyzer, Servo assembly located in the TS-2460/UYA-4 Test Set Electronic Circuit Plug-In.

581306-100 Gear Train Assembly located in each CV-2095(V)/UYA-4(V) Converter Group.

4-CV-2095(V)/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group 1, as a Unit Field Change

Correction Material: None
4-A NS0967-238-7360 EIC FU09000
SERIAL: As indicated in Table : of this field change
IDENTITY: Observing F.C. \#4 on the Field Change Record plate.

5-CV-2095(V)/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group 1I, as a Unit Field Change

Correction Material: None Required
2-A FA-33 NS0967-238-7630
EIC P80R000
SERIAL: Equipment serial numbers as shown on table I of field change. All other serial numbers were modified by identical production changes
IDENTITY: Checking the equipment for the identification features specified on table I.

6-CV-2095(V)/UYA-4(V): Input/Output Adapter Additions Correction Material: None
1-A FA-16 NS0967-238-7850
EIC QM06000
SERIAL: Al (NObsr 95440), B-1 thru B-10 (NObsr-93313), C1 thru C-7 (N00024-69-C-1111), and D-1 thru D-3 (N00024-71-C-1229)
IDENTITY: Peripheral equipment simulator installed and Field Change \#6 nameplate located on left door.

7-CV-2095(V)/UYA-4(V): Wiring Change to Synchro Converters

Correction Material: In new technical manual
4-A FA-2 EIB 899
EIC QM06000
SERIAL: CV-2095(V)1/UYA-4(V) - A1, B1, D1 thru D22, El thru E4, G1, G2, HI thru H7, 11, and I2; CV-2095(V)2/ UYA-4(V) - Al, Bl thru B8, and C1; CV-2095(V)4/UYA4(V) - Al thru A3, and Bl; CV-2095(V)5/UYA-4(V) - Al, B1 thru B10, Cl thru C7, D1 thru D3, and El; CV-2095(V)6/ UYA-4(V) - Al thru A4, B1, B2, and Cl thru C6
IDENTITY: Read zero ohms resistance between the following locations: A3J17-23 to A3J10-52, A5J10-81 to A5J10-51, A3J10-81 to A3510-51

8-CV-2095(V)/UYA-4(V): Same as 4-AM-4534/UYA-4(V) except
SERIAL: CV-2095(V)1/UYA-4(V)-El thru E4, G1, G2, H1H7. I1, I2; CV-2095(V)2/UYA-4(V) - C3; CV-2095(V)4/ UYA.4(V) - Bi; CV-2095(V)5/UYA-4(V) - B6 thru B10, Cl thru C7, D1, D2, D3, E1; CV-2095(V)6/UYA-4(V) - B2, C1C6

9-CV-2095(V)/UYA-4(V): ASMD Servo Modification ( 400 Hz ) and Addition of North Crossing Reset and Self Test Capability

Correction Material: Supplement \#I, NS0967-238-7072 to TM, NS0967-238-7070

I-A FA-50 NS0967-562-6070 EIC QM06000 SER1AL: Serial numbers selected by NAVSEC, Code $6175 D 02$

IDENTITY: Open left front door and observe installation of servo assembly $361035-021$ in one or more synchro RAC positions of the affected unit. For information on synchro RAC positions and card slot locations, refer to pages 40-4 and 4-0-5 of NAVSHIPS 0967-238-7070 dated 25 May 1972 and to the card location decal on the inside surf ace of the left front door.

10-CV-2095(V)/UYA-4(V): ASMD Servo Modification ( 60 Hz ) and Addition of North Crossing Reset and Seif Test Capability

Correction Material: Supplement \#1, NS0967-238-7072 to NS0967-238-7070
1.A FA-50 NS0967-562-6040 EIC QM06000 SERIAL: Serial numbers selected by NAVSEC, Code 6175D02
IDENTITY: Open left front door and observe installation of Servo Assembly 361035-011 in one or more synchro RAC positions of the affected unit. For information on synchro RAC positions and card slot locations refer to pages 4-0.4 and 4-0.5 of NAVSHIPS 0967-238-7070, dated 25 May 1972 and to the card location decal on the inside surface of the left front door.

11-CV-2095(V)/UYA-4(V): Under Development (8-72)
12-CV-2095(V)/UYA-4(V): Under Development (8-72)

13-CV-2095(V)/UYA-4(V): Same as 8-AM-4534/UYA-4(V)

14-CV-2095(V)/UYA-4(V): Add RAC Power Panel Wiring Correction Material: None required
11-A FA-1.5 NS0967-562-6140
EIC QM06000
SER1AL: CV-2095(V)/UYA-4(V)- A1, BI, D1 thru D22, El thru E4, G1, G2, H1 thru H9, 11, 12, J1, J2; CV-2095(V)2/ UYA-4(V) - Bl thru B8, C1, D1, E1, G1, G2, H1; CV. 2095(V)3/UYA-4(V) - A 1; CV-2095(V)4/UYA-4(V) - Al thru A3, B1; CV-2095(V)5/UYA-4(V) - A1, Bl thru B10, C1 thru C7, Dl thru D3, El, Gl thru G3; CV-2095(V)6,UYA-4(V) Ai thru A4, B1, B2, C1 thru C6; CV-2095(V)8/UYA-4(V) A1, A2; CV-2095(V)10/UYA-4(V) - A1.
IDENTITY: Open the right front door of the Radar Azimuth Converter and verify that wires have been added in pins 10, 11 , and 12 of connector J 2 on the power control panel A14

15-CV-2095(V)/UYA-4(V): Cancelled, Never Developed. (0477)

16-CV-2095(V)/UYA-4(V): Addition of North Crossing Signal Capability

Correction Material: T-1, NS0967-LP-238-7131 to NS0967-LP-238-7130

I-A FA-32 NS0967-LP-562-6250 EIC QM06000 SERIAL: CV-2095(V)!/UYA-4(V) - Al, B1, Cl, Di thru D22, El thru E4, G1, G2, 11 and up; CV-2095(V)2/UYA-4(V) - Al, Bl thru B8, C1, Fl, Dl and up; CV-2095(V)3/UYA4(V) - A1; CV-2095(V)4/UYA-4(V) - A1 thru A3, Bl and up; CV-2095(V)5/UYA-4(V) - A1, B1 thru B10, Cl thru C7, D1 and up; CV-2095(V)6/UYA-4(V) - A1 thru A4, B1, B2, C1 and up; CV-2095(V)8/UY A-4(V) - Al and up; CV-2095(V)9/ UYA-4(V) - A! thru A4, B1, B2, C1 and up; CV-2095(V)10/ UYA-4(V) - All

IDENTITY: Check the card box wining to wire changes listed in the bulletin and check for the presence of a Theta Register Card in the J26 location in the affected RAC.

17-CV-2095(V)/UYA-4(V): Modification to MK-86 RAC
Correction Material: T-2, NS0967-238-7102 to NS0967-2387100; T-2, NS0967-238-7772 to NS0967-238-7770

1-A FA-8 NS0967-238-7980 EIC QM60000 SERIAL: CV-2095(V)10: A1, B1. CV-2095(V)1 1: A1-A18. CV-2844: Al-A6.
IDENTITY: Presence of a 25 K ohm potentiometer (R14) on the front chassis edge directly below switch S1 (1X and 36X Mode switch) on synchro to digital converter assembly 360701-011.

18-CV-2095(V)/UYA-4(V): Same as 11-CV-1321/SYA-4(V) except
SER1AL: CV-2095(V)1/UYA-4(V) - A1, B1, D1 thru D22, El thre E4, G1, G2, H1 thre H9, I1, 12, J1, J2, K1, K2, L1 and L2; CV-2095(V)2/UYA-4(V) - B! thru B8, Cl, D1, E1, Gl thru G30, H1, L1, J1 and J2; CV-2095(V)4/UYA-4(V) Al thru A3, and B1; CV-2095(V)S/UYA-4(V) - Al, Bl thru B10, C1 thruC7, D1 thru D3, E1, Gl thru G3, H!, H2, 11, 12, and J1; CV-2095(V)6/UYA-4(V) - B1, B2, C1 thru C6, D1, D2, E1, and E2; CV-2095(V)8/UYA-4(V) - A1 and A2

19-CV-2095(V)/UYA-4(V): Additional 1537627 Card Capability Correction Material: None
I-A FA-140 NS0967-LP-562-6190 EIC QM06000 SER1AL: CV-2095(V)1/UYA-4(V) - A1, B1, D1 thru D22, E1 thru E4, G1, G2, H! thru H9, I1, I2, Jt, J2, K1, and K2; CV-2095(V)2/UYA-4(V) - Bl thru B8, C1, D1, El, Gl thru G30, H1, I1, HAC S/N 46; CV-2095(V)4/UYA-4(V) - Al thru A 3, B1; CV-2095(V)5/UYA-4(V) - A!, B1 thru B10, Cl thru C7, D1 thru D3, E1, Gl thru G3, Ht, HAC S/N 27; CV-2095(V)6/UYA-4(V) - Al thru A4. M1. B2. Cl thru C6, D1, D2, and El; CV-2095(V)10/UYA-4(V) - A1, B!, and C1; CV-2095(V)11/UYA-4(V) - A1 thru A29, HAC S/N 30. 10.CV-2095(V)/UYA-4(V) - HAC S/N 1 thru 4; CV-2844/UYA-4(V) - Al thre A6, HAC S/N ! and 2; CV-3052/UYA-4(V) - Al thru A4; CV-3053/UYA-4(V) - A1, A2, HAC S/N 3 and 4; CV-3054/UYA-4(V) - Al thru A12, Bi thru B4, HAC S/N 19 thru 22; 12-CV-3054/UYA-4(V) - HAC S/N 1 and 2; CV. $312!/ U Y A-4(V)$ - A1; CV-3122/UYA-4(V) - Al: CV-2843/ UYA-4(V) - A1, B1, and B2.
IDENTITY: Remove the 1537627-100 card/cards from the location/locations indicated for each equipment type indicated in procedure A step 2 and check for incorporation of the card modifications indicated in step 4 of procedure A.

20-CV-2095(V)/UYA-4(V): Remove Connector P1. (E1B 946)
Correction Material: Revised TM, NS0967-LP-238-7070 dtd 23 Aug 76.
4.A FA-1

E1B 946
EIC QM06
SERIAL: Al! CV-2095(V)/UYA-4(V) Analog to Digital Converters with either Field Change 9- or 10-CV-2095(V)/UYA$4(V)$ installed.
IDENTITY: Open the right front door and make the following observations: If this field change (FC 20) has NOT been accomplished, one or more of the plugs labeled AllPl, Ai2P1, or A13Pl will be disconnected from one or more of
the indicator units and will be hanging from the cable harness. (Plugs disconnected by either FC 9 or 10 ). FC 20 removes these disconnected plugs and their associated wiring from the cable harness.
NOTES: Prerequisite Field Change: FC 9 or 10-CV-2095(V)/ UYA-4(V).

21-CV-2095(V)/UYA-4(V): Improved Switch Actuator
Correction Material: To be incorporated into revised TMs
1-A FA-6 NS0967-LP-562-6360 EIC QM06 SERIAL: CV-2095(V)1/UYA-4(V): A1, B1, C1, Di-D22, E1EA, G1, G2, H1-H9, I1, 12, J1, J2, K1, K2, L1, L2, CV-2095(V)2/UYA-4(V): Bl-B8, Cl, D1, El, Gl-G30, H1, I1, J1, J2, K1. CV-2095(V)4: A1-A3, B1. CV-2095(V)5: A1, B1-B10, Cl-C7, DI-D3, El, Gl-G3, H1, H2, I1, I2, J1. CV-2095(V)6: Al-A4, B1, B2, Cl-C6, D1, D2, E1, E2. CV-2095(V)8: A1, A2. CV-2843: A1. TS-2460: Al-A3, B1, B2, Cl-C25, G1-G5, H1, Il-I10, J1, K1-K30, L1-L3, M1-M15, N1-N4, P1, P2, R1, R2.
IDENTITY: Locate Servo Gear Train Assemblies 581306-100 in the CV-2095(V) or CV-2843, or Servo Analyzer 581353-100 in the TS-2460: Remove the plate which covers the gear box on each servo assembly and note that the actuator for microswitch S1 has a nylon roller vice a metallic roller-
NOTES: This filed change is NOT to be installed if Field Change 9, 10, 11, 12 or 18-CV-2095(V)/UYA-4(V) or Field Change 1 or 2-CV-2843/UYA-4(V) is accomplished.

22-CV-2095(V)/UYA-4(V): Add Solid State RAC CV-3211.
Correction Material: Use Supplemental TM, NS0967-LP-605-3010 dtd Aug 1976.

1-A FA-24 NS0967-LP-562-6480 ElC QM06 SERIAL: All CV-2095(V)l, (V)2, (V)4, (V)S, (V)6, and (V) ll serial numbers not having Field Change 6, 11, or 12-CV-2095(V)/UYA-4(V) installed.
IDENTITY: Verify installation of CV-3211/UYA-4(V) in Al6.

23-CV-2095(V)/UYA-4(V): Provide 48/52 RAC with MTI, High Duty Cycle, Digital Theta.

Correction Material: To be provided.
1-A FA-8 NS0967-LP-562-6610
EIC QM06 SERIAL: CV-2095(V)5, (V)6, (V)8, (V)9, and (10): Specific serial numbers to be selected by NAVSEC.
IDENTITY: Verify installation of MT1 Theta Ready circuit card ( $\mathrm{p} / \mathrm{n}$ 1610000-134) in A6J10 of CV-2095(V)S, (V)6, (V)8, and ( $V$ ) 9 , or in A5J10 of CV-2095(V)10.

24-CV-2095(V)/UYA-4(V): Under Development. (11.77)
25-CV-2095(V)/UYA-4(V): Conversion of Non-ASMD RAC to Solid State.

Correction Material: To be provided.
1-C YF-50 SE690-AC-FCB-010
ElC QM06 SER1AL: CV-2095(V)1, (V)2, (V)3, (V)4, (V)5, (V)6, (V)8, and (V)9: All serial numbers.
IDENTITY: Verify that the Synchro Servo Assembly in slot A11 is p/n 361289-011 and that circuit card in slot A15 of the applicable Synchro Radar Azimuth Converter is $\mathrm{p} / \mathrm{n}$ 1606721100.

## 26.CV-2095(V)/UYA-4(V): Under Development. (11-77)

27-CV-2095(V)/UYA-4(V): Modify Theta Function Card 1535828

Correction Material: To be provided.
1-A FA-8 NS0967-LP-562-6560
EIC QM06 SERIAL: CV-2095(V)S: A1, BI-B10, Cl-C7, D1-D3, E1, G1G3, H1, H2, I1, I2, J1, J2. CV-2095(V)6: A1-A4, B1, B2, ClC6, D1, D2, E1, E2, G1, H1-H8. CV-209508: A1, A2. CV2095(V)10: A1, B1, C1, D1, D2, E1, E2. OU-91(V)I: Al-A4, $\mathrm{Bl}, \mathrm{Cl}$. OU-91(V)2: Al-A4, B1, B2, Cl, C2. OU-91(V)9: Al. OU-91(V) 11: A1, A2.
IDENTITY: This field change can be identilied by checking that R1 is 82 ohms, R2 is 620 ohms, R3 is 9.1 K ohms and VR1 is a $\mathbb{I N} 748 \mathrm{~A}$ on the 1535828 card. The 1535828 card can be located by referring to the card location chart located on the inside of the equipment door.

28-CV-2095(V)/UYA-4(V): Addition of CV-3189 RAC. (See Note.)

Correction Material: To be provided.
1-A FA-48 SE690-AC-FCB-020
EIC QM06 SERIAL: CV-2095(V)I, (V)2, (V)3, (V)4, (V)5, (V)6, and (V) Il: All serial numbers. Foreign Military Sales (FMS) CV-2095(V)/UYA-4(V) Type A and Type H: All serial numbers. IDENTITY: Verify that Radar Azimuth Converter CV-3189/ UYA.4(V), $\mathrm{p} / \mathrm{n}$ 1622625-100, is installed in area Al6. NOTES: This field change is not to be accomplished if either field change 6, 11, or 12-CV-2095(V)/UYA-4(V) is installed.

1-CV-2122/USQ-20(V): Blower Motor and Air Filter Assembly Installation

Correction Material: None
1-A FA-2 NS0967-309-2050
EIC FR04000
SERIAL: A2 and A3
IDENTITY: A Blower Motor, Filter Assembly and housing is located on the left rear of the converter top cover.

1-CV-2356/UYA-4(V): Replace Pan Head Screws
Correction Material: None
1-A FA-2 NS0967-238-7270 E1C FU09000
SERIAL: A6, A 10 through A14
IDENTITY: Inspection of adapter plates on rear of cabinet. If the Bendix connectors are held in place with countersunk laat head screws, this change has been accomplished.

2-CV-2356/UYA-4(V): Eliminate Ground Noise Interference Correction Material: None
2-A FA-2 NS0967-238-7280 EIC FU09000
SERIAL: A4, A6, A9 through A 11
IDENTITY: Inspection of the wired frame assembly for the wire changes specified in the field change bulletin.

3-CV-2356/UYA-4(V): Incorporation of Isolation Resistor Assembly

Correction Material: None
1-A FA-4 NS0967-238-7290 EIC FU09000
SERIAL: Al through A14
IDENTITY: Inspecting the upper rear section of the center divider for the (1558936-1*)) Isolation Resistor Assembly shown in ligure 11. Also, inspect the (1537595-100) Relay

Control Assembly located in A8514 for temporary installation of 51 ohm resistors in series with K1, K2, K3, K4, and K5 relay outputs and connector pins $14,20,26,34$, and 42 respectively. If these resistors exist, remove them and connect the relay outputs to their designated output pins and install the Isolation Resistor Assembly per bulletin instructions.

4-CV-2356/UYA-4(V): Incorporation of HAC Maintenance Bulletins as a Unit Field Change

Correction Material: None
4-A FA-I NS0967-238-7350 EIC FU09000
SERIAL: Equipment as shown in Table 1 of Field Change Bulletin
IDENTITY: Observing change number on the Field Change
Record plate.
5-CV-2356/UYA-4(V): Incorporation of HAC Maintenance Bulletins as a Unit Field Change

Correction Material: Included in applicable maintenance bulletins

4-A NS0967-238-7380 EIC FU09000
SERIAL: Equipment serial numbers as shown in Table I
IDENTITY: Observing this change number on the Field Change Record plate.

6-CV-2356/UYA-4(V): Improve Frequency Stability of Local Oscillator

Correction Material: T-1, NS0967-238-7181 to NS0967-2387180; T-1, NS0967-238-7191 to NS0967-238-7190

1-A FA-6 NS0967-238-7370 EIC FU09000 SERIAL: AI through A 17 and BI
IDENTITY: Installation of this field change can be identified by inspecting the 1558905-100 Local Oscillator assembly in Area A6, Ji4 for a field bulletin decal. Also inspect the card assembly for the existence of components R69, R70 ( 390 ohms, $1 / 4 \mathrm{w}$ ) C28, C29 (. $1 \mathrm{uf}, 20 \%, 100 \mathrm{v}$ ) and the addition of insulating lape under crystai Yi.

7-CV-2356/UYA-4(V): Radar Select Output Coding Modification

Correction Material: T-1, NS0967-238-7172 to NS0967-238. 7170 and T-2, NS0967-238-7182 to NS0967-238-7180

4-A FA-1.0 NS0967-238-7420 EIC FU09000 SERIAL: Al through A17 and B!
IDENTITY: Inspecting the area adjacent to A25 P10 for a Field Bulletin Decal specifying this change, or by inspecting A25 P10 for the wire changes specified in this article.

8-CV-2356/UYA-4(V): Under Development (7-70)
9-CV-2356/UYA-4(V): Modify 1537595-100 Card for Configuration Control

Correction Material: T.3, NS0967-238-7183 to NS0967-2387180; T-3, NS0967-238-7193 to NS0967-238-7190

1-A FA-8 NS0967-238-7740 EIC QM06000 SERIAL: Serials Al through A17 and B1 through B10 IDENTITY: Removing the $1537595-100$ relay control card from location A8J14 and noting that diodes CR12 through CR18 and resistors R38 through R44 have been installed.

10-CV-2356/UYA-4(V): LVPS Change

Correction Material: None required
1-A FA-3 NS0967-238-7830
EIC QM06000
SERIAL: Equipment serials Cl through C 9
IDENTITY: Remove the Hyperion power supply, 390034 located in area 9 and area 10 of the CV-2356/UYA. $4(\mathrm{~V})$, and note the presence of C-27, a 68 ufd, 15 volt capacitor between pins 6 and 10 as indicated in figure 1.

11-CV-2356/UYA-4(V): Beacon Video Processor Control, Line Multiplex

Correction Material: T-2, NS0967-238-7173 to NS0967-2387170

3-A FA-2 NS0967-238-7690
SERIAL: All
IDENTITY: Presence of TB-1, component board assembly consisting of six IN277M diodes, on rear panel opposite connector P8. Resistor R2 (75 ohms) removed from card A6A12.

12-CV-2356/UYA-4(V): Under Development (07-75)
1-CV-2363/USQ-20(V): Installation of Voltage Protection Plate

Correction Material: None required
1-A FA-I NS0967-270-4020 EIC
QM1D000
SERIAL: I through 4
IDENTITY: A 'DANGER HIGH VOLTAGE' warning plate is mounted on the rear of the door assembly over the fuse holder terminals for the main power 30 supply ( $\mathrm{F} 1, \mathrm{~F} 2$, and F3).

1-CV-2460/SGC: Installation of VOX Closure Relay IAIIAIK 1

Correction Material: T-1, NE0967-386-3011 to NE0967-386-3010
l-A FA-8 NE0967-386-3020 EIC Q3CF000 SERIAL: Ali serial numbers
IDENTITY: Loosen the six retaining screws and withdraw the front panel assembly from the cabinet. There should be a relay mounted vertically on the botiom rear bracket behind and to the right of the receive loop current rheostat.

2-CV-2460/SGC-1: Increases Compatibility with Respect to Variation in System Configurations

Correction Material: Ch. 1, NE0967-386-3012 to NE0967. 386.3010

IIL-A FA.1/3 NE0967-386-3030 EIC QC3F00 SERIAL: Serial numbers I thru 582
IDENTITY: ASRI0 not present; A5C14 value, 0.33 mf ; A2R 34 value, 3.3 K ohms.

1-CV-2517A/UYK: Reference Voltage Wiring Change Correction Material: Included in Field Change Bulletin 4-A FA-1 NS0967-310-1030 EIC QK07000
SERIAL: Equipment serials I through 24 of the converter IDENTITY: J4 pin E having no connection to it.

## 2-CV-2517A/UYK: Spare Fuse Value

 Correction Material: None required 1-A FA-1 NS0967-310-1040EIC QK07000
SERIAL: Equipment serials 1 through 30

IDENTITY: The spare fuse value will read $4,2,3,5$, in lieu of $1,2,3,5$.

3-CV-2517A/UYK: Circuit Card Retainers Correction Material: None
1-A FA-0.5 NS0967-310-1050
EIC QK07000
SERIAL: 1 through 33
IDENTITY: Circuit card retainers for cards at locations J01A through J01E are identified by Manufacturer's Part Number 7082043-01 or 7082039-01.

1-CV-2517B/UYK: Wiring Change to Reverse Sine and Cosine Outputs

Correction Material: None required
IV-A FA-1 NS0967-444-7030
SERIAL: 3A, 5A, 6A, 9A through 19A, 22A, 23A, 24A, 29A, 30A, 32A, 33A, 36A
IDENTITY: Verify the following wire colors on the following terminals of J 2 and J4: W/BLK/RED on $\mathrm{J} 2 \cdot \mathrm{FF}$; W/ BLK/YEL on J2 - M; W/BLK/BRN on J2 - GG; W/BLK/ GRN on $\mathbf{J} 2$-G

2-CV-2517B/UYK: Synchro Resolver Mode Switch Wiring Change

Correction Material: None required
II-A FA-2 NS0967.444-7030
SERIAL: 1A through 37A
IDENTITY: Note jumpers between the following position terminals of S2 and S4: Al to A2, B1 to B2, C1 to C2, D1 to D2 and E2 to E wiper-arm.

3-CV-2517B/UYK: Drawer Protection Plate Correction Material: None required
I-A FA-1 NS0967.444-7040
EICQM00000
SERIAL: Serials Al thru A37
IDENTITY: Open front drawer of the cabinet and slide the drawer out to its fully extended position. Remove tray Al by unscrewing the screws along both sides of the tray and then sliding the tray to the rear to disengage the mother board connectors. Note that TB1, located on the inside right of the back cabinet panel, is not mounted directly on the cabinet panel but on a subassembly plate.

4-CV-2517B/UYK: Power Ampliffier Modification
Correction Material: T-1, NS0967-444-7011 to NS0967.4447010

1-A FA-6 NS0967-444-7050 ElC QM060~
SERIAL: Equipment serials A1 thru A37, and BI thru B36
IDENTITY: Open front drawer of cabinet and remove circuit module tray assembly 1 A 1 . Remove power amplifier 1 A 2 from lower portion of drawer assembly. Ascertain that there is a 150 ohm resistor connected across each of the following pairs of terminal posts: $G$ and $H ; P$ and $O ; U$ and $W$; and $Y$ and $X$ on card assembly 1A2A1.

5-CV-2517B/UYK: Power Supply Modification
Correction Material: T-2, NS0967-444-7012 to NS0967-4447010
1.A FA-4 NS0967-444-7060 ElC QM06000

SERIAL: Equipment serials Al thru A37, Bl thru B36

IDENTITY: Open front drawer of cabinet and remove circuit module tray assembly IA1. Remove power supply 1 A3 from lower portion of drawer assembly. Ascertain that items 1A3A1C3, CA, and R6 have been removed from the IA3Al circuit board.

6-CV-2517B/UYK: ODR Line Driver Modification
Correction Material: T-3, NS0967-444-7013 to NS0967-4447010

1-A FA-. 2 NS0967-444-7070 EIC QM06000 SER1AL: Serial numbers Al thru A37, B 1 thru Bios IDENTITY: Open front drawer assembly and locate circuit card 1A1A82 in the module tray (Al). Verify that the circuit card is stamped with manufacturer part number 783056D.

7-CV-2517B/UYK: Modification to Drawer Fasteners
Correction Material: None
IV-A FA-1 EIB 905 EIC
QM4H000
SERIAL: All serial numbers
IDENTITY: Note that the two top center drawer retaining screws no longer exist.

8-CV-2517B/UYK: Data Strobe Disable
Correction Material: To be provided
II-A FA. 1 ElB 916
SERIAL: All equipment serial numbers
IDENTITY: Presence of a jumper wire between terminal points A1A67-14 and AlA68-5 on the underside of module tray assembly IA 1.

## 9.CV-2517B/UYK: Revised ODR Circuit Card.

Correction Material: Change to TM, NS0967-444-7010, to be provided.

1-A FA-1 NS0967-LP-444-7080 EIC QM4H SERIAL: All serial numbers prefixed with letters A, B, C, and D.

IDENTITY: Open front drawer assembly and locate circuit card 1A1A82 in module tray A1. Verify that the circuit card is stamped with manufacturer's part number 783056.

1-CV-2518/UYK: Circuit Card Retainers
Correction Material: None
1.A FA-0.5 NS0967-313-9020 EIC

QM3U000
SERIAL: Equipments $i$ through 11
IDENTITY: Circuit card retainers for cards at locations J01A and J0!B are identified by Mfg. Part Numbers 7082043-01 and 7082039-01.

1-CV-2607/GG: Modification of STRAWHAT CV-2607/GG Magnetic Tape Buffer P/N 651043034 to Correct Design Error

Correction Material: Incorporated in NS0967-873-8010
II-A FA-1 NS0967-873-8020 EIC QM00000 SERIAL: Serial numbers ! thiu 168
IDENTITY: Place 'W13E' and '65104058' decals over existing W 13 board marking S. Part No. 91920022 is now deleted.

1-CV-2819(XN-1)/UYA-4(V): Same as 19-CV-2095(V)/UYA-

## 4(V) except

SERIAL: CV-2819(XN-i)/UYA-4(V)-001
1-CV-2834/UYA-4(V): Cancelled. (Reissued as Field Change 3-CV-2834/UYA-4(V))

2-CV-2834/UYA-4(V): Under Development (01-76)

3-CV-2834/UYA-4(V): Incorporation of HAC Modifications
Correction Material: NS0967-LP-535-6010, dtd 26 Jun 75, reflects HAC modifications incorporated by this field change

4-A FA-14 EIB 924
SERIAL: A1-A7, B1-B3
IDENTITY: Continuity (zero ohms) between the following: J19-64 and J17-64 (HAC MOD A), J2-46 and J3-46 (HAC MOD C), J22-59 and J12-79 (HAC MOD D), A3J4-32 and A4J22-31 (HAC MOD E), Jl-63 and J8-25 (HAC MOD K), AiJi-21 and A3J2-12 (HAC MOD N), J12-62 and J12-16 (HAC MOD P), J3-73 and J2-23 (HAC MOD Q), JI0-59 and J10-6] (HAC MOD R). Continuity (open) between J1-82 and J19-82 (HAC MOD J). Jumper wire between the following: E4 and E6 on card 1619033 slot J24 (HAC MOD F), U26-12 and U20-4 on card 1619038 slot J21 (HAC MOD G), U6-8 and U3-13 on card 1619032 slot 17 (HAC MOD H), U31-4 and U25-12 on card 1606418 slot J23 (HAC MOD I), U33-2 and U38-11 on card 1619044 slot J20 (HAC MOD M), U26-9 and U29-9 on card 1619047 slot JlS (HAC MOD O). Card 1606425 added in skot Jl (HAC MOD B). Card 1606422 replaces card 1558906 in slots J9, J10 and J11 (HAC MOD L).
4.CV-2834/UYA.4(V): Under Development. (12-76)

5-CV-2834/UYA-4(V): Same as 7-AM-6382/UYA-4(V)

1-CV-2843/UYA-4(V): Under Development (05-72)
2-CV-2843/UYA-4(V): Under Development (05-72)

3-CV-2843/UYA-4(V): Same as Il-CV-i321/SYA-4(V) except
SERIAL: A1, BI, and B2
4.CV-2843/UYA-4(V): Same as 21-CV-2095(V)/UYA-4(V).

1-CV-2844/UYA-4(V): Same as 17-CV-2095(V)/UYA-4(V)
1-CV-2953(P)/UYK: Replace Card Guides
Correction Material: T-1, NS0967-LP-483-7021, to NS0967-LP-483-7020 dtd Jun 72

1-A FA NS0967.LP-483-7030
SERIAL: CV-2953(P): Al-A6. CV-2954(P): A1, A2, A3.
IDENTITY: The new card guides are one sided except for the last inch, next to the card connector, where it is ' $U$ ' shaped.

## 2-CV-2953(P)/UYK: Correct DD/DDI/RD Timing

Correction Material: T-2, NS0967-LP-483-7022, to NS0967-LP-483-7020

1-A FA-2 NS0967-LP-483-7050
SER1AL: CV-2953(P): Ai thru A6, B1, B2. CV-2954(P): Ai, A2, A3.

IDENTITY: Check for continuity (zero ohms) between 1 AiXA17-12 and IAIXA17-14, lA2XA30-26 and IA2XA2628, IA2XA26-22 and 1A2XA60.06, 2A2XA62-42 and 2A2XA30-04, and between 2A2XA89-10 and 2A2XA27-18.

3-CV-2953(P)/UYK: Wise Wrap Corrections
Correction Material: None Required.

## 1-A FA-i NS0967-LP-483-7070

SERIAL: CV-2953(P): Ai thru A6, B1, and B2. CV-2954(V): A1, A2, A3.
IDENTITY: CV-2953(P): Check for continuity between XAi !0.024 and XA!09-24 on the 1Ai chassis, between XA4902 and XA-50-02 on the IA2 chassis, between J12-22 and J1246 on the IA2 chassis, and between XA82-42 and XA-80-05 on the IA2 chassis. CV-2954(P): Check for continuity between XA19-41 and CGI9 on the 2AI chassis.
4.CV-2953(P)/UYK: Interconncetion Timing Change

Correction Material: T-4, NS0967-LP-483-7024, to NS0967-LP-483-7020

1-A FA-I NS0967-LP-483-7080
SERIAL: CV-2953(P): Al thru A6, B1, and B2. CV-2954(P): A1, A2, A3.
IDENTITY: Check for continuity between XA76-14 and XA27-42 on the Processor Cabinet IA2, between CG- 24 and AX5S-15 on the Processor Cabinet 2Ai, and between XA8935 and XA71-24 on the Processor Cabinet 2A2

5-CV-2953(P)/UYK: Front Panel and Associated Parts Change.

Correction Material: T-S, NS0967-LP-483-702S, to TM NS0967-LP-483-7020; T-2, NS0967-LP-483-7012, to TM, NS0967-LP-483-7010.

1-C YF-24 NS0967-LP-483-7090
SERIAL: CV-2953(P): Ai thru A6, B1, and B2. CV-2954(P): Ai, A2, A3.
IDENTITY: Chassis iAi and 2Ai: Check the Power Control and Interłock Assembly (497848) IA1A129 (located on rear of front panel) to see that CR10, CR12, CRi7, CR18, and CRi9 have been changed from 'iN4148' to 'iN645' and that a wire has been connected from terminal E9 to K2 (X-i).

6-CV-2953(P)/UYK: Internal Rebound Test Corrections.
Correction Material: T-6, NS0967-LP-483-7026, to NS0967. LP-483-7020

1-A FA. $1 \quad$ NS0967-L-P-483-7100
SERIAL: Ai thru A6, Bi, B2, and Ci thru C20.
IDENTITY: Check for continuity between XA25-20 and XA09-34 in chassis IA2.

7-CV-2953(P)/UYK: internal Rebound Test Corrections.
Correction Material: Revision of TM's, NS0967-LP-483. 7010 and -7020 dtd Jun 72

## 4-A FA-1 NS0967-LP.483-7120 ElC QM55

SERIAL: CV-2953(P) serial numbers Al thru A6 have been modified in the field. All other (subsequent) serial numbers have been modified during production.
IDENTITY: Verify that capacitor C-3 has been removed from PC boards $\{A 2 A 125$ thru IA2A130. The type/part no. of boards before change is 2868495 rev. D and after change is 2868495 rev. E.

8-CV-2953(P)/UYK: Addition of Card Decal(s).
Correction Material: ACN's to NS0967-LP-483-7020 and NS0967-LP-581-9020 to be provided.

1-A FA-I NS0967-LP-483-7130 EIC 1-CV-3056/UYA-4(V): ODA Width Change and Address QM5T,QM55,QM5SStacking
SERIAL: All serial numbers of CV-2953(P), CV-2953A(P), and CV-2954(P).
IDENTITY: Verify the installation of one additional card-location decal for card XA129 of the CV-2953(P)/UYK and CV-2953A(P)/UYK and card XA62 for CV-2954(P)/UYK.

1-CV-2953A(P)/UYK: Elimination of Capacitor Interference.
Correction Material: ACN $1 / 1$ to TM, NS0967-LP-581. 9020

1-A FA-2 NS0967-LP-581-9030 ElC QM5S SERIAL: A1 and A2.
IDENTITY: Circuit card (2868588) in location A2A41 thru A2A44 have revision letter ' $G$ ' after the assembly number vice ${ }^{\prime} F$ '.

2-CV-2953A(P)/UYK: Same as 8-CV-2953(P)/UYK.
1-CV-2954(P)/UYK: Same as 1-CV-2953(P)/UYK.
2-CV-2954(P)/UYK: Correct Wiring Error
Correction Material: None Required.
1-A FA-1 NS0967-LP-483-7040
SERIAL: B1 thru B20
IDENTITY: Check for an open circuit between XA62-05 and XA26-09 in chassis 2A2.

## 3-CV-2954(P)/UYK: Same as 2-CV-2953(P)/UYK

4-CV-2954(P)/UYK: Add Address 247 for On-Line Test.
Correction Material: T-1, NS0967-LP-483-7011, to NS0967-LP-483-7010 and T-3, NS0967-LP-483-7023, to NS0967-LP. 483-7020.

1-A FA-1 NS0967-LP-483-7060
SERIAL: A1, A2, A3, and B1 thru B19.
IDENTITY: Installation of cards in slots A46 thru A52 on chassis 2A1.

5-CV-2954(P)/UYK: Same as 3-CV-2953(P)/UYK
6-CV-2954(P)/UYK: Same as 4-CV-2953(P)/UYK.
7-CV-2954(P)/UYK: Same as 5-CV-2954(P)/UYK.
8-CV-2954(P)/UYK: Shorten Interconnecting Cable
Correction Material: None Reuired.
1-A FA-1 NS0967-LP-483-7110 EIC QM5T
SERIAL: Determined by NAVSECNORDIV.
IDENTITY: The length of interconnecting cable between IA2J27 of CV-2953(P)/UYK and 2AIJ2 of CV-2954(P)/UYK is approximately 11.25 inches vice 19.25 inches (measured center plug to center plug).

9-CV-2954(P)/UYK: Same as 8-CV-2953(P)/UYK.
1-CV-3052/UYA-4(V): Under Development (07-75)

1-CV-3054/UYA-4V): Same as 11-CV-1321/SYA-4(V) except SERIAL: Al thru A17, B1 thru B13, and C1 thru C6 Correction Material: None required
1-A FA-65 NS0967-483-4020
EIC QM06000
SERIAL: Serial number Al
IDENTITY: Remove data register assembly (1579977) and check for incorporation of the card modifications indicated in the procedure.

1-CV-3057/UYA-4(V): Same as 1-CV-3056/UYA-4(V) except SERIAL: A 1 thru A8, and Bl thru B4

1-CV-3067/WSC-5(V): Modification of FM Crystal Offsets in Signal Data Converter CV-3067/WSC-5(V).

Correction Material: Change 1, NE0967-LP-455-0014, to TM, NE0967-LP-455-0010 dtd 16 Apr 73.

1-A FA-1 NE0967-LP-455-0050 EIC QPOE SERIAL: All serial numbers.
IDENTITY: Verify the following FM transmit frequencies when the transmitter is keyed: 303.400 MHz for XMIT 9 and 303.425 MHz for XMIT10.

1-CV-3084/MSC-46(V): Reduce Thermal Stress on RF Oscillator.

Correction Material: Chg. I, NE0967-LP-550-1051, to TM, NE0967-LP-550-1050; and Chg. 1, NE0967-LP-550-1061, to TM, NE0967-LP-550-1060

1-A FA-32 NE0967-LP-550-1180* EIC QPOZ SERIAL: CV-3084/MSC-46(V) and CV-3084A/MSC-46(V): all serial numbers.
IDENTITY: Modification Work Order (MWO) identification plate on the side of the converter near equipment identification plate indicates installation of this field change.
NOTES: * iris-Service Bullet̂in alōo identified by Army MWO 11-5895-883-30-2-1 and Air Force TCTO 31R5-2MSC46-506.

1-CV-3084A/MSC-46(V): Same as 1-CV-3084/MSC-46(V).
1-CV-3085/MSC-46(V): Reduce Thermal Stress on RE Oscillator.

Correction Material: Chg. 1, NE0967-LP-550-1151, to TM NE0967-LP-550-1150; and Chg. 1, NE0967-LP-550-1161, to TM, NE0967-LP-550-1160.

1-A FA-12 NE0967-LP-550-1190* EIC QPOZ SERIAL: CV-3085/MSC-46(V) and CV-3085A/MSC-46(V): all serial numbers.
IDENTITY: Modification Work Order (MWO) identification plate on the side of the converter near equipment identification plate indicates installation of this field change.
NOTES: *Tri-Service Bulletin also identified by Army MWO 11-5895-833-30-7-1 and Air Force TCTO 31R5-2MSC46-507.

1-CV-3085A/MSC-46(V): Same as 1-CV-3085/MSC-46(V).
1-CV-3122/UYA-4(V): ARO/CRT Symbol Flash Modification Correction Material: None required
1-A FA-4 NS0967-441-2030 EIC QM06000
SERIAL: Al

IDENTITY: Presence of C14, C15, and Cl6 on Random Access Memory, Dynamic, Card 1606758-100.

1-CV-3211/UYA.4(V): Same as 11-CV-1321/SYA-4(V) except SERIAL: I, 2, 3, and 4

2-CV-3211/UYA-4(V): Under Development (06.77).

1-CV-3253(V)/UYK: Same as 6-CV-2036(V)/USQ-20(V)

2-CV-3253(V)/UYK: Same as 7-CV-2036(V)/USQ-20(V)
3-CV-3253(V)/UYK: Same as 8-CV-2036(V)/USQ-20(V).
4-CV-3253(V)/UYK: Same as 9.CV-2036(V)/USQ-20(V).

5-CV-3253(V)/UYK: Same as 11-CV-2036(V)/USQ-20(V).

2-CV-32iT/UYA-4(V): Under Development (06-77)
1-CV-3325/UYK: Analog Switch Protection Resistor Redesign.

Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

1-C YF-4 NS0967-LP-604-5040 EIC QM6K
SERIAL: AI, A2, A3, A5, A8, and A13. (Plus eight Installation Repair Kits (IRP's).)
IDENTITY: Verify that the printed circuit boards mounted in the following locations have the part number indicated: A4A2A59, 60, 6J, and 62; p/n 20231 E.1. A4A2A41, 42, 43. and 45, thru 53; p/n 20241 F-1. A4A2A69; p/n 20275 F-1. A3A2A3 thru 7 and 32 thru 36; p/n 20131 D-1. A4A2A54; p/ n 20235 D. 1 .

2-CV-3325/UYK: Retrofit of DC Output Processor.
Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

## 1-A FA. 2 NS0967-LP-604-5050 ElC QM6K

SERIAL: A1, A2, A3, A5, and A8.
IDENTITY: Printed circuit board $\mathrm{p} / \mathrm{n} 20215$ is sulfixed with ' F ' in card locations A4A1A60, 62, 64, 66, 68, 70, 75, 77, 79, $81,83,85$, and 87.

3-CV-3325/UYK: Retrofit of Synchro Input Conditioner (Type $1 \& 2$ ).

Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

1-A FA-4 NS0967.LP-604-5060 EIC QM6K SERIAL: A1, A2, A3, A5, A8, and Al3.
IDENTITY: Verify that printed circuit board p/n 20251 is replace with p/n 20251-E in card locations A4A2A27 and A29 and printed circuit board $p / n 20255$ is replaced with $p / n$ 20255-E in card locations A4A2A2, A5, A7. A9. All, Al3. A17. A19, A21, A23, and A25.

4-CV-3325/UYK: Upper Drawer Slide Extension.
Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

1-C YF-8 NS0967-LP-604-5070 EIC QM6K SERIAL: A1 and A2.

IDENTITY: Verify that upper drawer slides of drawers A3A1, A3A2, A4Al, and A4A2 are p/n 20014-B-1

5-CV-3325/UYK: Address 141 Wining Change.
Correction Material: New TM's NS0967-LP-604-5010, 5020, and 5030
2.C YF-4 NS0967-LP-604-5080 ElC QM6K SERIAL: A1, A2, A5, A8, A9, and Al0.
IDENTITY: Verify that a blue wire has been installed between backplane terminals XA45-053 and XA45-055 of assembly $\mathrm{p} / \mathrm{n} 20250$.

6-CV-3325/UYK: AC Output Processor Mod.
Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

1-C YF-12 NS0967.LP-604-5090 EIC QM6K SERIAL: Al-A16.
IDENTITY: Verify that resistors R4A and R4B on AC Output Processor Card ( $\mathrm{p} / \mathrm{n} 20211$ ) are 100 K ohms vice 200 K ohms.

7-CV-3325/UYK: Mod to Power Sequencer.
Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

1-C YF-4 NS0967-LP-604-5100 EIC QM6K SER1AL: AI, A2, A3, A5, A8, A13, A14, and A15.
IDENTITY: Verify addition of new assembly ( $p / n$ 20245) located on Connector Plate Assembly ( $\mathrm{p} / \mathrm{n}$ 20244-3) of 1A4AI Card Cage Assembly.

8-CV-3325/UYK: End Around Test Timer Mod.
Correction Material: New TM's, NS0967-LP-604-5010, 5020, and 5030.

C YF-4 NS0967-LP-604-5110 EIC QM6K
SERIAL: Al thru A 16.
IDENTITY: Verify that the printed circuit card in location lA3AlA50 is $\mathrm{p} / \mathrm{n} 20361$.

9-CV-3325/UYK: Retrofit of Synchso Input Conditioner (Type $1 \& 2)$.

Correction Material: New TMs, NS0967-LP-604-5010, 5020, and . 5030.

1-A FA-4 NS0967-LP-604-5120 ElC QM6K SERIAL: A1, A2, A3, A5, A8, and A13.
IDENTITY: Verify that PC board ( $\mathrm{p} / \mathrm{n}$ 20251) in locations A4A2A27 and A29 is rev. ' $E$ ' or higher, and that PC board in locations A4A2A2, A5, A7. A9, A11, A13, A17, A19, A21. A23, and A25 is p/n 20244 Rev. ' $E$ '.

1-CV-3399/BYQ: Freq. X/Freq. 4 Wiring Change.
Correction Material: New TM's, NS0967-LP-611-5010, 5020, 5030, and 5040.

2-C YF-8 NS0967-LP-611-5050 EIC QM6L SERIAL: A1-A3, A5-A8.
IDENTITY: Verify that a red wire has been installed between backplane wiring terminals 1A4XA12-077 and 1A4XA13-077.

2-CV-3399/BYQ: Parity Error Wiring Mod.
Correction Material: New TM's NS0967-£P-613-5010. 5020, 5030, and 5040.

2-C YF-8 NS0967-LP-611-5060 EIC QM6L

SERIAL: A1-A3, A6-A9, and A11.
IDENTITY: Verify that a red wire has been installed between
XA28-3 and XA49-29 of assembly A3A2.
3.CV-3399/BYQ: Clock Rewiring.

Correction Material: New TM's, NS0967-LP-611-5010, 5020, 5030, and 5040.

2-C YF-8 NS0967-LP-611-5070 EIC QM6L
SERIAL: A1, A2, and A3.
IDENTITY: Verify that a red wire has been installed between backplane terminals 1A4XA13-77 and 1A4XA16-93 of assembly $\mathrm{p} / \mathrm{n} 21540$.

## 4-CV-3399/BYQ: Master Clock/DTC Change.

Correction Material: New TM's, NS0967-LP-611-5010, 5020, 5030, and 5040.

1-A FA-2 NS0967-LP-611-5080 EIC QM6L
SERIAL: A1-A3, A5-A13.
IDENTITY: Verify that printed circuit board ( $\mathrm{p} / \mathrm{n} 21911$ ) in slot 1A3A2A29 has an M38510/07101 IC in position U10 vice an 54S74/883B IC.

5-CV-3399/BYQ: Maintenance Panel Switch Protection.
Correction Material: New TM's, NS0967-LP-611-5010, 5020, 5030, and 5040.

1-A FA-2 NS0967-LP-611-5090 ElC QM6L
SERIAL: A1-A3, A6-A9, A11, and A13-A16.
IDENTITY: Verify that the Control and Maintenance Panel contains a protective cover over the switches of the front panel ( $\mathrm{p} / \mathrm{n} 21081$ ). This protective cover is attached with four spacers at the four comers of the Control and Maintenance Panel.

6-CV-3399/BYQ: DMA/DSA Control 1 Timing Fix.
Correction Material: New TM's, NS0967-LP-611-5010, 5020,5030 , and 5040.

1-A FA-1 NS0967-LP-611-5100 EIC QM6L
SER1AL: A1-A3, A6-A9, A11, A13, and A14.
IDENTITY: Verify that the printed circuit card in location 1A3A2A54 has a part number suffixed with a revision letter ' $B$ ' or higher.

7-CV-3399/BYQ: 24 Volt Power Supply Redesign.
Correction Material: New TM's, NS0967-LP-611-5010, 5020, 5030, and 5040.

1-C YF-120 NS0967-LP-611-5110 EIC QM6L SER1AL: A1-A3, A6-A9, A11, and A13-A16.
IDENTITY: Verify that card slots 1A4A25 and 1A4A27 contain pinted circuit card assemblies 21791 and 21795 , respectively. Previously both card slots contarined card assemblies 21965.

8-CV-3399/BYQ: Mid Word 33 Alarm Mod.
Correction Materjal: New TM's, NS0967-LP-611-5010, 5020, 5030, and 5040.

1-A FA-2 NS0967-611-5120 E1C QM6L
SER1AL: A1-A3, A6-A9, A11, and A13-A16.
IDENTITY: Verify that circuit cards ( $\mathrm{p} / \mathrm{n} 21735$ ) in locations 1A4A12 and 1A4A13 are suffixed with revision letter 'C-1' or higher.
9.CV-3399/BYQ: Cavitation Data Stability and MS Sensor (f) Parity.

Correction Material: New TMs, NS0967-LP-611-5010, 5020, -5030, and -5040.

1-A FA-2 NS0967-LP-611-5130 E1C QM6L
SERIAL: A1, A2, A3, A6, A7, A8, A9, and A11.
IDENTITY: Verify that PC board ( $\mathrm{p} / \mathrm{n}$ 21915) in slot A3A2Al is rev. ' $A$ ' or higher.

10-CV-3399/BYQ: Control Program Memory Modification.
Correction Matesial: New TMs, NS0967.LP-611-5010, 5020, -5030, and -5040.

1-A FA-2 NS0967-LP-611-5140 EIC QM6L
SERIAL: A1, A2, A3, A6, A7, A8, A9, A11, A13, A14, A15, and Al6.
IDENTITY: Verify that PC board ( $\mathrm{p} / \mathrm{n}$ 21915) in slot 1 A 3 A 2 Al is rev. ' B ' or higher.

1-CXOF: Add 82 K resistors across storage relay sockets
SERIAL: All
IDENTITY: 82 K ohm resistors across storage relay sockets.
1-CY-4032A/SRA-34(V): Replace Diplex Cards with Improved Diplex Cards Having CI 73016 or CI 73023. (E1B 854, 865, 918)

Correction Material: Will be done by installing team after completion of modifications

1-A FA-1 NS0967-LP-304-3200
SERIAL: All equipment built under Contract NObsr 95244. IDENTITY: Refer to Collins Factory Modification \#36: (a) In electronic gate AlA4 of the Transmitter Adapter MX-4847B/SRA-34(V) and the Coupler Adapter MX-4845A/ SRA-34(V), resistors R10, R13, R16, and R19 should be 1800 ohms vice 4700 ohms, and resistors R11, R14, R17 and R20 should be 1000 ohms vice 1200 ohms. (b) In electronic gate AlA8, AlA10, AlA13, and A1A15 of Electrical Equipment Cabinet CY-4032A/SRA-34(V), resistors R10, Ri3, R16, and R19 should be 1800 ohms vice 4700 ohms, and resistors R11, R14, R17, and R20 should be 1100 ohms vice 1200 ohms.

1-CY-4033/SRA-34(V): Interface with AN/SRM-16(XG-1)
Correction Material: Change 1, NS0967-304-3013 to NS0967-304-3010

3-C YF-168 NS0967-304-3140
E1C Q94L000
SERIAL: Only those units installed with the AN/SRM-16(XG-1).
IDENTITY: A sixty pin connector located on the dight rear of the cabinet below J14 and the left of $\mathbf{J 2 2}$. Three NELC RAAB54110 circuit card assemblies installed in J170, J171, and J179 as well as a dual fuse block mounted on the card cage near the temperature alarm indicator.

2-CY-4033/SRA-34(V): Replacement of Rear Guide Pin Blocks with Stronger Blocks. (ElB 854, 865, 918).

Correction Material: Will be done by installing team after completion of modifications

1-A FA-1 NS0967-LP-304-3200
SER1AL: All equipments, built under Contract NObsr-95244 IDENTITY: Refer to Collins Factory Modification \#35: (a) Extend the electrical equipment drawer assembly in accordance with instructions outlined in Chapter G, Paragraph 5.
2.b(I) in NS0967-304.3010, TM for AN/SRA-34A(V). (b) Locate guide pin blocks at the lower right and lower left rear comers of the drawer assembly. Observe that a heavy duty guide pin block has been installed

1-DAK-1: Modulator Tube Balance Kit
A FA-3 w/kit
F5825-311• 2536
SERIAL: Al!
IDENTITY: R127 (mod or balance) placed on front panel.

1-DAK-2: Same as 1-DAK-1

1-DAK-3: Same as I-DAK-1

1-DAQ: Improved Loop Antenna, Install
B 12
F5820-509.
2352
SERIAL: All
IDENTITY: Improved loop ant type cft 69083B
1-DAS: Station sel trimmers, relocate
A FA. 4 SHIPS 225A None
SERIAL: 1-5
IDENTITY: Trimmers of st sw relocated to front of chassis.

## 1A-DAS:

## 1B-DAS:

2A-DAS: Time corrector ckt, chg
A FA-1 SHIPS 225A
None
SERIAL: 1-106
IDENTITY: On TB101, R134 is 91 K (indicator unit)

2B-DAS: Slow sweep length, increase
A FA. 2
None
SERIAL: 1-106
IDENTITY: Lead from R271 and R273 to pin 3 of X114 ind unit.

3-DAS: DAS to DAS-a, chg
A FA-2 SHIPS 225A F5825-697.
SERIAL: 1-200
IDENTITY: Add trr toggle switch to indicator unit.
4-DAS: Indicator fil ground lead, remove

## A FA-1 SHIPS 225A <br> None

SERIAL: I-200
IDENTITY: Fil gnd removed at socket X104 indicator unit.

5-DAS: Gain cont circuit, improve balance
A FA. 4 SHIPS 225A None
SERIAL: 1-200
IDENTITY: Socket X113 (ind unit) bus wire from pins 2 to 5.

6-DAS: Gain and fine delay controls, chg
A FA-4 SHIPS 225A None
SERIAL: 1-200

IDENTITY: Yellow lead from T105 removed from pin 6 of XI26.

7-DAS: R-285, add
A FA-0.5 SHIPS 225A None
SERIAL: 1-200
IDENTITY: Add R285, 3.9k between trr sw and R132 (ind unit).

8-DAS: Adjust 'plus B' to 280V (was 300)
A FA-0.5
None
SERIAL: All
IDENTITY: Adjust bolt reg R309 to 280 instead of 300 V .

9-DAS: DAS-a/DAS-2 to DAS-b/DAS-2b, chg
A FA-2 w/kit
F5825.311.

SERIAL: All
IDENTITY: Channels 3 and 4 cover channels 1 and 2.

10-DAS: 2 microsec monitor markers, add
B YF w/kit None
SERIAL: SHORE MONITORS
IDENTITY: 2 usec markers provided for increased accuracy.

11-DAS: Cancelled
1-DAS-1: DAS-1 10 DAS-Ia, chg
A FA-2 NS900725 F5825.699.
1356 Cl
SERIAL: All
IDENTITY: A pwr switch is installed on front panel.
2-DAS-1: DAS-la to DAS-1b, chg
A FA-2 NS900752
F5825.301-

SERIAL: All
IDENTITY: Pin 8 of $V-6$ is grounded and pin 5 of $V-6$ is connected to the end of R-30 that connects to the test jack. R30 is connected between the test jack and pin 4 of V-7.

2A-DAS-1: Prr adjust (in lieu of FC \#1)
A FA-! NS900725 None
SERIAL: All
IDENTITY: Receiver band change switch has four positions labeled 1-23.4.

3-DAS-1: Receiver diode connection
A FA-0.5 NS 900752 None
SERIAL: All
IDENTITY: New nameplates are standard type
4-DAS-1: Nameplate chg
A FA.0.5 NS900752 None
SERIAL: 1-140
IDENTITY: Nameplates now read sel to 640.

5-DAS-1: Grounding chg
A FA-1 NS900752
None
SERIAL: All

JDENTITY: An insulated ground lead is added from S-4B (recvr on-off function switch) to the ground lug on socket X17 on DAS-1 or X-117 on DAS-3.

6-DAS-1: Insulation of $\mathrm{Cl} 07 / \mathrm{C} 207$
A FA-1 NS900752 None
SERIAL: All
IDENTITY: Capacitors are bathtub type and are located $m$ back right-hand comer. Mounted on insulated base.

7-DAS-1: Change of Slow Sweep Resistors R167 and R267
A FA-0.5 NS900752 None SERIAL: All
IDENTITY: R-167 in DAS-1 or R-267 in DAS-3 is changed from 4,700 to 3,300 ohms. Located under chassis, right side, mounted on terminal strip. (Third from back end of long strip, 2 watt).

8-DAS-1: Change of Capacitors C37 and C137
A FA. 0.5 NS900752 None
SERIAL: All
IDENTITY: Changed from 25 to 30 mmfd ., located on pin 4 of V-33 or V-133.

1-Electromagnetic Underwater Log (Mfg. Litton Industries): Access to Gear of Time Motor (B203) to Allow for Inspection and Facilities Proper Gear Mesh

> 11-C YF-8 NS0365-LP-292-0010

SERIAL: All serial numbers manufactured by Litton Industries
IDENTITY: A removable inspection plate located in area of time motor (B203). See figure J of bulletin for exact location.

2-Eiectromagnetic Underwater Log (Mfg. Litton Industries): Gear Change in EM Log Indicator Transmitter (Mfg. Litton Industries)

## Correction Matertal: None

11-A FA-2 NS0365-LP-292.0020 EIC LC0100
SERIAL: All serial numbers of Litton Industries Underwater Log (Electromagnetic type for $40-\mathrm{knot}$ equipment)
IDENTITY: Compound gear PC11, P/N B-311-506, now composed of the following: Gear 128th-made of aluminum; Gear 48th-made of brass.

3-Electromagnetic Underwater Log (Mfg. Litton Industries): Replacement of Magnetic Amplifier, AR-560, in EM Log Indicator Transmitter (Litton)

Correction Material: None
11-A FA-4 NS0967-LP-292-0030 EJC LC0100 SERIAL: All serial numbers, Litton Underwater Log Equipment (Vacuum Tube Electromagnetic Type)
JDENTITY: Note that magnetic amplifier, AR-560, has a black removable cover in lieu of gray seaied unit.
4.Electromagnetic Underwater Log (Mfg. Litton Industries): Change in Indicator Transmitter Speed Servo Response Time to Eliminate Excessive Speed Pointer Oscillations

Correction Material: None
1I-A FA-2 NS0365-LP-292-0040 EIC LC01000
SERIAL: Als Litton Industries EM Log Indicator-Transmitters. Any ship and especially carriers experiencing excessive
pointer oscillations of speed indicator (oscillations appear to follow the roll period of the ship) should install this field change.
IDENTITY: Note servo motor B204 is attached to a mounting bracket. Also shaft of servo motor B204 has a extension shaft on which a steel (CRES) pinion gear is mounted. Original pinion gear is made of nylon.

5-Electromagnetic Underwater Log (Mfg. Litton Industries): Fusing of Power Transformer T503

Correction Material: NS0365-LP-292-0000 requires change.
1-A FA-3 NS0365-LP-292-0050
SERIAL: All serial numbers of the Litton Industries Underwater Log (Electromagnetic type for 40 knot equipment)
IDENTITY: The presence of a fuseholder with .5 amp fuse located to the left (facing equipment) of fuse F201 under the trimmer potentiometer assembly. Fuse is marked F202.

6-Electromagnetic Underwater Log (Mfg. Litton Industries): Addition of Resistor R211A to Increase Range of Full Scale Adjustment Potentiometer R211.

$$
\text { Correction Material: EIB } 931
$$

2-A FA-] EIB 931
EJC LC0]
SERIAL: All serial numbers.
IDENTITY: Lower the Trimmer Potentiometer Assembly and note that a 47 -ohm, 2-watt resistor is connected in series with R211.

1-F-1033/SG: Decrease Bias Distortion of Filter Output Correction Material: T-1, NS0960-019-2001 to NS0960-0192000

2-A FA-1 NS0960-019-2010
SERIAL: All units used with shipboard land-line terminations IDENTITY: The resistance value of R4 is 220 ohms.

1-FRA: Installation of C-120
A FA-i NS98662 None
SERJAL: 1-16
IDENTITY: Appearance of capacitor C-120.
1-H-169/U: Handset Modification
Correction Material: Not Required
2-A FA-1 NS0967-971-0190
SERIAL: Handsets used with T-827/URT, AN/WRC-1, AN/ URT-23(V), and C-1138/UR
JDENTITY: Absence of a loud receiver click when the $T$ $827 /$ URT is unkeyed.

1-H-580A/TSQ-18: Replacement of Valve Cores in Low and High Pressure Charging Valves

Correction Material: None
1-A FA-3 NS0967-266-6150
SERIAL: All Navy owned equipment serial numbers A-1 thru A-109
JDENTITY: The threaded end of the new valve core is copper colored instead of gold.

1-ID-500(XN-1)/URN-3: Modification of Alarm Lamp Circuits Correction Material: None required
2-A FA-J NS0967-159-1060 None
SERIAL: Al!

IDENTITY: Presence of a 125 -volt, 6-watt lamp in place of lamp originally installed.

1-ID-917/USQ-20(V): Net Program Display - Incorporation Factory Field Service Orders as a Unit Field Change Correction Material: Incorporate in revised publications 2-A NA

None
SERIAL: 1
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-1D-1365/U: Modification of the Secure System Controller for Push-to-Talk Mode of Operation

$$
\text { 3-A FA. } 32 \text { NS0967-192-3020 }
$$

SERIAL: 1 thru $9,11,14$, and 15 . Serial numbers 10,12 , and 13 modified by contractor.
IDENTITY: The accomplishment may be identified by the additional words MODIFIED and PUSH-TALK on the front panel and by the rotary switch replacing the RESYNC toggle switch.

1-ID-1573/SPN-10: Under Development (09-77).
2-ID-1573/SPN-10: OPS-III Modification For Data Link Monitor OA-8435/SPN-10.

Correction Material: Revised TM, NE0967-LP-303-7010, to be issued.

1-C YF-40 NE0967-LP-303-7060 EIC PD0M
SERIAL: All serial numbers of ID-1573/SPN-10. MX-8107/ SPN-10, and OA-8435/SPN-10.
IDENTITY: DLM (Unit 32) PC cards in A7 and A8 locations are $p / n$ 17-14680-1 instead of $p / n$ 17-14560-1, PC card in A6 location is $\mathrm{p} / \mathrm{n}$ 17.14685-1 instead of $\mathrm{p} / \mathrm{n}$ 17-14565-1, PC card in Al9 location is $\mathrm{p} / \mathrm{n}$ 17-14675-1 instead of $\mathrm{p} / \mathrm{n}$ 17-14520-1. NOTES: Prerequisite Field Changes: 1-ID-1573/SPN-10. 1-MX-8107/SPN-10, and 1-OA-84:35/SPN-10.

1-IP-1117/UYA-4(V): Range Height Indicator Medification
Correction Material: T-1, NS0967-535-5011 to NS0967-0515010: T-1, NS0967-238-7131 to NS0967-238-7130
1.A FA-9 NS0967.535.5030 EIC QM06000 SERIAL: Serial numbers A1 thru A 10
IDENTITY: Remove A3A15 heighi register card (3613651100) and check for addition of CR4 diode as indicated in the procedure.

2-1P-1117/UYA-4(V): Prevent Ghost Images on LED Numerical Indicator.

Correction Material: T-2, NS0967-LP-535-5012, to NS0967-LP.535-5010 dtd 27 June 74, or T-2, NS0967-LP-555-6012, to NS0967-LP-555-6010 dtd 28 Feb. 74.

1-A FA-4 NS0967-LP-535-5040
SER1AL: 1P-1!17: Al-A16, B1. B2, C1. IP-1180. Al-A4, B1. IDENTITY: Disconnect A3J19 from the left-hand card box and check for continuity betweer: A3J 19 and 43 and between A3P19 and 43.

3-1P-1117/UYA-4(V): Direct Computer Interface. Correction Material: To be provided. J-A FA. 4 NS0967-LP-535-3050 SERIAL: AI-A16, B1, B2, and CI-C5.

IDENTITY: Verify installation of Data Line Receiver PC card ( $p / n$ 1631457-100) in slots A3AI and A4A15.

4-IP-1117/UYA-4(V): Same as 36-OJ-194(V)/UYA-4(V)
1-IP-1166/CYA-4(V): Under Development (12-73)
2-IP-1166/UYA-4(V): Master Reset Switch Addition.
Correction Material: TM chg. required.
1-A FA-20 NS0967-LP.535-3030 EIC QM06
SERIAL: A3,81,B3-B6,CI-C6,DI,D2,El-E14; HAC serial no. 1,11,12,32-36.
IDENTITY: Installation of a MASTER RESET pushbutton switch mounted to the left of the ALARM ADVANCE switch on the Variable Function key panel located on the front control panel.

1-1P-1180/UYA-4(V): Same as I-IP-1117/UYA-4(V) except Correction Material: T-1, NS0967-555-6011 to NS0967.555. 6010 and
SERIAL: Serial numbers Al thru A4

2-1P-1180/UYA.4(V): Same as 2-IP-1117/UYA-4(V).
1-1P-1304/UYA-4(V): Under Development. (11-77)
2-IP-1304/UYA-4(V): DDl Analog Card Sync Pulse Timing. Correction Material: Changes to TM will be provided.
1-A FA-8 NS0967-LP-562-6510 EIC QM06 SERIAL: A1-A13, A15-A64, A76. A90, and B1-B4.
IDENTITY: On the Raster Control Card (p/n 1631443-100), verify that resistor R 129 is 6.8 k ohms (formerly 3.3 k ohms) and capacitor C53 is 0.022 uF (formerly 0.047 uF ).

3-IP-1304/UYA-4(V): Alphanumeric Control ROM Update. Correction Material: To be supplied.
3-A ङ゙A.2 NS0967-LP-5E2-6590 EIC QMOE SERIAL: Al-Al3l, Bl-B4.
IDENTITY: Verify the following on the (A2) Alphanumeric Control Circuit card (163:422-100): component A2U37 is p/n 43037A. A2U38 is p/n 43038A, A2U42 is p/n 43039A, and A2U43 is $p / n 43040 A$.

1-J.2698/UR: Interconnecting Box - Reduction of Crosstalk
Correction Material: T-1. NS0967-190-3011 to NS0967.190. 3010; T-1, NS0967-190-3021 to NS0967-190-3020

2-A FA-0.5 NS0967-190-3040
SERIAL: All equipments
IDENTITY: Removing the cover of the J-2698/UR and noting the presence on terminal board TB-1 of a 680 ohm resistor between terminals $C$ and $E$ and a 0.1 mfd . capacitor between terminals $A$ and $D$.

1-KWT-6(8): Power Amplifier Keying Modification to Reduce Fuse (F3) Failures

Correction Material: None
2-A FA-1 NS981475 None
SERIAL: KWT-6(8) Serial I through 79
IDENTITY: Addition of the 270 K ohm resistor and a type [N198 diode connected to relay K-2 in the power amplifier AM-206]/URT.

2-KWT-6(8): Addition of Ground Wire in High Voltage Power Supply for Positive Grounding of Switch S-1 Correction Material: None 2-A FA-0.5 NS981476

None
SERIAL: 1 through 88
IDENTITY: Presence of a 10 inch bonding wire bolted to the S1 subchassis and carried back and bolted to the back plate of the Power Supply PP-2153/U.

3-KWT-6(8): Same as 12-AN/URC-32
4-KWT-6(8): Same as 13-AN/URC-32 except
SERIAL: I through 90
5-KWT-6(8): Same as $34-A N / U R C-32$ except
SERIAL: 1 through 90
6-KWT-6(8): Same as 15-AN/URC-32
7.KWT-688): Same as 16-AN/URC-32

8-KWT-6(8): Same as 17-AN/URC-32 except
SERIAL: 1 through 10

9-KWT-6(8): Same as 18-AN/URC-32
10-KWT-6(8): Same as 19-AN/URC-32
11-KWT-6(8): Same as 20-AN/URC-32
12-KWT-6(8): Same as 21-AN/URC-32

13-KWT-6(8): Same as 22-AN/URC-32 except
SERIAL: 1 through 90

14-KWT-6(8): Same as 23-AN/URC-32 except SERIAL: All

15-KWT-6(8): Same as 24.AN/URC-32
16-KWT-6(8): Same as 25-AN/URC-32
17-KWT-6(8): Same as 26-AN/URC-32
18-KWT-6(8): Same as 27-AN/URC-32 except 2-C FA. 4 NS0967-066-7350

EIC FH43000
1-KY-44A/FX: Change of Power Line Fuse to 1 Amp Slow Blow

Correction Material: T-1 to NS91411
2-A FA-0.5 NS981085
None
SERIAL: All
IDENTITY: F-1 and F-2 are one amp fuse.
1-KY-44B/FX: Same as 1-KY-44A/FX
1-KY-58/CRT: Provision for Separate input for FAX Signals Correction Material: Change 1 to NS91543
2 FA-3 NS98335
SERIAL: All

IDENTITY: Connector raceptacle (J-113) is added on blister assembly E-122.

2-KY-58/CRT: Wining Error Correction
Correction Material: None
2-A FA-0.5 NS0967-213-2050 None SERIAL: All
IDENTITY: When wire No. Rain Amplifier - Oscillator AM65SNRT is connected to pin 5 of V-113 instead of lower lug of R-181.

1-KY-75/SRT: Same as 1-KY-58/GRT
2-KY-75/SRT: Same as 2-KY-58/GRT

1-KY-83/S: Use with TDZ, TED, or AN/ARC-27 via NT Radiophone Unit

Correction Material: Change 1 to NS91822(B)
2-A FA-2 NS98521 F5820-642.
7903
SERIAL: 1-50
IDENTITY: Shielded wire, one end of which the inner conductor connects to terminal 3 of TB 101 and the other end connects to terminal 3 of TB 102.

3-KY-83A/S: Use with TDZ, TED, or AN/GRC-21 via N'T Radiophone Unit

Correction Material: Correct the TM in accordance with Change 1 to NS91822B

A FA-2 NS98522 F5820-699.
5504
SERIAL: 1-205
IDENTITY: Shielded wire, one end of which the inner conductor connects to terminal 3 of TB 101 and the other end connects to terminal 3 of TB 102.

1-KY-122/URN: HF and UHF Keying Compatibility and UHF Tone Modulation

Correction Material: T-4, NE0967-998-0014 to NE0967. 998-0010

11-C YF-8 NE0967-998-0020
SERIAL: All serial numbers
IDENTITY: The front panel of KY-122()/URN push button start stop switch S102 is replaced by UHF/HF toggle switch S201.

1-KY-122A/URN: Same as 1-KY-122/URN
1-KY-214/BRA-4: Information relative to this change is included in NS94546

1-KY-438/SYA-4(V): Under Development (01-72)
2-KY-438/SYA-4(V): Rewiring of 'Y'Axis Noise Control FlipFlop

Correction Material: T- to NS0967-059-2020
IV-A FA-1 EIB 882
EIC P84H000
SERIAL: All serial numbers
IDENTITY: Note a wire from J11-7 to $\mathbf{5 1 1 - 5}$ and a wire from Jli-11 to Jll-14.

1-KY-663/WRA-4: Replace 1A1C2, 1A2C2, 1A3C2, IA4C2, and IASC2

Correction Material: T-1, NS0967-873-50 II to NS0967-8735010

1-A FA-2 NS0967-873-5060 EIC QQ06000 SERIAL: All serial numbers. IDENTITY: Verify that capacitors (1A1C2, 1A2C2, 1A3C2, 1 A 4 C 2 , and IASC2) are $10 \mathrm{~h}_{1} \mathrm{~F}$ instead of 47 uF . (Capacitors were 47 uF before this field change.)

2-KY-663/WRA-4: Install Bandpass Filter IFLI.
Correction Material: T-2, NE0967-LP-873-5012, to TM, NE0967-LP-873-5010.

1-A FA-2 NE0967-LP-873-5070 EIC QQ06
SERIAL: All serial numbers.
IDENTITY: IFL1 is mounted on outside rear panel.
3-KY-663/WRA-4: Relocate FI and F2.
Correction Material: T-3, NE0967-LP-873-5013, to NE0967-LP-873-5010.

1-A FA-2 NE0967-LP-873-5080 EIC QQ06
SERIAL: All serial numbers.
IDENTITY: Fuseholders, XFI and XF2, are mounted on outside front panel.

1-KY-766/BRT-2: Wire CR1 and CR2 into A2ATI Circuit.
Correction Material: T-1, NE0967-LP-547-40II, to TM, NE0967-LP-547-4010.

4-A FA-2 NE0967-547-4030 EIC QM4Y
SERIAL: All serial numbers.
IDENTITY: CRI and CR2 are wired into A2ATI circuit.
1-LS-458A/S1C: Power Supply Modification.
Correction Material: To be provided.
1-A FA-I NS0967-LP-079-7020 EIC Q64F
SERIAL: All serial numbers.
IDENTITY: On the Audio Amplifier board (iA3) - the corner of the board nearest terminal 1 - verify that a nylon flat washer is between the board and metal standoff and that a nylon screw secures the board to the standoff.

1-IS.468/S: Incorporation of Factory Field Change Bulletins as a Unit Field Change

Correction Material: Incorporated in the revised publication

2-A FA-2 NS0967-213-2050 None
SERIAL: AI through A28
IDENTITY: Presence of a 10 K ohm potentiometer in lieu of a 1 megohm potentiometer Gain Control.

2-LS-468/S: Modification of Audio Amplifier
Correction Material: T-1, NS0967-975.7011 to TM, NS0967-975-7010 (formerly NS93734(A))

2-A FA-1 NS0967-975-7030
None
SERIAL: All
IDENTITY: Checking for presence of a IN270 diode between pins 72 and 78 on the 577014 card.

1-LS-482/SYA-4(V): Intercommunication Station - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: None

2-A NA NS0967-999-2040
None SERIAL: A2 through A24 and A26 through A29 IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-LS-482/SYA-4(V): Same as 2-OA-3069/SYA-1(V)
3-LS-482/SYA-4(V): Same as 14-OA-3953/SYA-4(V)
4-LS-482/SYA-4(V): Same as 31-OA-3953/SYA-2(V) except SERIAL: Al-A!04, BI-B25, CI-Cl3 and
IDENTITY: Pull the chassis drawer out of the Intercommunication Station and observe the installation of a resistor-capacitor filter assembly on the top front end of the card retainer which secures the intercom amplifier 580637, and buzzer control, 580718.

5-LS-482/SYA-4(V): Add Secure Voice Capability.
Correction Material: Supplemental TM (TBS).
3-C YF-25 NS0967-LP-999-2050 ElC P804
SERIAL: LS-482 serial numbers AI-AI04, BI-B25, CI-C13.
OA-3953 serial numbers AI-AI54, BI-BI8, C1-CII. OA-3955 seria! numbers AI-A143, BI-B20, C1-CIS, D1, D2.
IDENTITY: Installation of Audio Amplifier module ( $\mathrm{p} / \mathrm{n}$ 55802) and operation of Secure Voice control panel lights.

NOTES: Prerequisite feld change: 4-LS-482/SYA-4(V).

6-LS-482/SYA-4(V): Under Development (09-75)
1-LS-518A/S1C: Power Supply Modification.
Correction Material: Chg. 4, NS0965-LP-109-014, to NS0965-LP-109-0 10.

1-A FA-1 NS0965-LP-109-0020 EIC Q64A,
SERIAL: All serial numbers of LS.518A/SIC and LS.519A/ SIC.
IDENTITY: Verify that the standoff spacer for the Power Supply-Amplifier Board (assembly lA3) is nylon (vice metal) at the corner of IA3 adjacent to transformer TI.

2-LS-518A/SIC: Increase Amplifier Input Sensitivity and Speaker Clarity.

Correction Material: Chg. 4, NS0965-LP-109-0014, to NS0965-LP-109-0010.
1-A FA-I NS0965-LP-109.0030 EIC Q64A,
Q64E

SERIAL: All serial numbers of LS-518A/SIC and LS-519A/ SIC.
IDENTITY: Verify that resistor 1 A3R4 is 15 ohms (vice 3.3 ohms) and resistor 1 A 3 R 13 is 39 K ohms (vice 18 K ohms).

1-LS-519A/SIC: Same as 1-LS-518A/SIC.

2-LS.519A/SIC: Same as 2-LS-518A/SIC.
1-LS-527/UYA-1(V): 1mproved Labels for the Intercommunication Panels

Correction Material: None
1-A FA-2 NS0967-LP-078-7240
SERIAL: All serial numbers

IDENTITY: Presence of labels on the Intercommunication Panel.

2-LS-527/UYA-1(V): Modification of Radio Control Circuits for PUSH-TO-TALK

1-A FA-3 NS0967-078-7330 EIC FU0A000 SERIAL: AI through A19 (All intercommunication stations will be the same after this field change has been accomplished) IDENTITY: New relays K 10 and K11 will be located on the drawer chassis between the Sound Power switch and connector $J 2$.

3-LS-527/UYA-1(V): Add Secure Voice Capability.
Correction Material: Supplemental TM (TBS).
3-C YF-25 NS0967-LP-078-7610 EIC QM0S
SERIAL: Selected by NA VSEC.
IDENTITY: Installation of Audio Amplifier module ( $\mathrm{p} / \mathrm{n}$ 55802) and operation Secure Voice Control Panel lights.

4-LS-527/UYA-1(V): Under Development (09-75)
1-LS-537/UYA-4(V): Incorporation of HAC Maintenance Bulletin as a Unit Field Change

Correction Material: lncluded in applicable maintenance bulletins

4-A NS0967-238-7380 ElC FU09000
SER1AL: Al through A23
IDENT1TY: Observing this field change number on the Field Change Record plate.

2-LS-537/UYA-4(V): Elimination of Communication Cross Talk

Correction Material: T-2, NS0967-238-7112 to NS0967-2387110

2-A FA-1 NS0967-238-7540 EIC QM06000
SER1AL: All A and B serials
IDENTITY: Noting the etch change on Control P.C. Card 1548022 as indicated in step 3 of this field change.

3-LS-537/UYA-4(V): Modification to Unload Radio Receive Circuits

Correction Material: Included in TM
1-A FA-8 NS0967-238-7390
E1C QM06000
SERIAL: All
IDENTITY: Noting the addition of a new relay (K-19) on the intercom mode select printed circuit card assembly (1537682) and that R38 and R42 are removed on the intercom amplifier and control P.C. card (1548022).

4-LS-537/UYA-\&V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: None required
2-A FA-8 NS0967-238-7600 EIC QM06000
SER1AL: Equipment serials A1 through A21. All other serials were modified by an identical production change.
IDENTITY: This field change can be identified by checking the front, top and rear access panels for installation of new wire impregnated silicone rubber RFI gaskets and spacers to prevent over compression of the gaskets.

5-LS-537/UYA-4(V): Convert Carbon to Dynamic Communi-
cations System
Correction Material: None required
I-A FA-8 NS0967-238-7610
EIC QM06000
SER1AL: Serial numbers A1 through A21, B1 through B24 IDENTITY: Noting the addition of a new relay, K19 on the ${ }^{*}$ INTERCOM MODE SELECT', Printed Circuit Card Assembly (1537682), and that the following equipment card locations contain a 1548022 P.C. Card.

6-LS-537/UYA-4(V): Correct Intercom Noise.
Correction Material: TM's to be revised.
1-A FA-11 NS0967-LP-562-6540* EIC QM06 SERIAL: LS-537: A1-A21, Bl-B20, B24, Cl-C3. LS-537A: Ai-A163A, Bl-B37, Cl-C64, Dl-D30, E1-E22, G1-G22. OA7979(V)1: A1-A10, A14, A16-A19, A25-A27, B2-B6. OA7979(V)2: A1, A2, B1-B4. OA-7979(V)4: A1-A339, B1-B78, C1, C2, BSCl-BSC3. OA-7979(V)S: A1-A6, B1, B2. OA7979(V)6: Al-A29, B1-B4. OA-7979(V)9: A1-A4. OA7979(V)10: A1-A161, B1-B4, C1-C34, D1-D29. OA-7980: A1, Bl, Cl-C3, El. OA-7980A: Al-A50, Bl-B10, Cl-C18, Dl-D5, El-E6. OA-7981A: A3, A4, B1-B4. OJ-194(V)3: A1-A19, B1B231. OJ-194(V)4: Al-A7, B1, Cl. OJ-195: Al-A7, Bl, Cl. OJ-197: Al-A4, B1-B27.
IDENTITY: For the LS-537, LS-537A: Verify installation of a zener diode type 1N2975B (AIVR1) and a 12-ohm, 3-watt, wirewound resistor (AIR7) on the left side extemior surface of power supply (Al). For the OA-7979(V), OJ-194(V): Remove the Intercom Amplifier and Control Card (1548022) from area A10A31 and verify addition of ferrite beads (L1 and L2) to the leads of capacitor C12. For the OA-7980, OA-7980A: Remove the Intercom Amplifier Control Card (1548022) from Area A9A2 and verify the addition of ferrite beads (L1 and L2) to the leads of capacitor C12. For the OA-7981A, OJ-195, OJ-197: Remove the Intercom Amplifier Control Card (1548022) from Area A9A2 and verify the addition of ferrite beads ( Ll and L 2 ) to the leads of capacitor Cl 2.
NOTES: Prerequisite Field Changes: 7-LS-537; 3-, 4-LS-537A; 22-OA-7979(V); 6-, 7-, 9-OA-7980; 6-, 7-OA-7980A; 8-, 9-, 13-OA-7981A. *FCB dtd 2 Aug 78 supersedes FCB dtd 1 Apr] 78.

7-LS-537/UYA-4(V): lnstall -15 Volt Power Supply
Correction Material: None required
1-A FA-4 NS0967-238-7710 E1C QM06000 SERIAL: Senial numbers Al through A21, B1 through B20, B24 and C1 through C3
IDENTITY: Removing the 20 screws secuing the top access plate and observing that a 1500 ufd capacitor has been added extemal to the rear of the power supply and is labeled $C 4$.

8-LS-537/UYA-RV): Add Secure Voice Capability.
Correction Material: New Supplemental TM, NS (TBS).
1-C YF-25 NS0967-LP-562-6410 ElC QM06
SERIAL: All serial numbers of LS-537, LS-537A, OA7979(V)!, (V)2, (V)4, (V)5, (V)9, (V)10, (V)!2, OA-7981A, OJ-194(V)3, OJ-194(V)4, OJ-195, and OJ-197.
IDENTITY: Installation of Audio Amplifier Module ( $\mathrm{p} / \mathrm{n}$ 55802) and operation of the Secure Voice control panel lights.

9-LS-537/UYA-4(V): Correct IFF Emergency Alarm Wiring.
(EIB 977, 991)
Correction Material: None required.
4-A FA-1 EIB 977
EIC QM06
SERIAL: All serial numbers of the LS-537. LS-537A applies to serials A1-A163. B1-B37. Cl-C64. Dl-D30. El-E22, GlG26. H1-H58, I1-I12, J1.J11.
IDENTITY: Verify that the wire from TBI-7 is connected to J 7 pin 45 vice J 7 pin 39.

10-LS-537/UYA-4(V): Add Secure Radio Channel Select Capability

Correction Material: To be provided.
1-A FA-40 SE185-AA-FCB-010 EIC QM06
SERIAL: LS-537: All serial numbers. LS-537A: All serial numbers.
IDENTITY: Observe the Intercom Select Panel and verify that the lamp in the center is labelled NO ACCESS, READY and has a green lens.
NeTES: Prerequisite Field Change: 8-LS-537/UYA-4(V), 9 -LS-537A/UYA-4(V).

1-LS-537A/UYA-4(V): Same as 8-OA-7979(V)/UYA.4(V) except
SERIAL: A1 and A 21

2-LS-537A/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group 1, as a Unit Field Change

Correction Material: None
4-A NS0967-238-7360
EIC FU090e0
SERIAL: As indicated in Table 1 of this field change
IDENTITY: Observing FC 2 on the Field Change Record plate.

3-LS-537A/UYA-4(V): Same as 2-LS-537/UYA-4(V)
4-LS-537A/UYA-4(V): Same as 3-LS-537/UYA-4(V) except SERIAL: All A and B serials

5-LS-537A/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II as a Unit Field Change Correction Material: None required 2-A FA-8 E1B 791

EIC P81700
SERIAL: Equipment serials Al through A163 and Bl through B20. All other serials were modified by an identical production change.
IDENTITY: This field change can be identified by checking the front, top and rear access panels for installation of new wire impregnated silicone rubber RF1 gaskets and spacers to prevent over compression of the gaskets.

6-LS-537A/UYA-4(V): Same as 6.LS-537/UYA-4(V)
7-LS-537A/UYA-4(V): K3 Contact Protection on the 1548022 Card

Correction Material: TM Change to NS0967-238-7120
II-A FA-0.5 EIB 862
EIC QM06000
SERIAL: All A and B serials
IDENTITY: Remove Intercom amplifier control card J-7 and note that a 1 N 914 diode CR25 has been added between K9X2 and ground.

8-LS-537A/UYA-4(V): K2 and K3 Contact Protection of the 1548022 Card

Correction Material: T-2, NS0967-238-7122 to NS0967-2387!20

I-A FA-1 NS0967-238-7930 EIC QM06000
SERIAL: Serial numbers Cl thru C64, El thru E21, and D1 thiu D30, G 1 thru G20, and His thru H10
IDENTITY: Remove intercom amplifier control card (1548022) at card location J-7 and note the addition of a 1N914 diode between K9X2 and ground.

9-LS-537A/UYA-4(V): Same as 8-L.S-537/UYA-4(V)
10-LS-537A/UYA-4(V): Same as 10-LS-537A/UYA-4(V).

11-LS-537A/UYA-4(V): Same as 9-LS-537/UYA-4(V).

1-LS.621/IUYA-4(V): Under Development (12-73)
1-MAR: Addition of Shockmounts
Correction Material: None
B YF-4 NS98663 2N5820-311.
SERIAL: 1-1400
IDENTITY: Shockmounts on NT-20379
2-MAR: Addition of Ballast Resistor R-530 Correction Material: None
A FA-1/4 NS98663 None
SERIAL: 1-500
IDENTITY: Spare ballast resistor R-530.
3-MAR: Replacement of TDR in Power Supply NT-20379 Correction Material: None

> A FA-1/4 NS98769 2N5840-311.

SERIAL: NT-20379 (1-500)
IDENTITY: Relay K-903 bearing type number 40258

4-MAR: Addition to Allowance of Equipment Spares Correction Material: None
A FFA-1/4 NS98062
2N5820-642-
7215
SERIAL: Equips with power supplies NT-20379 with numbers 50i and up
IDENTITY: Following spare items; I each of the following:
C-963A/S. C-964A/S, E-906, F-907, J-902, L-915A/S, L-916
5-MAR: Aiddition of Noise Suppression Kit for Dynamotor and Blower Motor

Correction Material: See NS98051
A FA-4 NS98051 2N5820-311.
SERIAL: All
IDENTITY: Installation of noise suppressor kit Z-601 and Z804.

6-MAR: Addition of Bleeder Resistor in Electronic Noise Suppressor

Correction Material: T-1 to NS900,719(A)

2-A FA-0.5 NS98224
F5820-340.
SERIAL: All w/ctd-53518 noise suppr
IDENTITY: Presence of R-1701 across terminals 15 and 16 on 2-1701 (not readily accessible).

1-MAY: Replacement of Whip Antenna and Tripler Meter Shunt and Installation of Channel Frequency Card Correction Material: See NS98263
A FA-I NS98263 2N5820-311. 2825
SERIAL: All
IDENTITY: Channel frequency plate installed on front panel below system nameplate.

2-MAY: Improvement of Alignment Procedures
Correction Material: See NS98562
2-A FA-2 NS98562 2N5820-642-
7904
SERIAL: All
IDENTITY: Presence of a new switch (S-202) in place of S201 and colored paint marks on the tripler yokes and coils.

3-MAY: Replacement of Capacitors, C-127, C-129, C-235, C. 401

Correction Material: Change 3 to NS91392
1-A FA-3 NS981031
2N5820-615-
SERIAL: All
IDENTITY: Accomplished
1-MAY-1: Same as 2-MAY
2-MAY-1: Same as 3-MAY
1-MD-855~WRR-7: Audible Alarm Location Change to the Front Panel

Correction Material: Included in Operation and Maintenance Manual

1-A FA-4 NS0967-421-9130 EIC QB1L000
SERIAL: Serial numbers AI thru A50
IDENTITY: Relocation of audible alarm on the power supply panel and nameplate with part number 792-6371-002.

2-MD-855/WRR-7: Incorporation of Diverter Assembly for Fan Noise Reduction into Demodulator Power Supply.

Correction Material: T-1, NE0967-LP-421-9012, to TM, NE0967-LP.421-9010, and T-1, NE0967-LP-421-9043, to TM, NE0967.LP-421-9040.

1-A FA-I NE0967-LP-421-9180 EIC QB1L SERIAL: A1-A 21 and A23 thru A 51 (contract N00039-70-C. 1507), and BI-B120 (contract N00039-74-C-0152).

IDENTITY: The louvered front-entry type of air vent is replaced by a bottom-entry type of airduct (diverter).

1-MD-856/ART-50. Modulator 'Constant Frequency Shift' and 'Modulation' Switch Modifications.

Correction Material: T-1, NE0967-LP-421-9083, to NE0967-LP.421-9080 dtd 30 April 74, and T-1, NE0967-LP-462-3041, to NE0967-LP 462-30-40 dtd 30 July 76.

1-A FA-I NE0967-LP-421-9200 EIC QM4K

SERIAL: All VERDIN shore station MD-856/ART-50 modulators. These modulators are assigned to AN/URT serial numbers AI thru A4, B1 thru B15, and B17 tbru B27.
IDENTITY: The Constant Frequency Shin (CFS) switch S-3 has been changed from a three-position switch to a momentary action switch incorporating a switch to a guard engraved with the words 'WARNING SEE SOI'.

1-MD-1042/BRR-3: Replacement of 2-Wire AC Input Power Receptacle, J308, with 3-Wire Receptacle; and instajlation of Additional Fuseholder, XF-302, and 1/4-A Fuse, F302, in Unfused AC Input Line.

Correction Material: T-5, NE0967-LP-063-6015, to TM, NE0967-LP.063-6010 dtd Oct. 76.

1-A FA-2 NE0967-LP-063-6100 EIC QB06 SERIAL: All serial numbers of MD-1042/BRR-3 manufactured by the Naval Weapons Support Center, Crane, Indiana, which have been interfaced with AN/BRR-30 receivers.
IDENTITY: Verify that J 308 at the rear of the chassis is a 3 . pin receptacle (vice 2-pin). Verify installation of tuse holder (XF-302) and 1/4-A fuse (F-302) on the front panel.

1-MK 1 MOD 0 MSR PORT T/S: Resolver Bridge Wiring Change.

Correction Material: Provided in revised TM, NS0924-LP. 036-9010.

1-A FA-2 NS0924-LP.036-9020 EIC L900
SERIAL: All serial numbers.
IDENTITY: Installation of a red warning decal on the front panel directly under the resolver bridge.

1-MK 1 MOD 0 SAISAC: Provide Compatibility Between SAISAC and AIAS

Correction Material: T- to NS0924.009-4010

$$
\text { 2-A FA-1 EIB } 859
$$

EIC LA01000
SERIAL: All serial numbers
IDENTITY: No connection between terminals 17 and 18 on TB3.

2-MK 1 MOD 0 SAISAC: Addition of Digital Data Output at SAISAC Test Plug

Correction Material: T-1, NS0324-LP-062-1001 to NS0324-LP-062-1000

1-A FA-2 NS0324-LP-062-1020 EIC LAOI000 SERIAL: SAISAC (all MKs and MODs) installed on all CV, CVA and CVA(N) having MK 3 MOD 4 (INTERIM) Ships Inertial Navigation Systems (SINS) to provide digital alignment and waypoint data to aircraft. This currently includes the following carrier hull numbers: 43 and 59 thru 69 inclu. sive.
IDENTITY: The presence of a relay and waveshaper module installed on the inside bottom of SAISAC.

I-MK 1 MOD 1 SAISAC TEST SET: Replaces Illuminating Panel with Improved Type

1-A FA-I NS0924.013-9020 EIC SN03000
SERIAL: All serial numbers
IDENTITY: Note that (degrees X10) is marked on the illuminating pane! under the HEADING dial. (See figure 3-2, NS0967-013-9010 for location of HEADING dial.)

2-MK 1 MOD 1 SAISAC TEST SET: Compatibility to the Digital Configuration of the Aircraft Inertial Alignment System (AIAS)

Correction Material: T- to NS0924-013-9010
2-A FA-1.5
EIC LA03000
SERIAL: All serial numbers

1-MK 2 MOD 0 SAISAC: Same as 1-MK I MOD 0 SAISAC

2-MK 2 MOD 0 SAISAC: Same as 2-SAISAC MK 1 MOD 0 except

Correction Material: T-1, NS0924-LP-009-4012 to NS0924-LP-009-4010 and

EIC LA05000

1-MK 2 MOD 1 SAISAC: Same as 1 MK 1 MOD 0 SAISAC

2-MK 2 MOD 1 SAISAC: Same as 2-SAISAC MK 1 MOD 0 except

Correction Material: T-1, NS0924-LP-009-4012 to NS0924-LP.009-4010 and

EIC LA05000

## 1-MK 2 MOD 1 SINS: Cancelled

2-MK 2 MOD 1 SINS: Addition of Computer Test Set to Auxiliary Control Console (fommerly Modification Instruction N7B-002)

Correction Material: None required to TM, NS0324-0477010 thru NS0324-047-7120 dtd 3-29-68, or to Programming Documents NS0324-047-7!30 thru NS0324-047-7380

1-A YF-28 NS0324-047-7410 EIC L901000 SERIAL: Auxiliary Control Console serial numbers 01 Y and 002 thru 018
IDENTITY: Presence of Computer Test Set P/N 68021-501 mounted adjacent to Relay and Switch Drawer in upper lefthand side of Auxiliary Control Console P/N 65335-101-11.

3-MK 2 MOD 1 SINS: Addition of VM-7 Velocity Meters Correction Material: Included in EFCB
3-A FA-10 NS0324-047-7420 EIC L901000 SERIAL: Binnacle (Stable Platform Unit) serial numbers 003, 004, 006, 008, $01 \mathrm{I}, 014,016,017$, and 018 (001, 007, 009, 012, and 013 modified during production).
IDENTITY: Installation of 65309-401-21 Gyro Wheel Power Supply in the 65548-101 (or -11) Navigation Console (65309-401-21 Gyro Wheel Power Supplies identified by installation of two 65950-502-21 Velocity Meter Electronic Control Amplifiers in slots A6 and A8), and installation of two 65293-40141 25V DC Power Supplies in slots A1 and A3 of 65300-40141 Power Supply Set.

4-MK 2 MOD 1 SINS: Modification of Auxiliary Control Console for Addition of Typewriter (formerly Modification Instruction N7B-004)

Correction Material: Use of NS0324-047-7120 dtd 29 March 1968

I-C YF-88 NS0324-047-7430 ElC L901000

SERIAL: Auxiliary Control Console serial numbers 002 thru 018
IDENTITY: Installation of connectors 311 and 312 on top right rear comer of 65335-101-21 Auxiliary Control Console.

5-MK 2 MOD 1 SINS: Polar Mode Reset and Autoloc Programs

Correction Material: Ch. 1, NS0324-047-7011 to NS0324-047-70!0; Ch. 1, NS0324-047-7021 to NS0324-047-7020; Ch. 1, NS0324.047-7031 to NS0324-047-7030; Ch. 1, NS0324-0477041 to NS0324.047-7040; Ch. 1, NS0324-047-7051 to NS0324-047-7050; Ch. 1, NS0324-047-7061 to NS0324-047-7060; Ch. 1, NS0324-047-707! to NS0324-047-7070 Ch. I, NS0324-047-7081 to NS0324-047-7080; Ch. I, NS0324-047-7091 to NS0324-0477090; Ch. 1, NSO324-047-7101 to NS0324-047-7100; Ch. 1, NS0324-047-7111 to NS0324-047-7110

1-A FA-1 NS0324-047-7440
EIC L90!000
SERIAL: MK 2 MOD 1 SINS having Binnacle (Stable Platform) serial numbers 003 thru 009, 011, 012, and 014 thru 018 IDENTITY: Use of MK 1 MOD 1 Spare VERDAN Polar Mode Reset Program, Autonetics tape P/N 2T0041-450-000. AA.

6-MK 2 MOD 1 SINS: Modification of Navigation Console and Stable Platform and Housing

Correction Material: T-1, NS0324-047-7012 to NS0324-047. 7010; T-1, NS0324-047-702! to NS0324-047-7020; T-1, NS0324-047-7052 to NS0324-047-7050; T-1, NS0324-047-7061 to NS0324-047-7060, T-1, NS0324-047-7071 to NS0324-0477070; T-1, NS0324-047.7081 to NS0324-047-7080; T-1, NS0324-047-7092 to NS0324-047-7090; T-1, NS0324-047-7!0! to NS0324-047-7100; T-1, NS0324-047-7111 to NS0324-0477110

1-A FA-40 NS0324-047-7450 EIC L90!000 SERIAL: All serial numbers
IDENTITY: Pull out the navigation control panel and note installation of 65102-306 indicatos assembly and 66171-502 detector assembly.

7-MK 2 MOD 1 SINS: Alteration of 66433-301-11 or 66440-301-11 Stable Platform and Housing

Correction Material: T-2, NS0324.047-70!3 to NS0324-0477010; T-2, NS0324-047-7062 to NS0324-047-7060, T-2, NS0324-047-7072 to NS0324-047-707t, T-2, NS0324-047-7082 to NS0324-047-7080; T-2, NS0324-047-7093 to NS0324-0477090; T-2, NS0324-047-7!02 to NS0324-047-7!00; T-2, NS0324-047-71!2 to NS0324-047-71!0

1-A FA-90 NS0324-047-7460 EIC L901000 SERIAL: 66433-301-11 or 66440-301-11 stable platform and housing (serial numbers as applicable)
IDENTITY: Verify that connectors J71, 572, J73, and J74 are installed adjacent to slip ring assembly.

8-MK 2 MOD 1 SINS: Typewriter Mounting and Cooling Air Filter Change

Correction Material: T-3, NS0324-047-7014 to NS0324-0477010; T-3, NS0324-047-7!2! to NS0324-047-7120 (Typewriter Addendum)

1-A FA-20 NS0324-047-7470
EIC L901000
SERIAL: 55131-107 Typewriter System (serial numbers as applicable)

IDENTITY: Verify that two retainers are mounted on bottom of typewriter for ease of removal base assembly.
9.MK 2 MOD 1 SINS: Alteration of 65548-101-41 Navigation Console and 66433-301-21 or 66440-301-21 Stable Platform and Housing

Correction Material: Ch. 2, NSO324.047-7015 to NSO324. 047-7010; Ch. 1, NSO324-047-7022 to NS0324.047-7020; Ch. 2. NS0324.047-7053 to NS0324-047-7050; Ch. 1, NSO324-0477063 to NS0324-047-7060; Ch. 1, NS0324.047-7073 to NSO324. 047.7070; Ch. 1, NSO324-047-7083 to NS0324-047-7080; Ch. 2, NSO324-074-7094 to NS0324-097-7090; Ch. 1, NSO324.0477103 to NS0324-047-7100; Ch. 1. NSO324.047-7113 to NS0324-047-7110; Ch. I, NSO324.047-7122 to NSO324.047-7120

1-A FA-180 NS0324.047.7480 EIC L901000 SERIAL: 65548-101-41 navigation console and 66433-301-21 or 66440-301-21 stable platform unit (serial numbers as applicable)
IDENTITY: Pull out platform detector group amplifier and note that part number is 65603 -502-1.

10-MK 2 MOD 1 SINS: Modilication to Update N7B-1 to N7B. 2

Correction Material: Ch. 3. NS0324-047-7016 to NS0324-047-7010; Ch. 3. NSO324.047-7054 to NS0324.047-7050; Ch. 2, NSO324-047-7064 to NS0324-047-7060; Ch. 2, NSO324-0477074 to NSO324.047-7070; Ch. 2, NS0324.047-7084 to NS0324-047-7080; Ch. 3, NSO324-047-7095 to NS0324-047-7090; Ch. 2, NSO324-047.7114 to NS0324.047.7110

1-C YF NS0324-047-7490
SERIAL: 65548-101-51 Navigation Console and 66433-301-31 or 66440-301-31 Stable Platform Unit (serial numbers as applicable).
IDENTITY: Note installation of tape cables between the navigation console hamess connectors and the drawers.

11-MK 2 MOD 1 SINS: Tape Reader Modilication (p/n 56793-501 Reproducer).

Correction Material: Chg. 1, NS0324-LP-047-7031, to TM, NS0324-LP-047-7030 did 29 March 68.
2.C YF-6 NS0324-LP-047-7500 EIC

SERIAL: 65335-101-21 Auxiliary Control Console (serial numbers as applicable).
IDENTITY: Verify that the canister on the tape reader is $\mathrm{p} / \mathrm{n}$ 36920-315.

1-MK 2 MOD 1A SINS: Cancelled
2-MK 2 MOD 1A SINS: Same as 2-MK 2 MOD 1 SINS except

EIC L903000
3-MK 2 MOD 1A SINS: Same as 3-MK 2 MOD 1 SINS except

EIC L903000
4-MK 2 MOD 1A SINS: Same as 4-MK 2 MOD 1 SINS
except
EIC L903000
5-MK 2 MOD IA SINS: Same as 5-MK 2 MOD 1 SINS except

EIC L903000
SERIAL: MK 2 MOD IA SINS having Binnacle (Stable Platform) serial numbers 001 and 013
IDENTITY: Use of MK I MOD I Spare VERDAN Polar Mode Reset Program. Autonetics tape P/N 2T0041.4600000AA.
6.MK 2 MOD 1 A SINS: Same as 6-MK 2 MOD 1 SINS

7-MK 2 MOD IA SINS: Same as 7-MK 2 MOD 1 SINS
8-MK 2 MOD 1 A SINS: Same as 8-MK 2 MOD I SINS
9-MK 2 MOD 1 A SINS: Same as 9-MK 2 MOD 1 SINS

10-MK 2 MOD 1A SINS: Same as 10-MK 2 MOD 1 SINS

11-MK 2 MOD 1A SINS: Same as 11-MK 2 MOD 1 SINS

1-MK 3 MOD 4 SINS: Improved Latitude Gimbal Heat Shield (formerly SPALT number BS34-1)

Correction Material: None required
I-C YF. 48 NS0324-064-5710 EIC L905000 SERIAL: 101 thru 103 (104 thru 122 modilied during production)
IDENTITY: Presence of four sets of screws securing the bearing assemblies on each of the end plates which support the latitude heat shield.

2-MK 3 MOD 4 SiNS: Catch-All Modilication (formerly SPALT number BS34-2)

Correction Material: None required to NS0324-064-5110, 5120, 5210, 5220, 5310, 5320, 5330, 5410 5420, and 5430 dtd 12-1-70; to NS0324-064-5500 did 9-30.65; or to NS0324.0645610 and 5620 did 4.1.70

1-C YF. 48 NS0324.064.5720
EIC L905000
SERIAL: 101 thru 103 ( 104 thru 122 modsfied during production)
IDENTITY: Power rating of 120 ohm resistor (R21) in the AEC Monitor Detector (P/N 1686932) changed from 1/4 watt to $1 / 2$ watt.

3-MK 3 MOD 4 SINS: Breakpoint Jump Logic Changes (formerly SPALT number BS34-3)

Correction Mater it: None required to NS0324-064-5410, 5420, and -5430 did 12-1-70; or to NS0324-064-5610 and 5620 dtd 4.1.70

2-A FA-2 NS0324-064-5730 EIC L905000
SERIAL: 101 thru 114 ( 115 thru 122 modified during production)
IDENTITY: Installation of jumper wire between 2A2J30-5 and 2A1P4-m in the Computer Set Group P/N 1687166.

4-MK 3 MOD 4 SINS: Fuse Protection for Navigation Com-
puter Slip Ring Assembly (formerly SPALT number BS34-4)
Correction Material: None required to NS0324.064-5110, $5120,5210,5220,5310,5320,5330,5410,5420$, and 5430 dtd 12-1-70

1-C YF-48 NS0324-064-5740
SERIAL: 101 thru 122
IDENTITY: Installation of Fuse Assemblies P/N 1512983-901 (F1 thru F15), P/N $1512983-902$ (F16 thru F30), and P/N 1512983-903 (F34 thru F42) in the Navigational Computer Assembly P/N 1511709.

5-MK 3 MOD 4 SINS: SINS/NTDS Digita! Link Adapter (formerly SPALT number BS34-5)

Correction Material: Use of TM for SINS/NTDS Digital Link Adapter MK 1 MOD 0, NS0924-006-5000 did 9-1-65

1-C YF. 4 NS0324-064-5750 EIC L905000 SERIAL: 101, 102, 105, 108, and 118
IDENTITY: Installation of new Line Driver Module P/N 1690310 in receptacle $J 21$ and new Harness Board module P/ N 1690308 in receptacle J22 of Computer Group B (2A5) tray.

6-MK 3 MOD 4 SINS: NTDS Power Supply Modification (formerly SPALT number BS34-6)

Correction Material: SPALT BS34.6 Temporary Change to NS0924-06-5000 dtd 9-1-65

1-C YF-I NS0324-064-5760 EIC L905000 SERIAL: MK I MOD 0 SINS/NTDS Digital Link Adapter serial numbers 101 and 102 ( 103 and 104 modified during production)
IDENTITY: Installation of type 1N751A zener diode (CRII0) in Power Supply P/N 1602989.

7-MK 3 MOD 4 SINS: Red Lighting Modification (formerly SPALT number BS34-7)

Correction Material: None required to NS0324-064-5110, $5120,5210,5220.5310,5320,5330,5410,5420$, and 5430 dtd 12-1-70

I-A FA-8 NS0324-064-5770 EIC L905000
SERIAL: 106 thru 117 and 119 thru 122
IDENTITY: Turn on system and visually inspect to see that all indicator lights and displays are red.

8-MK 3 MOD 4 SINS: Computer Program Tapes (formerly SPALT number NS-34-8)

Correction Material: None required to NS0324-064-5110, 5120, 5210, 5220, 5410, 5420, and 5430 did 12-1-70; NS0324. 064-5500 dtd 9-30-55; or to NS0324.064-5610 and 5620 dtd 4-170

I-A FA-8 NS0324.064-5780 EIC L905000 SERIAL: 101 thru 104 and 106 thru 122
IDENTITY: Two each of system tapes and spare tapes, SPN 1514370 thru 1514374 and 1514414 have replaced SPN 1688081 thru 1688084, and 1513196.

9-MK 3 MOD 4 SINS: Module Clamp Redesign (formerly SPALT number BS36-5)

Correction Material: None required to TM (Vol I thru 4), NS0324-064-5 110, 5120, 5220, 5310, 5320, 5330, 5410, 5420, and 5430 dtd $12 \cdot 1-70$

I-C YF-32 NS0924-022-1340 EIC L905000 SERIAL: 101 thru 122

IDENTITY: All modules in Control Set (EC-2) and Computer Set (EC-1) are secured with spring-loaded clamps having allen-head set screws in contact with module frame.

10-MK 3 MOD 4 SINS: Water Speed Gear Train Slewing and Alarm Sensitivity (formerly SPALT number BS36-6)

Correction Material: None required to TM (Vol I thru 4), NS0324-064-5110, 5120, 5220, 5310, 5320, 5330, 5410, 5420, and 5430 dtd 12-1-70

1-C YF-8 NS0924-022-1350
EIC L905000 SERIAL: 101 thru 122
IDENTITY: Presence of transformer P/N 1514379 in base of control set cabinet.

11-MK 3 MOD 4 SINS: Latitude Heat Shield and Monitor Table Modification (formerly SPALT number NS36-14) Correction Mater zal: Change 10 to NAVSHIPS 324-0645 1-C YF-48 NS0924-022-1420
IDENTITY: Amplifier Electronics P/N 1511742-1 modif!̣ed to P/N 1511742-3.

12-MK 3 MeD 4 SINS: SINS MK 3 MOD 7 conversion. (Modifies MK 3 MOD 4 SINS to MK 3 MOD 7 SINS, formerly SPALT number NS34-9)

Correction Material: Use of MK 3 MOD 7 SINS technical manual, NS0924-038-8010 series

3-C YF-3500 NS0324-064-5790 EIC L905000 SERIAL: MK 3 MOD 4 serial numbers 101, 102, 105, 108, 109, and 118*
IDENTITY: MINDAC Computer (EC-1) seplaced with Interface Adapter Unit and associated CP-642B/USQ-20(V) computer.
NOTES: *MK 3 MOD 4 serial numbers 101, 102, 105, 108, 109. and 118 are changed to $7101,7102,7105,7108,7109$, and 7118 when this field change is accomplished. System serial numbers are engraved on the nameplate attached to the Dinazale end pane!.

13-MK 3 MOD 4 SINS: Computer Program Tapes (NAV REV AB, N.FIX RESET, EM LOG CAL, and DIAG TEST NO. 12A, formerly SPALT number NS34-10)

Correction Mazerial: Ch. I, NS0924-037-3011 to NS0924-037-3010; Ch. 2, NS0324-064-5122 to NS0324-064-5120; Ch. 2, NS0324-064-5212 to NS0324-064-5210; Ch. 2, NS0324.0645222 to NS0324-064-5220; Ch. 2, NS0324-064-5612 to NS0324-064-5611, and Ch. 2, NS0324-064-5622 to NS0324-064-5621

1-A YF-3500 NS0324-064-5800 EIC L905000 SERIAL: 101 thru 104 and 106 thru 122. ( 105 has been modified to MK 3 MOD 7 SINS.)
IDENTITY: Tape AB Part I SPN 1514371 seplaced with SPN 1514371-! and Tape AB Part II SPN 1514370 replaced with SPN 1514370-1.

14-MK 3 MOD 4 SINS: Computer Program Tapes (NAV Pt. I Rev. AB-1, N-Fix Reset, 3-Fix Reset, Loran C and Off Line Diagnostic Tapes)

Correction Material: Ch. 12, NS0324-064-5113 to NS0324-064-5110 (Vol. I, Part 1); Ch. 12, NS0324-064-5123 to NS0324-064-5 120 (Vol. 1, Part 2); Ch. 12, NS0324-064-5213 to NS0324. $064-5210$ (Vol. 2, Part 1); Ch. 12, NS0324-064-5223 to NS0324-064-5220 (Vol. 2, Part 2); Ch. 11, NS0324-064-5318 to NS0324-

064-5310 (Vol. 3, Part 1); Ch. 11, NS0324-064-5327 to NS0324-064-5320 (Vol. 3, Part 2); Ch. 11, NS0324-064-5339 to NS0324064.5330 ( $V$ ol. 3, Part 3); Ch. 12, NS0324-064-5413 to NS0324. 064-5410 (Vol. 4, Part 1); Ch. 11, NS0324-064-5421 to NS0324-064-5420 (Vol. 4, Part 2); Ch. 12, NS0324064-5433 to NS0324-064-5430 (Vol. 4, Part 3); Ch. 3, NS0324064-5611 to NS0324-064-5610 (Vol. 6, Part 1); Ch. 3, NS0324-064-5621 to NS0324-064-5620 (Vol. 6. Part 2)

1-A FA-8 NS0324-064-5810 EIC L905000 SERIAL: SPN 1514714.901 and 902 serial numbers 101 thru 104 and 106 thru 122
IDENTITY: Perform a visual check to determine that the following computer tapes are aboard: AB-1 PT 1 SPN 15143712; AB PT 2 SPN 1514370-1; BB SPN 1514372-1; CB SPN 1514373-1; CC SPN 1514373-2; DB SPN 1514374-1; FB SPN 1514414-1; FB SPN 1514415-1; and GA SPN 1514416.

## 15-MK 3 MOD 4 SINS: Addition of Latching Alarms

Correction Material: Ch. 13, NS0324-064-5114 to NS0324. 064-5110; Ch. 13, NS0324-064-5124 to NS0324-064-5120; Ch. 13, NS0324-064-5214 to NS0324-064-5210; Ch. 13, NS0324-064-5224 to NS0324-064-5220; Ch. 12, NS0324-064-5319 to NS0324-064-5310; Ch. 12, NS0324-064-5328 to NS0324-0645320; Ch. 12, NS0324-064-5340 to NS0324-064-5330; Ch. 13, NS0324-064-5414 to NS0324-064-5410; Ch. 13, NS0324-0645434 to NS0324-064-5430

1-C YF-48 NS0924.022-1450 EIC L905000 SERIAL: All serial numbers
IDENTITY: The altered control panel P/N 1685121-1, -2, -3, or -5 has the middle switch of the 'DATA INPUT' column indicating 'LATCH ALARMS'.

## 16-MK 3 MOD 4 SINS: To be Provided

17-MK 3 MOD 4 SINS: SINS Monitor Table Improvements
Correction Material: Ch. 15, NS0324-064-5116 to NS0324064.5!10; Ch. 15, NS0324-064-5126 to NS0324-064-5120; Ch. 15, NS0324-064-5216 to NS0324-064-5210; Ch. 15, NS0324. 064-5226 to NS0324-064-5220; Ch. 14, NS0324-064-5902 to NS0324-064-5310; Ch. 14, NS0324-064-5351 to NS0324-0645320; Ch. 14, NS0324-064-5342 to NS0324-064-5330; Ch. 15, NS0324-064-5416 to NS0324-064-5410; Ch. 13, NS0324-064. 5423 to NS0324-064-5420; Ch. 15, NS0324-064-5436 to NS0324-064-5430

1-C YF-168 NS0924-022-1480
EIC L905000
SERIAL: Part Number 1514714-901 and -902, all serial numbers
IDENTITY: Inspect switch S1. If it is a single switch in lieu of a double switch, this field change has been accomplished.

18-MK 3 MOD 4 SINS: DOC Test Unit Removal.
Correction Material: Included in FCB, NS0924.022-1490.
1-A FA-4 NS0924-LP-022-1490 EIC L905
SERIAL: All serial numbers of SINS MK 3 MOD 4, MOD 6, and MOD 7.
IDENTITY: Verify that a plenum chamber is mounted on top of the DOC. The plenum chamber occupies the space fommerly occupied by the Test Unit.

19-MK 3 MOD 4 SINS: Monitor Table Supplement. Correction Material: For the MK 3 MOD 4 SINS: Chg.

16, NS0324-LP-064-5117, to TM, NS0324-LP-064-5110; Chg.
16, NS0324-LP-064-5127, to TM. NS0324-LP-064-5120; Chg.
16, NS0324-LP-064-5217, to TM, NS0324-LP-064-5210; Chg. 16, NS0967-LP-064-5227, to TM, NS0324-LP-064-5220, Chg. 15, NS0324-LP-064-5352, to TM, NS0324-LP-064-5320; Chg. 16, NS0324-LP-064-5417, to TM, NS0324-LP-064-5410; Chg. 16, NS0324-LP-064-5437, to TM, NS0324-LP-064-5430 For the MK 3 MOD 6 SINS: Chg. 10, NS0924-LP-022-1701, to TM, NS0924-LP-022-1000(CVA's); Chg. 11, NS0924-LP-0221702, to TM, NS0924-LP-022-1000(SSN's); Chg. 5, NS0924-LP-022-1015, to TM, NS0924-LP-022-1010(CVA's); Chg. 10, NS0924-LP-022-1801, to TM, NS0924-LP-022-1020(CVA's); Chg. 11, NS0924-LP-022-1802, to TM, NS0924-LP-0221020(SSN's); Chg. 5, NS0924-LP-022-1035, to TM, 0924-LP-022-1030; Chg. 5, NS0924-LP-022-1045, to TM, NS0924-LP. 022-1040; Chg. 4, NS0924-LP-022-3054, to TM, NS0924-LP-022-1050; Chg. 5, NS0924-LP-022-1065, to TM, NS0924-LP. 022-1060; Chg. 9, NS0924-LP-022-1109, to TM, NS0924-LP-022-1100; Chg. 6, NS0924-LP-022-1126, to TM, NS0924-LP-022-1120(CVA's); Chg. 7, NS0924-LP-022-1127, to TM, NS0924-LP-022-1120(SSN's); Chg. 5, NS0924-LP-022-1185, to TM, NS0924-LP-022-1180(SSN's).

1-A FA.1 NS0924-LP-022-1500 E1C
L905,L906
SERIAL: All serial numbers of SINS MK 3 MOD 4 and MOD 6
IDENTITY: Verify that the AEC Heading Gimbal Servo Amplifier, located in the 3A2 tray of the EC-2 (slot J217), is Sperry part number 1512047-7.
NOTES: Prerequisite Field Changes: 11 and 13 thru 17-MK 3 MOD 4 SINS. 12 thru 18-MK 3 MOD 6 SINS.
20.MK 3 MOD 4 SINS: Improved Gimbal Servo.

Correction Material: Chg. 17, NS0324-LP-064-5118, to TM, NS0324-LP-064-5110; Chg.17, -5128, to TM, -5120; Chg. 17, -5218 , to TM, -5201 ; Chg. 17, -5228 , to TM, -5220 ; Chg. is, -5903, to TM, -5310; Chg. 16, -5353, to TM, -5320 , Chg. 15, -5343, to TM, -5330; Chg. 17, -5418 , to 「M, -5410 ; Chg. 14, -5424, to TM, -5420 ; Chg. 17, -5438 , to TM, -5430 . Chg. 12, NS0924-LP-022-1703, to TM, NS0924-LP-022-1000; Chg. 12, -1803, to TM, -1020; Chg. 6, -1036, to TM, -1030; Chg. 6, 1046, to TM, -1040; Chg. 6, -1066, to TM, 1060; Chg. 10, . 1901, to TM, -1160; Chg. 6, -1186 , to TM, -1180 .

1-C YF NS0924-022-1520 EIC L905,L906
SERIAL: MK 3 MOD 4 SINS p/n 1511714-901, MK 3 MOD 6 SINS p/n 1513260-901 and -903.
IDENTITY: Check that the binnacle connector 159 on the FWD side of the binnacle has been capped.
NOTES: Prerequisite field changes: Field changes 11. 13, 14, 15, 16, 17, and 19-MK 3 MOD 4 SINS; field changes 12, 13, 14, 15, 16, 17, 18, and 20-MK 3 MOD 6 SINS.

21-MK 3 MOD 4 SINS: Data Output Console Elimination. Correction Material: To be provided.

> 1-C YF-80 S9427-AA-FCB-010 EIC L905, L906
SERIAL: MK 3 MOD 4 SINS: 103, 106, 107, 110-117, and 119-122. MK 3 MOD 6 SINS: 101, 102, 104-108, 110-116, 118 , $120,123,125,127,128$, and 130-135.

IDENTITY: Open the door to the Control Set Group (EC-2) cabinet and verify that the water speed and LCT gear train have been replaced by a solid state chassis.
NOTES: Prerequisite Field Change: For MK 3 MOD 4 SINS; 11. 13-17, 19, and 20. For MK 3 MOD 6 SINS; 12-18, 20, and 21.

1-MK 3 MOD 6 SINS: Catch-All Modification for Cabinet Installation, Filter Accessibility, and Computer Wiring Correction (formerly SPALT number BS36-1)

Correction Material: Ch. 1, NS0924-022-1011 dtd 9-1-69 (supersedes NS0924-022-1010 dtd 3-1-67); Ch. I, NS0924-0221021 dtd 9-1-69 (supersedes NS0924-022-1020 dtd 3-1-67); Ch. 1, NS0924-022-1031 did 9-1-69 to NS0924-022-1030 dtd 3-167); Ch. I, NS0924-022-1041 dtd 9-1-69 to NS0924-022-1040 dtd 3-1-67); Ch. 1, NS0924-022-1051 to NS0924-022-1050 dtd 3-1.67); Ch. 1, NS0924-022-1061 dtd 9-1-69 to NS0924-0221060 dtd 3-1-67; Ch. 1, NS0924-022-1071 dtd 9-1-69 (supersedes NS0924-022-1070 dtd 3-1-67); Ch. 1, NS0924-002-1081 dtd 9-1-69 (supersedes NS0924-022-1080 dtd 3-1-67); Ch. 1, NS0924-022-1091 dtd 9-1.69 (supersedes NS0924-022-1090 dtd 3-1-67); Ch. 1, NSO924-022-1101 dtd 9-1-69 (supersedes NS0924-022-1100 dtd 3-1-67); and Ch. I, NS0924-022-1111 dtd 9-1-69 to NS0924-022-1110 dtd 5-1-69

1-C YF-32 NS0924-022-1310 EIC L906000 SERIAL: 101 thru 107 (108 thru 118, 120 thru 125, 127 thru 130, and 132 thru 134 modified during production)
IDENTITY: Installation of new fiter assembiy, P/N 1693886 on the front side of terminal board plate (i.e., on the side with terminal boards). New filter assembly contains filkers $2 Z 2$ thru 2 Z .

2-MK 3 MOD 6 SINS: Module Test Set Cable Change (formerly SPALT number BS36-3)

Correction Material: Ch. 2, NS0924-013-5012 dtd 9-1-70 (supersedes NS0924-013-5010 dtd 5-4-67); Ch. 2, NS0924-0135022 dtd 9-1-70 (supersedes NS0924-013-5020 did 5-4-67); Ch. 2, NS0924-013-5032 dtd 9-1-70 (supersedes NS0924-013-5030 dtd 5-4.67); Ch. 2, NS0924-013-5042 dtd 9-1-70 (supersedes NS0924-013-5040 dtd 5-4-67) and Ch. 2, NS0924-013-5052 dtd 9-1-70 (supersedes NS0924-013-5050 dtd 5-4-67)

## 1-A FA-1 NS0924-022-1320 EIC L906000

 SERIAL.: 101 thru 107 ( 108 thru 118, 120 thru 125, 127 thru 130 , and 132 thru 134 modified during production)IDENTITY 30 -inch cables, $w 2, w 3, w 4$, w5 , and w7 replaced with $20-\mathrm{foot}$ cables.

3-MK 3 MOD 6 SINS: Module Test Set Modification (formerly SPALT BS36-4)

Correction Material: Ch. 2. NS0924-013-5012 dtd 9-1-70 (supersedes NS0924-013-50ł0 dtd 5.4-67), Ch. 2, NS0924-0135022 dtd 9-1-70 (supersedes NS0924-013-5020 dtd 5-4-67); Ch. 2, NS0924-013-5032 dtd 9-1-70 (supersedes NS0924-013-5030 dtd 5-4-67), Ch. 2, NS0924-013-5042 dtd 9-1-70 (supersedes NS0924-013-5040 dtd 5-4-67) and Ch. 2, NS0924-013-5052 dtd 9-1-70 (supersedes NS0924-013-5050 dtd 5-4-67)

1-C YF-20 NS0924.022-1330 EIC L906000 SERIAI: 101 thru 104, 109 thru 111, and 117 (118, 120 thru 125, 127 thru 130, and 132 thru 134 modified during production)

IDENTITY: PSR cards $2,4,16,27,31,34,38,39,41,43,44$, 76, 77, and 78, Adaptors No. 6 and No. 14, and Cartridge Assembly to be removed and modified at the factory. 'BS36-4' stamped on the SPALT Plate located near the Module Test Set nameplate indicates accomplishment.

4-MK 3 MOD 6 SINS: Same as 9-MK 3 MOD 4 SINS except
Correction Material: None required to TM (Vol. 1 thru 10); NS0924-022-1010 thru NS0924-022-1100 dtd 5-1-70

YF-16
EIC L906000
SERIAE:: 101 thru 117 (118 thru 134 accomplished during production)
IDENTITY: All modules in Control Set (EC-2) are secured with spring-loaded clamps having allen-head set screws in contact with module frame.

5-MK 3 MOD 6 SINS: Same as 10-MK 3 MOD 4 SINS except

Correction Material: None required to TM (Vol 1 thru 10), NS0924-022-1010 thru NS0924-022-1100 dtd 5-1-70

EIC L906000
SERIAL: 101 thru 117 (118 thru 134 modified during production)

## 6-MK 3 MOD 6 SINS: Cancelled

7-MK 3 MOD 6 SINS: Module Test Set Catch-All Modification (formerly SPALT number BS36-8)

Correction Material: NS0924-013-5010 (Change 2), NS0924-013-5020 (Change 2), NS0924-013-5030 (Change 2), NS0924-013-5040 (Change 2), and NS0924-013-5050 (Change 2)

## 2-C FA-4* NS0924-022.1370

IDENTITY: This field change is accomplished at the contractors facility: 'BS36-8' on the SPALT accomplishneut plate indicates accomplishment of this field change.
NOTES: *Module Test Set, P/N 2684000 is to be returned to the contractor for modification. The remaining effort to reinstall the modified Module Test Set and update the documentation will require one man working 4 hours.

8-MK 3 MOD 6 SINS: PIPA Storage Container Alarm (formerly SPALT number BS36-10)

Correction Material: None required
2-C FA-1 NS0924-022-1380
IDENTITY: 'BS36-10' appearing on the SPALT accomplishment plate on the outside of the two PIPA Shipping and Storage containers, P/N 891079-2, indicates accomplishment of this field change.

9-MK 3 MOD 6 SINS: Drum Strobe Adjustment (formerly SPALT nurnber NS36-11)

1-C FA-8 NS0924-022-1390
IDENTITY: Installation of wires between the following: J627 and J2-6, J2-42 and J2-49, J2-49 and J6-05, J6-33 and J2-11, J2-46 and J2-48, and 52.48 and J6-34. Also, installation of two 430 -ohm, 1/4-watt resistors R152 and R153: R152 connected between 1135-1 and J135-11 and R153 connected between J134-1 and J134-1 1 .

10-MK 3 MOD 6 SINS: Module Test Set Programming Tape and Ancillary Changes (formerly SPALT number NS36-12)

4-C FA-4* NS0924-022-1400
IDENTITY: This fieid change is accomplished at the contractors facility. 'NS36-12' on the SPALT accomplishment plate indicates accomplishment of this field change.
NOTES: *Module Test Set, P/N 2686400, is to be returned to the contractor for modification. The remaining eff ort to reinstall the modified Module Test Set and update the documentation will require one man working 4 hours.

11-MK 3 MOD 6 SINS: MINDAC Modification (formerly SPALT number NS36-13)

1-C YF-16 NSO924-022-1410
IDENTITY: Installation of jumper wire between TB1-11 and TB1-18 in the power panel.

12-MK 3 MOD 6 SINS: Same as 11-MK 3 MOD 4 SINS except

Correction Material: Change 3 to NS0924-022-1010 thru 1100
IDENTITY: Amplifier Electronics P/N $1511742-902$ modif ied to 1511742-4.

13-MK 3 MOD 6 SINS: Computer Program Tapes (NAV REV B and THETA D) (formerly SPALT number NS36-15)

Correction Material: T-1, NS0924-022-1015 to Change 4, NS0924-022-1014

1-A FA-8 NS0924-022-1430
IDENTITY: Nav Tapes, 1514056-11, 1514056-21, and 1514056-31, are replaced by Nav Tape 1514617-13, Reset Tape 1514617-21, and Theta D Tape 1514517-31, respectively. OnLine Diagnostic Tapes 1514057-21, are replaced by On-Line Diagnostic Tapes 1514617-41.

14-MK 3 MOD 6 SINS: Computer Tape Revisions (Nav. Rev. C, AN/SRN-9A Shori Count Doppier)

Correction Material: Ch. 1, NS0924-022-1001 to NS0924-022-1000; Ch. 1, NS0924-022-1021 to NS0924-022-1020, Ch. I, NS0924-022-1121 to NS0924-022-1120; Ch. 1, NS0924-0221131 to NS0924-022-1130; Ch. 1, NS0924-022-1141 to NS0924-022-1140; Ch. 1, NS0924-022-1151 to NS0924-022-1150; Ch. 1, NS0924-022-1161 to NS0924-022-1160; Ch. I, NS0924-0221171 to NS0924-022-1170, and new TM NS0924.022-1180. (TM, NS0924-022-1010 is superseded by NS0924-022-1180 for SSN installations.)

1-A FA-8 NS0924-022-1440 EIC L906000 SERIAL: Serial numbers 101, 102, 104 thru 108, 110 thru 116, 118, 120, 123, 125, 127, 128 and 130 thru 135. (Fied Change 13-MK 3 MOD 6 SINS must be accomplished prior to the installation of this field change.)
IDENTITY: The following computer tapes are provided by this field change: Navigation Tape (SPN 1514617.14, replaces SPN 1514617-13), SKOR Reset Tape (SPN 1514617-22, replaces SPN 1514617-21), 2/3 Reset Calculation Tape (SPN 1514617-61), SRN-9A (SC) Printer Program (SPN 1514617. 71), Theta D Data Reduction Tape (SPN 1514617-32, replaces SPN-1514617-31), and EM-Log Calibration Tape (SPN 1514617-42).

15-MK 3 MOD 6 SINS: Same as 15-MK 3 MOD 4 SINS
except
Correction Material: Ch. 2. NS0924-022-1002 to NS0924-022-1000 (CVA's); Ch. 3, NS0924.022-1003 to NS0924-0221000 (SSN's); Ch. 1, NS0924-022.1011 to NS0924-022-1010 (CVA's); Ch. 2, NS0924-022-1022 to NS0924-022-1020 (CVA's); Ch. 3, NS0924-022-1023 to NS0924-022-1020 (SSN's); Ch. 1, NS0924-022-1031 to NS0924-022-1030; Ch. 1, NS0924-022-1041 to NS0924-022-1040; Ch. I, NS0924-0221051 to NS0924-022-1050; Ch. 1, NS0924-022-1061 to NS0924-022-1060; Ch. 5, NS0924-022-1105 to NS0924-022-I 100; Ch. 1, NS0924-022-1181 to NS0924-022-1180 (SSN's) and

EIC L906000
16-MK 3 MOD 6 SINS: LORAN/SINS Interface Modification

Correction Material: Ch. 4, NS0924.022-1004 to NS0924-022-I000 (CVA's); Ch. 5, NS0924.022-1005 to NS0924-0221000 (SSN's); Ch. 2. NS0924-022-1012 to NS0924-022-1010 (CVA's); Ch. 4, NS0924-022-1024 to NS0924-022-1020 (CVA's); Ch. 5, NS0924-022-1025 to NS0924-022-1020 (SSN's); Ch. 2, NS0924-022-1032 to NS0924-022-1030; Ch. 2, NS0924-022-1042 to NS0924-022-1040; Ch. 2, NS0924-0221062 to NS0924.022-1060; Ch. 5, NS0924.022-1075 to NS0924-022-1070; Ch. 3, NS0924-022-1083 to NS0924-022-1080; Ch. 5, NS0924-022-1095 to NS0924-022-1090, Ch. 6, NS0924-0221106 to NS0924-022-1100; Ch. 2, NS0924-022-1122 to NS0924-022-1120 (CVA's); Ch. 3, NS0924-022-1123 to NS0924.0221120 (SSN's); Ch. 2, NS0924-022-1132 to NS0924-022-1130 (CVA's); Ch. 3, NS0924.022-1133 to NS0924-022-1130 (SSN's); Ch. 2, NS0924-022-1142 to NS0924-022-1140 (CVA's); Ch. 3, NS0924-022-1143 to NS0924-022-1140 (SSN's); Ch. 2, NS0924-022-1162 to NS0924-022-1160 (CVA's); Ch. 3, NS0924-022-1163 to NS0924-022-1160 (SSN's); Ch. 2, NS0924-022-1182 to NS0924.022-1180 (SSN's)

I-C YF-48 NS0924.022-1460 EIC L906000 SERIAL: All serial numbers except $119,122,126$, and 129. (Field changes 13, 14, and 15-MK 3 MOD 6 SINS must be accomplished prior to the installation of this field change.)
IDENTITY: Examine the three indicator lights on the Remote Status Indicator (Alarm Box). They should read as follows: top - 'SINS READY', middle - 'SRN-9No.CALC', and bottom - 'LORAN CALC'.

## 17-MK 3 MOD 6 SINS: Same as 16-MK 3 MOD 4

18-MK 3 MOD 6 SINS: Same as 17-MK 3 MOD 4 SINS except

Correction Material: Ch. 8, NS0924-022-I008 to NS0924-022-1000; Ch. 9, NS0924-022-1009 to NS0924-022-1000; Ch. 4, NS0924-022-1014 to NS0924.022-1010, Ch. 8, NS0924-0221028 to NS0924-022-1020; Ch. 9, NS0924-022-1029 to NS0924-022-1020; Ch. 4, NS0924-022-1034 to NS0924-022-1030; Ch. 4, NS0924.022-1044 to NS0924.022-1040; Ch. 3, NS0924.0221053 to NS0924-022-1050; Ch. 4, NS0924-022-1064 to NS0924-022-1060; Ch. 8, NS0924-022-1 108 to NS0924-022-1100, Ch. 4, NS0924-022-1184 to NS0924-022-1180

EIC L906000
SERIAL: Part number 1513260-901, -902, -903, and -904 All serial Numbers
19.MK 3 MOD 6 SINS: Same as 18-MK 3 MOD 4 SINS.

EIC L906

20-MK 3 MOD 6 SINS: Same as 19-MK 3 MOD 4 SINS.

21-MK 3 MOD 6 SINS: Same as 20.MK 3 MOD 4 SINS.

22-MK 3 MOD 6 SINS: Same as 21-MK 3 MOD 4 SINS.
1-MK 3 MOD 7 SINS: Update of MK 3 MOD 6 SINS Module Test Set (MOTS) to Test Interface Adapter Unit (IAU) Circuit Modules for MK 3 MOD 7 SINS

Correction Material: Supplement to Technical Manual NS0924-013-5060

1-A FA. 4 NS0924.038-8220 EIC L90A000 IDENTITY: Presence of a new nameplate on the tester case, tester front panel, and accessory case; new PSR cards and cable assembly inserted in the accessory case, and a new memory cartridge in the magnetic tape reader.

2-MK 3 MOD 7 SINS: Same as 15-MK 3 MOD 4 SINS except

Correction Material: T-2, NS0924-038-8022 to NS0924-0388020; T-2, NS0924-038-8032 to NS0924-038-8030; T-2, NS0924-038-8042 to NS0924-038-8040, NS0924-038-8052 to NS0924-038-8050; T-2, NS0924-038-8062 to NS0924-038-8060; T-2, NS0924-038-8082 to NS0924-038-8080; T-2, NS0924-0388092 to NS0924-038-8090, and

EIC L90A000

## 3-MK 3 MOD 7 SINS: Same as 16-MK 3 MOD 4

4-MK 3 MOD 7 SINS: Same as 17-MK 3 MOD 4 SINS except

Correction Material: Ch. 3, NS0924-038-8013 to NSO924-038-8010; Ch. 4, NS0924-038-8034 to NS0924-038-8030; Ch. 4, NS0924-038-8044 to NS0924.038-8040; Ch. 4, NS0924-0388054 to NS0924-038-8050; Ch. 4, NS0924-038-8064 to NS0924-038-8060; Ch. 3, NS0924-038-8073 to NS0924-038-8070; Ch. 4, NS0924-038-8084 to NS0924-038-8080; Ch. 4, NS0924-0388094 to NS0924-038-8090
SERIAL: Part Number 1514564-i, -2, and -3 All Serial Numbers, and EIC L90A000

5-MK 3 MOD 7 SINS: Remote Waypoint Handling Capabiliry, Addition of

Correction Material: T-4, NS0924-038-8014 to NS0924-0388010; T-5, NS0924-038-8025 to NS0924-038-8020; T-5, NS0924-038-8035 to NS0924-038-8030; T-5, NS0924-038-8055 to NS0924-038-8050; T-5, NS0924-038-8065 to NS0924.0388060

## 1-C FA-8 NS0924-038-8230

EIC L90A000
SERIAL: Serial number All
IDENTITY: The remote I/O console OA-7984/UYK (Type 1532 Input/Output console) is connected to channel 6 of the CP-642B computer and waypoint data edited at the semote I/ O console is outputted from the SSW-1C.

6-MK 3 MOD 7 SINS: Improved Velocity Resolution

Correction Material: TBS
1-C FA-168 NS0924-038-8240
EIC L90A000
SERIAL: All serial numbers
IDENTITY: Presence of part numbers 1511715-5, 1511760-3, 1511761-3, 1511762-2, 1511765-5, 1512121-2, 1686944-2, and 1512568-3.

7-MK 3 MOD 7 SINS: Same as 18-MK 3 MOD 4 SINS.

EIC L90A

8-MK 3 MOD 7 SINS: SINS/180X MSR Computer Program Interface.

Correction Material: Chg. 6, NS0924-LP-038-8016, to TM NS0924-LP-038-8010; Chg. 7 -8027, to TM -8020, Chg. 8 8038, to TM -8030; Chg. $6-8046$, to TM -8040; Chg. 7 -8057, to TM -8050; Chg. $7-8067$, to TM 8060; Chg. $5-8075$, to TM -8070, Chg. 3 -8153, to TM -8150; Chg. 3 -8183, to TM -8180 (dtd 09-73).

1-A FA-I NS0924-LP-038-8250 EIC L90A
SERIAL: All serial numbers.
IDENTITY: Verify that the Sperry $\mathrm{p} / \mathrm{n}$ of the magnetic computer tape is 1515611-13.
NOTES: Prerequisite Field Changes: 2,3,4,5, and 6.MK 3 MOD 7 SINS.

1-MK 4 MOD 1 UNDERWATER EOG EQUIPMENF: See Field Change I-UNDERWATER LOG EQUIPMENT (Mfg. Chesapeake Instrument Corp.)
NOTES: Equipment redesignated 'MK 4 MOD 1 UNDERWATER LOG EQUIPMENT* by accomplishment of this field change. This field change was originally published as l-MK 4 MOD 1.

2-MK 4 MOD 1 UNDERWATER LOG EQUIPMENT: Insulation of Switch Contacts

Correction Material: None required
2-A FA-1 EIB 925
SERIAL: All serial numbers
IDENTITY: Electrical contacts of switches S501, S502, and S503 are covered with black (heat shrinkable) sleeving.

1-MK 5 MOD 0 MSR: Addition of Plexiglass Cover Correction Material: None required
2-A FA-1 NS0924-037-1030 EIC L908000
SERIAL: All serial numbers
IDENTITY: Presence of plexiglass covering over the terminal boards of the MSR.

2-MK 5 MOD 0 MSR: Provision of Filtered Air Cooling
Correction Material: None required
1-A FA-2.5 NS0924-037-1020
EIC L908000
SERIAL: All serial numbers
IDENTITY: Presence of a fan and filter attached to either the right or left side of the multispeed repeater cabinet.

3-MK 5 MOD 0 MSR: Servo Motor Disconnect Switch Correction Material: None required
1-A FA-2 NS0924-LP-307-1040 EIC L908000
SERIAL: All serial numbers

IDENTITY: Presence of a toggle switch located in the rear upper comer near B9 of the servo repeater assemblies.

1-MK 5 MOD 1 UNDERWATER LOG EQUIPMENT: Replacement of the Mechanical Integrator with an Electronic Solid State Integrator to Improve Accuracy and Reliability of Distance Traveled Indication

Correction Material: Supplementary Technical Manual No. 1, NS0965-022-8011, Supplementary Technical Manual No. 1, NS0365-292-5013

1-A FA-4 NS0965-022-8020
SERIAL: All serial numbers of Litton Industries Underwater Log Indicator-Transmitter (Part Number 66000001).
IDENTITY: Remove cover from Indicator-Transmitter and observe area between the Distance Assembly and Dial Pedestal Assembly. If the Time Base Motor has been replaced with an assembly consisting of four printed circuit boards, the modification has been performed.

1-MK 6 MOD 0 EM LOG: Replacement of Zener Diode A3A3CR1

Correction Material: T-2, NS0965-074-1012 to NS0965-0741010

1-A FA-I NS0965-074-1020 EIC LC01000
SERIAL: All serial numbers
IDENTITY: Note the following on reference assembly A3A3 board: The zener diode CR1 positioned between components Cl and R 2 is a type iN 4962 in lieu of type IN 965 B .

2-MK 6 MOD 0 EM LOG: Installation of Bonding Jumper between Speed and Distance Assembly (A3A4) and Indicator Transmitter (A3) Housing

$$
\text { 2-A FA-0.5 EIB } 876
$$

EIC LCOIOOO
SERIAL: All seriai numbers
IDENTITY: Observe bonding jumper between distance motor cable clamp located beneath the top hinge of A3A4 assembly and the cable assembly clamp located on the left side of the indicator-transmitter housing.

3-MK 6 MOD 0 EM LOG: Correct Wiring Error in 100 Knots/Turn, 60Hz Speed Synchro, A3A4B5

Correction Material: None
4-A FA-1 EIB 882 EIC LC01000
SERIAL: All serial numbers
IDENTITY: Verify that A3A4B5-SI lead is connected to A3J5-D and A3A4B5-S3 lead is connected to A335-F.

4-MK 6 MOD 0 EM LOG: Wiring Change to 400 Hz Speed Synchros

Correction Material: None
2-A FA-4 EIB 905 EIC LC01000
SERIAL: Equipment serials installed in SSBN 640 Class Submarines (where two reference voltages are to be used with 400 Hz speed synchros).
IDENTITY: Note that internal wiring is connected to pins A, $\mathrm{B}, \mathrm{C}$ and D of connector A3J3. Before field change, internal wiring is connected only to pins A and B of A3J3.

5-MK 6 MOD 0 EM LOG: Replace Transistors Q7, Q8, and Q9 on Stepper Motor Driver Assembly, A3AIA6, p/n 50163 -
501.

Correction Material: T-1, NS0965-LP-074-1011, to TM, NS0965-LP-074-1010.

2-C YF-1 NS0965-LP-074-1030
EIC LOO1
SERIAL: All serial numbers.
IDENTITY: On Stepper Motor Driver Assembly (A3AIA6), transistors Q7. Q8, and Q9 are type 2 N4 150 mounted on a regular transistor pad with a snap-on heat dissipator installed.

1-MK 6 MOD 0 MSR: Same as l-MK 5 MOD 0 MSR except
EIC L909000
2-MK 6 MOD 0 MSR: Same as 1 -MK 5 MOD 0 MSR except
EIC L909000
3-MK 6 MOD 0 MSR: Same as 3-MK 5 MOD 0 MSR except
EIC L909000

1-MK 9 MOD 0 DRAI: Add Diodes to Suppress Excessive Line Transients. (Factory Field Modification No. NC-2-10.) (F.C. number assigned for configuration control.)

1-A NA None required
SERIAL: 1 through 77
2-MK 9 MOD 0 DRAI: Change Idler Gear in Latitude and Longitude Modules. (Factory Field Modification No. NC-2. 11.) (F.C. number assigned for configuration control.) Corfection Material: None
1-C NA None required
SERIAL: All
3-MK 9 MOD 0 DRAI: Test Point Paneis for 3A5 (4A5), 3A6 (4A6) and 3A7 (4A7) Modules

Correction Material: Included in TM, NS0924-004-0000 dtd Jan. 73.

1-A FA-8 NS0924-004.0040 EIC LD08000 SERIAL: All serial numbers
IDENTITY: Test point panel brackets secured to 3A5TB-1, 3A6TB-2, 3A7TB-4, and 3A7TB-5

4-MK 9 MOD 0 DRAI: Improved Accessibility for Amplifier AR-1 of Own Ship Speed (N-S, E-W) Modules 3A3 and 3A4 Correction Material: None sequired
1-A FA-1 NS0924-004-0050
EIC LD08000
SERIAL: CVA, CVAN, SS, and SSBN MK 9 MOD 0/2 DRAI installations only
IDENTITY: Amplifiers AR-1 of Own Ships Speed Modules mounted to rear of modules on bracket assemblies with R1 and R2 clearly visible and accessible for screwdriver adjustment. See figure 1.

5-MK 9 MOD 0 DRAI: Replace Motor Controller Circuit Cards 3A5A6, 3A6A9, and 3A7A5/A 13

Correction Material: Included in TM, NS0924-004.0000 dtd Jan. 73.

1-A FA-5 NS0924-0040070 EIC LD08000 SERIAL: All serial numbers

IDENTITY: The new motor controller has $\mathrm{P} / \mathrm{N}$ 537-200065A stamped on top of printed circuit card.

6-MK 9 MOD 0 DRAI: Installation of Hanger Assemblies on DC Step Motors 3A5BI, 3A6B1, 3A7B1 and 3A7B5

Correction Material: Included in TM, NS0924-004-0000 dtd Jan. 73.

2-A FA-2 NS0924-0040080 EIC LD08000
SERIAL: All serial numbers
IDENTITY: The presence of hanger assemblies on de step motors 3A5Bl, 3A6B1, 3A7B1 and 3A7B5.

7-MK 9 MOD 0 DRAI: Replacement of Capacitor 3A5CI
Correction Material: None required
1-A FA.0.5 NS0924-004 0090
EIC LD08000
SERIAL: Ail serial numbers
IDENTITY: The value of 3 ASCl is 33 uf vice 10 of.
8-MK 9 MOD 0 DRAI: Elimination of Noise Pick-up on Signal Retums

Correction Material: None
2-A FA-1 EIB 876 EIC LD08000
SERIAL: All serial numbers
IDENTITY: Note the installation of jumper on 3A6 module: between TB3-1 and TB5-3 and jumper on 3A7 module: between TB2-2 and TBI-8.

1-MK 9 MOD 2 DRAI: Same as 1-MK 9 MOD 0 DRAI except
SERIAL: 1 through 20
2-MK 9 MOD 2 DRAI: Same as 2-MK 9 MOD 0 DRAI
3-MK 9 MOD 2 DRAI: Changes Spring Assembly on the 4A6 and 4A7 Modules. (Factory Field Modification No. NC-2-9.) (F.C. number assigned for configuration control)

Correction Material: None
1-A NA None requirad
SERIAL: 1 through 20
4-MK 9 MOD 2 DRAI: Same as 3-MK 9 MOD 0 DRAI except

1-A FA. 8 NS0924-004-0040 EIC LD0A000
5-MK 9 MOD 2 DRAI: Same as 4-MK 9 MOD 0 DRAI except

EIC LDOA000
6-MK 9 MOD 2 DRAI: Same as 5-MK 9 MOD 0 DRAI except

EIC LD0A000
7-MK 9 MOD 2 DRAI: Same as 7-MK 9 MOD 0 DRAI except

EIC LD08000
8-MK 9 MOD 2 DRAI: Same as 8-MK 9 MOD 0 DRAI
except
EIC LDOA000
1-MK 9 MOD 4 DRAI: Replacement of Stepper Motor Coupling Assemblies and Bearings

Correction Material: None
1-A FA-2 NS0965-068-4020 EIC LD0B000 SERIAL: Equipments 1001 through 1088 inclusive
IDENTITY: The presence of the new design couplings on the shaft of the Distance N-S, E-W, Latitude and Longitude assembly stepper motors. This coupling is recognized by its hardened steel adapter shaft vice the 'black' hard coated (anodized) aluminum adapter shaft. The new coupling also has a life time coating of lubrication.

2-MK 9 MOD 4 DRAI: Provision for 400 HZ Reference Voltage via DRAI to User Equipment Requising OSS N-S, E-W and Latitude and Longitude Synchro Data

Correction Material: T-1, NS0965-068-4011 to NS0965-0684010

## 1-A FA-0.5 NS0965-068-4030 EIC <br> LDOB000

SERIAL: Equipment serial numbers 1001 through 1088
IDENTITY: Noting the presence of a 5 amp fuse in fuse holder, A2XF1 on the DRAI front panel and jumper(s) installed at TB1 as indicated in procedures.

3-MK 9 MOD 4 DRAI: Provision of Forced Air Cooling
Correction Material: T-3, NS0965-068-4013 to NS0965-0684010

1-A FA-2 NS0965.068-4040
EIC LD0B000
SERYAL: Serial numbers 1001 through 1137
IDENTITY: The presence of a fan and filter attached to the natural airflow vent openings, right and left sides of DRAI.

4-MK 9 MOD 4 bRAI: DC Step-Motor Coupling Assemblies with Oil Impregnated Bronze Bearings

Correction Material: T-4, NS0965-068-4014 to NS0965-0684010

1-A FA-1 NS0965-068.4050 EIC LD0B000 SERIAL: All serial numbers
IDENTITY: Presence of (1) the new design couplings on the shaf ts of the distance N.S, E.W coupling assemblies discernable by noting the bronze bearings visible in the area of the coupling springs and (2) metal-foil decals on the step iransmitter outer cases delineating special lubrication procedures.

5-MK 9 MOD 4 DRAI: Addition of Solid State Step Transmitter (A2A9) for Distance N-S, E-W Step Outputs to Dead Reckoning Equipment

Correction Material: Supplement io Technical Manual for MK 9 MOD 4, NAVSHIPS 0965-068-4010, NAVSHIPS 0965 -068-4070

1-A FA-4 NS0965-068-4060 EIC LD0B000 SERIAL: While this field change is applicable to all serial numbers of DRAI MK 9 MOD 4, it is only mandatory for those DRAI MK 9 MOD 4 installations that are providing step inputs to the MK 6 MOD 4B Dead Reckoning Tracer (DRT). This DRT, manufactured by Chesapeake Instrument Coip., holds Technical Manual NAVSHIPS 0965-068-5010.

IDENTITY: The presence of solid state step transmitter (A2A9) located on module frame assembly (A2) in the area between the own ships heading module (A2A8) and terminal boards (A2TB1) and (A2TB2).

1-MK 19 MOD 3 GYROCOMPASS: Installation of Azimuth Switching Capability

Correction Material: Ch. 1, NS0924-LP-063-1011 to NS0924-LP-063-1010; Ch 1, NS0924-LP-063-201 1 io NS0924-LP-063-2010

I-A YF-16 NS0924-LP-063-2020
SERIAL: All serial numbers
IDENTITY: An instruction plate on the outside of the cabinet door stating that master compass and control cabinet have been modified in accordance with field change bulletin NS0924-LP-063-2020 will indicate the accomplishment of this modification.

## 1-MK 19 MOD 3A GYROCOMPASS: Same as l-MK 19 MOD 3 GYROCOMPASS.

2-MK 19 MOD 3A GYROCOMPASS: Modification of Control Cabinet for use with Static Power Supply in lieu of Standby Supply.

Correction Material: Supplement to NS324-0348 and NS324-0585 to be provided.

1-A FA-24 NS0924.063-1020
EIC LBON SERIAL: 319, 396, 426, 456, 457, and 507.
IDENTITY: Presence of a Static Power Supply, p/n 039561884695, mounted in the vicinity of and connected to the MK 19 MOD 3A Gyrocompass Control Cabinet.

1-MK 19 MOD 3B GYROCOMPASS: Installation of Azimuth Switching Capability

Correction Material: Ch. 1, NS0924-LP-063-3011 to NS0924-LP-063-3010

1-A YF-16 NSO924-LP-963-3020
SERIAL: All serial numbers
1DENTITY: An instruction plate on the outside of the cabinet door stating that master compass and control cabinet have been modified in accordance with field change bulletin NS0924-LP-063-3020 indicates the modification has been accomplished

1-MK 19 MOD 3C GYROCOMPASS: Installation of Azimuth Switching Capability

Correction Material: Ch. 1, NS0924-LP-004-9005 to NS0924-LP-004-9010

I-A YF-16 NS0924-LP-004-9020
SERIAL: All serial numbers
IDENTITY: An instruction plate on the outside of the cabinet door stating that master compass and control cabinet have been modified in accordance with feld change bulletin NAVSEA 0924-LP-004-9020 will indicate accomplishment of the modification.

2-MK 19 MOD 3C GYROCOMPASS: Installation of Static Power Supply Phase Lock Modification Kit (URGENT ACTION)

Correction Material: Ch. 4, NS0924-LP-004-9006 to NS0924-LP-004-9000

1-A FA-12 NS0924-LP-004-9030
SERIAL: Only systems interfaced with MK 114 fire control on DE1052-3077, DDG 28-36, DD 933, 940, 943, 950, and DEG 1 and 2
IDENTITY: Presence of modification consisting of 2 circuit boards mounted in bottom left corner of static power supply.

1-MK 19 MOD 3D GYROCOMPASS: Installation of Filter Circuit and Azimuth Pickoff Compensation Network in Control Cabinet

Correction Material: Ch. 1, NS0924-038-2011 to NS0924-038-2010, Ch. 1, NS0924-038-2021 to NS0924-038-2020; Ch. 1, NS0924-038-2041 to NS0924-038-2040

1-B YF-3 NS0924.038-2050
SERIAL: Cabinets serials 905 thru 919. Al3 other MOD 3 equipments with higher serial numbers will have been so modified by identical production changes
IDENTITY: The part number 1886621 on the computer control indicates that the filter modification has been accomplished. The presence of the compensation network at the top of the control cabinet main terminal board (MTB) indicates that this modification has been accomplished.

## 1-MK 19 MOD 3R GYROCOMPASS: Same as 1-MK 19 MOD 3 GYROCOMPASS.

## 10-MK 2 MOD 1A SINS: Same as 10-MK 2 MOD 1 SINS

1-MK 23 MOD C. 3 GYROCOMPASS: Change in Design of Power Supply Control Unit Relay Assembly p/n MP60-2-013.

Correction Material: Chg. 2, NS0924-LP-006-7014, to TM, NS0924-LP-006-7010 dtd May 78.

1-A FA-1 NS0924-LP-006-7020 EIC LB31 SERIAL: All serial numbers.
IDENTITY: Verify installation of new relay assembly (A3) p/ it 03965-1886727. (Replaces relay assembly (A3) p/n MP60-2-01-3.)

2-MK 23 MOD C-3 GYROCOMPASS: Installation of Protective Guard to Eliminate Shock Hazard at Terminal Board (A2A1TBl).

Correction Material: Chg. 2, NS0924-LP-006-7014, to TM, NS0924-LP-006-7010, dtd May 66.

1-A FA-1 NS0924-LP-006-7030 EIC LB31 SERIAL: All serial numbers.
IDENTITY: Verify installation of a plexiglass protective shield with a 'DANGER HIGH VOLTAGE' decal attached over terminal board A2A 1 TB1.

1-MK 27 MOD 0 GYROCOMPASS: Eliminate/Reduce BeatFrequency Problem Inherent in some Gyrocompasses.

Correction Material: ACN's to TM's, NS0924-LP-007-5010 and NS0924-LP-038-1010

1-C YF-5 NS0967-LP-038-1020 EIC
LB0V,LB33
SERIAL: All serial numbers of MK 27 MOD 0 and MOD 1. IDENTITY: Verify that the interconnecting cable between the Electronic Control Assembly and the Master Unit has shielded wires that connect to terminais LC, LCC, and LClLC6 of TB1 in the Electronic Control Assembly.

1-MK 50 MOD 1A SYNCHRO SIGNAL AMPLIFIER: Installation of a Circuit that prevents damage to the Synchro Signal Amplifier Should the Input or Load Synchros be Removed Erroneously. Installation of a Mechanical Guard on the Gain Switch Which Prevents the Gain Switch from Inadvertently Being Changed.

Correction Material: Addendum 1, NS0924-037-8011, to NS0924-037-8010

1-A FA-3 NS0924-037-8020
SERIAL: All serial numbers of Chesapeake Instrument Corporation's Synchro Signal Amplifier, Solid State, MK 50, MOD 1A
IDENTITY: Simultaneously de-energize the input synchro, the synchro signal amplifier, and the load synchros. Using a 7/ 17 inch wrench, remove the eight hex head bolts that secures the cover of the synchro signal amplifier to the case. Observe the bottom and right side of the case. If a printed circuit board is mounted to the case in either of the above locations, the modification has been performed.

1-MK NC-2 MOD 0 PLOTTING SYSTEM: Addition of Ambiguity Detector Modification (Factory Field Modification No. 1). (F.C. number assigned for configuration control.)

$$
1-A \quad N A
$$

None SERIAL: 0001 thru 0006

2-MK NC. 2 MOD 0 PLOTTING SYSTEM: Provide Separate Reference Voltage Supplies for Range and Bearing Data (Factory Field Modification No. 2). (F.C. number assigned for configuration control.)

1-A NA None
SERIAL: 0001 thru 0032
3-MK NC-2 MOD 0 PLOTIING SYSTEM: install 'CAUTION• Plate on Data Converter and Modify Plotting Table Proiector Illumination Circuit. (Factory Field Modification No. 3 and No. 4). (F.C. number assigned for configuration control.)

1-A NA None SERIAL: 000 zhru 0049

4-MK NC. 2 MOD 0 PLOTTING SYSTEM: Modify E-W Drive (Factory Field Modification No. 5). (F.C. number assigned for configuration control.)

1-A NA None
SERIAL: 0001 thru 0059
5-MK NC-2 MOD 0 PLOTTING SYSTEM: Modify Plotting Table Access Door Locks (Factory Field Modification No. 7). (F.C. number assigned for configuration control.)

$$
1-A \quad N A
$$

None
SERIAL: 0001 thru 0074
6-MK NC-2 MOD 0 PLOTTING SYSTEM: install Transient Suppressors to the Power Circuits (Factory Field Modification No. 6). (F.C. number assigned for configuration control.) 1-A NA

None
SERIAL: 0001 thru 0079
7-MK NC-2 MOD 0 PLOTfING SYSTEM: Prevent Stray

Light Beams Reflecting on Plotting Surface (Factory Field Modification No. 8). (F.C. number assigned for configuration control.)

> 1-A NA None

SERIAL: 0001 thru 0087
8-MK NC-2 MOD 0 PLOTTING SYSTEM: Remove Utility Receptacle (J-5), Modify TPA Protective Shields and Provide Fuse Protection for Range Scale Selector. (Factory Field Modification) (F.C. number assigned for configuration control.)
1-A NA
SERIAL: All

9-MK NC-2 MOD 0 PLOTTING SYSTEM: Elimination of TPA Lead Screw TRU-ARC Retainer Clamps

Correction Material: T-1, NS0324-054-0001 to TM, NS0324-054-0000

1-A FA-1 NS0234-054- $O$ O10
SERIAL: All equipments
IDENTITY: Presence of a collar with two set screws on the ends of the TPA lead screws vice the TRU-ARC retainer clamps.

10-MK NC-2 MOD 0 PLOTTING SYSTEM: Adapters for Lighting Configuration.

Correction Material: To be provided.
ElC LDOL SERIAL: All serial numbers.
IDENTITY: Verify that an insert has been installed inside each TPA lamp holder and that new bulb is a single base, type S1183 (NSN6240-00-019-3120). Original bulb had an extended base.

1-MK NC-2 MOD 1 PLOTTING SYSTEM: Esiablishment of Sufficient Clearance to Allow the Installation of the New Design Target Plot Attachment (TPA) Projector

Correction Material: None required
4.A FA.2 NS0924-038-5020 ElC

LDOM000
SERIAL: All MK NC-2 MOD 1 equipments
IDENTITY: On the inside of 1 A2 Lower South Panel, the width of the angle bend should be approximately $13 / 16$ inch vice $1-3 / 8$ inch.

2-MK NC-2 MOD 1 PLOTEING SYSTEM: Installation of Protective Angle Bracket (Guard) for E-W Flexible Cable and Protective Handles for Null Adjust Control on DRI

Correction Material: T-1, NS0924-038-5013 to NS0924-0385010

1-A FA-2 NS0924-038-5030 ElC
LDOMOCO
IDENTITY: The presence of an angle bracket over the E-W flexible cable. This bracket is visible when the North Panel of Plotting Table is removed and the presence of handles protecting the Null Adjust Control on DRI Front Panel.

1-MK NC-2 MOD 1A PLOTfiNG SYSTEM: Improved Design Brass Gears for Latitude/Longitude Assemblies.

Correction Material: T-2, NS0924-LP-036-2013. to TM, NS0924-LP-036-2010 dtd Jan 69.

1-A FA-2 NS0924-LP-036-2020
EIC LDON
SERIAL: All serial numbers.
IDENTITY: Gears (PC 27 and PC 77) of Latitude and N-S Distance Assembly and gears (PC 10 and PC 27) of Longitude and E-W Distance Assembly of MK NC-2 MOD 1A DRI now made of brass vice aluminum.

1-MK NC-2 MOD 2 ASW PLOTTING SYSTEM: Addition of Louvers to the Projection Cover and the Lower NW Panel; Reversing the Projection Assembly Fan. (Factory Field Modification No. NC-2-2.) (F.C. number assigned for configuration control.)

1-A NA None required
SERIAL: I through 20
2-MK NC-2 MOD 2 ASW PLOTTING SYSTEM: Improve Auto Tracking Accuracy in Geographic Mode (Factory Field Modification No. NC-2-3.) (F.C. number assigned for configuration control.)

1-A NA None required
SERIAL: I through 26

3-MK NC-2 MOD 2 ASW PLOTTING SYSTEM: Change Clamping between Range Potentiometer and Gear on the Cursor Panel Assembly. (Factory Field Modification No. NC-2-6.) (F.C. number assigned for configuration control.)

1-A NA None required
SERIAL: 2, 5, 7, 12, 13, and 14

4-MK NC. 2 MOD 2 ASW PLOTTING SYSTEM: Resistor and wiring changes to allow trimming in the $200 \mathrm{yd} / \mathrm{in}$ scate. (Factory Field Modification No. NC-2-7.) (F.C. number assigned for configuration control.)

1-A NA None required
SERIAL: I through 10
5-MK NC-2 MOD 2 ASW PLOTTING SYSTEM: Provide Adequate Cooling to the Plotting Table Correction Material: T-1, NS0924-002-1003 to TM, NS0924.002-3000
1-A FA-I NSO924-002-1020

SERIAL: All serial numbers
IDENTITY: Installation of Blowers on the East end and air filters on the West end of plotting table.

6-MK NC-2 MOD 2 ASW PLOTTING SYSTEM: Not applicable

7-MK NC-2 MOD 2 ASW PLOTCING SYSTEM: Addition of Internal Test and Calibration Capability, Hinging the 1A 10 Amplifier Panel and the Relocation of Range modules and TPA 'HOLD' Function

Correction Material: Supplement III, NS0924-002-1060 to TM, NS0924-002-1000

1-C YF-160 NS0924-002-1050
SERIAL: All serial numbers
IDENTITY: This field change has been accomplished if (I) Lower hinged south range door and calibration doors installed. (2) Upper hinged west amplifier panel installed. (3) Hold switches added to switch panel. (4) Lower hinged north range door installed.

8-MK NC. 2 MOD 2 ASW PLOTTING SYSTEM: Reduced Fuse Rating for 30 VDC and 35 VDC Power Supplies of Plotting Table

Correction Material: T-3, NS0924-1007 to NS0924-0021000

I-A FA-I NS0924-002-1070
SERIAL: All serial numbers
IDENTITY: Presence of 2 ampere fuses vice 3 ampere fuses in fuse holder ?A7XFI3 located on the illumination and fusing panel assembly (IA7).

9-MK NC- 2 MOD 2 ASW PLOTTING SYSTEM: Relocate Power Supply Assembly IAIA6

Correction Material: Revised Technical Manual
1-A FA-6 NS0924-002-1080
SERIAL: All serial numbers
IDENTITY: The power supply shall be located on the lower north range panel and shall be interconnected via a removable connector/plug arrangement.

1-MK NC-2 MOD 2 DRI-ASW PLOTTING SYSTEM: Increase Resolution of Low Range Scale (Factory Field Modification No. NC-2-1.) (F.C. number assigned for configuration control.)

1-A NA None required
SERIAL: I through 10
1-MK NC-2 MOD 2A ASW PLOTTING SYSTEM: Same as 1 MK NC-2 MOD 2 ASW PLOTTING SYSTEM

2-MK NC-2 MOD 2A ASW PLOTTING SYSTEM: Same as 2 MK NC-2 MOD 2 ASW PLOTTING SYSTEM

3-MK NC-2 MOD 2A ASW PLOTIING SYSTEM: Same as 3MK NC-2 MOD 2 ASW PLOTTING SYSTEM

4-MK NC-2 MOD 2A ASW PLOTIING SYSTEM: Same as 4MK NC-2 MOD 2 ASW PLOTTING SYSTEM

5-MK NC-2 MOD 2A ASW PLOTTING SYSTEM: Same as 5MK NC-2 MOD 2 ASW PLOTTING SYSTEM

6-MK NC-2 MOD 2A ASW PLOTTING SYSTEM: Additional TPA Synchro Target Inputs

Correction Material: Ch. 3, NS0924-002-1004 to TM, NS0924-002-1000

1-C FA-20 NS0924-003-1040
SERIAL: Thirty-three systems installed on DE 1052 through DE 1084
IDENTITY: Changes in fuses F1 through F8 reference desig. nations on Illumination and Fusing Panel (IA7) from RADAR I REF, RADAR 2 REF, RADAR 3 REF, and SONAR REF to TPA 1 REF, TPA 2 REF, TPA 3 REF and TPA 4 REF respectively.

7-MK NC. 2 MOD 2A ASW PLOTTING SYSTEM: Same as 7MK NC-2 MOD 2 ASW PLOTTING SYSTEM

8-MK NC-2 MOD 2A ASW PLOTTING SYSTEM: Same as 8MK NC-2 MOD 2 ASW PLOTTING SYSTEM

9-MK NC. 2 MOD 2A ASW PLOTTING SYSTEM: Same as 9 MK NC-2 MOD 2 ASW PLOTTING SYSTEM.

10-MK NC-2 MOD 2A ASW PLOTING SYSTEM: Relocation of Bearing Module Assembly Potentiometer A2R5 for Increased Accessibility. (EIB 945).

Correction Material: None required.
2-C YF-3 EIB 945 EIC LD0Q
SERIAL: All serial numbers.
IDENTITY: Remove lower east panel and note that potentiometer A2R5 on each bearing module is mounted horizontally with adjustable screw facing east side of plotter.
1.MODEL 319 ALDEN FACSIMILE RECORDER: Manual Start/Stop Switch Addition to Front Panel

Correction Material: None
2-A FA-2 EIB 879
SERIAL: All serials
IDENTITY: Note a toggle switch, in lieu of a push button switch (START), below the automatic fast feed switch of the automatic rephase chassis.

1-MODEL 4580 VARO POWER SUPPLY: 5kW Power Supply, Varo Model 4580, Modification (formerly SPALT number BS36-2)

Correction Material: None required to TM, NS0962-0078000 dtd 3-15-70

1-C YF-8 NS0962-007-8010
EIC L906000 IDENTITY: On Assembly 24764-1, C204 thru C206 changed to 0.0056 microfarad. 1000 VDC and diodes CR206 thru CR208 changed to type $\operatorname{lN} 561$. On Assembly 23680, diodes CRI08 thru CR113 changed to type 1 N 649 .
2.MODEL 4580 VARO POWER SUPPLY: Varo Power Supply Catch-ALL NAVALT (formerly SPALT number BS36-9)

Correction Material: Changes to TM, NS0962-007-8000, supplied in NA VALT kit

1-C YF-8 NS0962-007-8020 EIC L906000
IDENTITY: Installation of 6.8 k ohm, 5 W , fixed wire-wound resistor ( $\mathrm{R}-114$ ) on right corner of Model 3172A control converter chassis, and removal of 30 k -ohm bleeder resistors (formerly R-114 thru R-116).

1-MT-2750/SYA-4(V): Base Data Display Console - 1ncorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in revised publications
2-A NA None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-MT-2751/SYA-4(V): Base Video Display Console - Incorporation of a Factory Field Bulletin as a Unit Field Change

Correction Material: Incorporated in revised publications SERIAL: A2 through A7 and A9 through A 99
IDENTITY. Change number stamped on the Field Change Accomplished plate.

1-MT-2752/SYA-4(V): Base, Data Readout Console - Incorpo-
ration of a Factory Field Bulletin as a Unit Field Change 2-A NA

None
SERIAL: A8 thru A36 and A39 thru A 100
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-MT-3574(XN-1)/USQ-20(V): Improvement of Mounting Base Circuit Breaker

## Correction Material: None

1-A FA-8 NS0967-218-0020
SERIAL: I thru 3
IDENTITY: Circuit breakers CBI and CB2 of the mounting base are 5 amp instead of 1.25 amp .

## 2-MT-3574(XN-1)/USQ-20(V): AC Reference Dummy Load

 Resistors
## Correction Material: None

1-A FA-5 NS0967-218-0040
SERIAL: Only the mounting base used in Digital DSOT (Mounting Base No. I Position) on the following ships is affected: DLG 28 thru 34 and DLG(N) 35
IDENTITY: The presence of 5.1 K or 4.7 K resistors in lieu of 2.4 K resistors at the following locations: R1, R2, R3, and R4 on TB22; R9, R10, R11, and R12 on TB 24.

## 3.MT-3574(XN-1)/USQ-20(V): Power Connector Cover

Correction Material: None
I-A FA-1 NS0967-051-6870 EIC QK05000
SERIAL: All serial numbers of each series
IDENTITY: A connector cover cap is attached to external plugs P1I and P12.

4-MT-3574(XN-1)/USQ-20(V): Digital Data Relay Replacement.

Correction Material: ACN to TM required.
2-A FA-2 NS0967-LP-051-6880 EICQM3U
SERIAL: All serial numbers.
IDENTITY: Verify that relay S -11 is mfg. p/n 901-36C-48.
1-MT-3574(XN-2)/USQ-20(V): Same as 1-MI-3574(XN-1)/
USQ-20(V) except
SERIAL: I
2-MT-3574(XN-2)/USQ-20(V): Same as 2-MT-3574(XN-1)/ USQ-20(V)

3-MT-3574(XN-2)/USQ-20(V): Same as 3-MT-3574(XN-I)/ USQ-20(V)

4-MT-3574(XN-2)/USQ-20(V): Same as 4-MT-3574(XN-1)/ USQ-20(V).

EIC QM3V
1-MT-3574/USQ-20(V): Improvement of Mounting Base Circuit Breaker

Correction Material: None
FA-8 NS0967-218-0030
SERIAL: 5 through 20

IDENTITY: Circuit breakers CB1 and CB2 of the mounting base are 5 amp instead of 1.25 amp .

2-MT-3574/USQ-20(V): Same as 2-MT-3574(XN-1)/USQ. 20(V)

3-MT-3574/USQ-20(V): Replacement of OA Test Switch
Correction Material: T-1, NS0967-051-6811 to NS0967-0516010

1-A FA-I NS0967-051-6860 EIC QK0509E
SERIAL: All serial numbers
IDENTITY: When new switch is activated, there is no audible click.

4-MT-3574/USQ-20(V): Same as 3-MT-3574(XN-I)/USQ20(V)

5-MT-3574/USQ-20(V): Same as 4MT-3574(XN-1)/USQ20(V).

EICQMIG
1-MT-3574A/USQ-20(V): Same as 1-MT-3574~USQ-20(V) except
SERIAL: I through 21
2-MT-3574A/USQ-20(V): Same as 2-MT-3574(XN-1)/USQ20(V)

3-MT-3574A/USQ-20(V): Replacement of a Test Switch Correction Material: None
f-A FA-I NS0967.05I-6850 EIC QK05000 SERIAL: All serial numbers
IDENTITY: When new switch is activated, there is no audjble click.

4-MT-3574A/USQ-20(V): Same as 3-MT-3574(XN-1)/USQ20(V)

5-MT-3574A/USQ-20(V): Same as 4-MT-3574(XN-I)/USQ20(V).

EIC QM3S
1-MT-3574B/USQ-20(V): Installation of A-C Reference Resistors

Correction Material: Included in Revised Technical Manual

3-A FA-5 NS0967-306-8020 EIC QK05000
SERIAL: Equipment used with the Analog MK 76 MWCS only. (EIB 970).
IDENTITY: 4 terminal boards, each terminal board having (4) 2.4 K ohm resistors mounted and each resistor connected across an A-C reference input in the bases affected. The resistor mounting boards are fastened to TB 15, 20, 21, and 26.

2-MT-3574B/USQ-20(V): Same as 3-MT-3574(XN-1)/USQ20(V)

3-MF-3574B/USQ-20(V): Digital Data Relay Replacement
Correction Material: T-1, NS0967-LP306-8011 to NS0967-

LP-306.8010
I-A FA-2 NS0967-LP-306-8030 EIC QK05000 SERIAL: All serial numbers
IDENTITY: Open the mounting base, locate K-13 and veiffy that it is stamped with Manufacturer Part Number T-Bar P/N 901-G534.

1-MT-4258/UYK: Provide additional Switch Locations. Correction Material: T-1, NS0967-LP-315-4011, to NS0967. LP-315. 4010.

1-A FA-8 NS0967-LP-315-4020 EIC P900 SERIAL: Designated by NAVSEC.
IDENTITY: An additional rack to accommodate five switch units is added to the MT-4258/UYK. The MT-4258/UYK with lield change I has provisions to accommodate 15 switch units. Without field change 1 only 10 switch units can be accomodated.

1-MU-602(V)/UYK: Unit Field Change. Correction Material: To be provided.
2-A FA-6 NS0967-LP-562-7030
EIC QUS8
SERIAL: B1, B3-B5, C1-C5.
IDENTITY: FCO no. 30536 (all serial nos.): RFI Filter Assembly identified by $\mathrm{p} / \pi$ 69746800-02 vice 69746800-01, Memory Chassis Assembly identified by p/n 69671600-02 vice 69671600.01 , and Final Assembly identified by p/n 69671500.3 vice $69671500-2$. FCO no. 30682 (all serial nos.): Continuity between U122-11 and U122-12 on LPM control board. FCO no. 30534 (serial nos. B1, B3-B5): On the LPM control board, C-102 is a 180 pF capacitor vice 3900 pF . FCO ло. 29946 (serial Bl only): Continuity between 1.C. U68-2 and I.C. U122-2 on the LPM control board.

1-MU-605/UYA.4(V): Prevent CRT Damage When RMU Power is Off

Correction Matcirial: New TM, NS0967-LP-599-7010
IV-A FA-I EI3 924
SERIAL: AI-A16
IDENTITY: Continuity (zero ohms) between A1J14-66 and A2J4-6 and between A2J14-66 and A2J4-34.

2-MU-605/UY A-4(V): RMU Power Connector Change.
Correction Material: To be provided.
I-A FA. 4 NS0967-LP-599-7020 EIC QM06 SERIAL: A1-A16, B1-B21.
IDENTITY: Gain access to the Power Relay Assembly A2, located on the rear of the cabinet door and verify that connector A2J2 on the right end of the panel is a male connector type MS18159-2N and not a female connector; type MS18160. $2 N$.

3-MU.605/UYA-4(V): Prevent Simultaneous Energizing of Power Supplies. (EIB 949).

Correction Material: E1B 949
4-A FA-1 EIB 949 EIC QM06 SERIAL: A1-A44, Bl-B35.
IDENTITY: On the RMU Control Panel, verify that continuity between A1S3-1 and AIS4-2 is zero ohms and that continuity between AIS3-2 and A1S4-2 is an open.

4-MU.605/UYA-4(V): ODA Pulse Width Change.

Correction Material: ElB 949.
4-A FA-1 ElB 949
EIC QM06

SERIAL: Al-A44, Bl-B35.
IDENTITY: Verify continuity (open) between AlJ20-83 and A1J20.74 and between A2J20-83 and A2J20-74.

5-MU-605/UYA\&N: Provide Model IV Interface and Im. prove Cabinet Cooling.

Correction Material: To be provided.
1.C YF-40 SE687.AA-FCB. 010

EIC QM06
SERIAL: All serial numbers.
IDENTITY: Verify that an air filter opening (approx. 6 in. X 9 in .) has been provided on the front door approx. 8 in . from the bottom. This area previously contained the equipment nameplate and field change plate which are relocated above the filter opening by this field change.

1-MX-802 MRC: Modification of Mike lnput CKT in CMX50128 Interphone Amplifier

Correction Material: None
A FA-1 NS98159
None
SERIAL: All
IDENTITY: R-103 removed from input circuit of xfmr
1-MX-1583/SRC: Prevention of Inadvertent Keying Thru Radio-Phone Unit

A FA-1 NS98518B None
SERIAL: All
IDENTITY: Jumper added between terminals 3 and 4 on terminal board E. 101 .

2-MX-1583/SRC: Remote Control Features Modification A FA-1 NS98518B None SERIAL: All
IDENTITY: R-101 now connects to term 3 of TB E-103, formerly R.!0! was connected to wire from term 1 (TB E-103) to wiper contact of relay.

1-MX-1627/URN-3: Modification of ALC Circuitry and Frequency Multiplier CV 460 URN- 3 Final Tripler Circuitry Correction Material: Change 1 to NS92975(A)
1-A FA-16 NE0967-LP.053-4020 2N5825-6280701
SERIAL: I through 26 (Equipments with serial numbers 27 and subsequent incorporated changes in production.)
IDENTITY: R-372 (xmtr pulse shape) is installed.
2-MX-1627/URN-3: Installation of Anti-Single Phasing Resistor to Servo System. Wining Modification of Blocking Oscillator (V301A) and Clipper (V302). Modifications to Frequency Multiplier CV-460/URN-3.

Correction Material: Change 1 to NS92975(A)
1-A FA-8 NE0967.LP-053-4030 $\quad$ 2N5825-628-
SERIAL: 1 through 169 (Equipments with serial numbers 170 and subsequent incorporated the changes in production.)
IDENTITY: R-222 (47k (add horseshoe symbol here)) installed across S-201.

3-MX-1627/UR.N-3: Installation of R.F. Interference Suppres-
sion Assembly
Correction Material: Change 2 to NS92975(A)
1-A FA-6 NE0967-LP.053-4040 2N5825-628-
0703
SERIAL: Frequency multiplier CV-460/URN-3 serial numbers 1-948
IDENTITY: CV-460/URN-3 has end-plate assembly with feed-thru capacitors and ferrite indicators.

4-MX-1627/URN-3: Installation of Plug-in Relays Correction Material: Change 3 to NS92975(A)
1-A FA-12 NE0967.LP.053-4050 2N5820-682-
2731
SERIAL: 1 through 705. (Equipments with serial numbers 706 and subsequent incorporated the changes in production.)
IDENTITY: K101, K102, K103, K104 and K301 are plug-in type relays.

5-MX-1627/URN-3: Part 1-To Eliminate 15 CPS Instability. Part 2. To improve reliability of PS Regulation. Part 3-Addition to Fail Safe Feature in case of B Minus Failure. Part 4. To Eliminate 15 CPS Instability applicable to Radio Receiver R-773/URN-3

$$
\text { 1-A FA-16 NE0967.LP-053.4060 } 2 \text { N5820-543. }
$$

$$
1922
$$

SERIAL: Part 1-1 through 1004; Part 2 - 1 through 861; Part 3-1 through 1004, and Part 4-1 through 948
IDENTITY: Part l: Cll2 installed from TB-101-!9 to TB-10139. Part II: Bus wire installed from TB-303-20 to TB-303-21. Part IV: Bus wire installed from L-S05 (top) to around.

6-MX-1627/URN-3: Installation of RF Suppression Screens
Correction Material: None
1-A YF-2 NE0967-LP-053-4080 None SERIAL: All
IDENTITY: Presence of screen covers on three sides of monitors.

7-MX-1627/URN-3: Modification of Main Delay Alarm and Identity Delay Alarm Circuits

Correction Material: T-3 to NS0967.053-4013
1-A YF-2 NSO967.053-4070 None SERIAL: All
IDENTITY: A 27 K ohm $1 / 2$ watt resistor is soldered between the lower arm of R-146 and a new grounding lug.

8-MX-1627/URN-3: Remove R.F. Suppression Screens. (EIB 959).

Correction Material: None required.
4.A FA.1 ElB 959

EIC L604 or
L605
SERIAL: All serial numbers of MX-1627/URN-3 and MX-2229/GRA-34.
IDENTITY: Verify that the R.F. suppression screens have been removed.

1-MX-1743/SRC: Wiring Changes
Correction Material: T-1 to NS93084; T-1 to NS93237
2-A FA.4 NS981186 None
SERIAL All
IDENTITY: Reversal of leads in the upper portion of R-604.

1-MX-1743A/SRC: Same as 1-MX-1743/SRC<br>1-MX-2229/GRA-34: Same as 1-MX-1627/URN-3<br>2-MX-2229/GRA-34: Same as 2-MX-1627/URN-3<br>3-MX-2229/GRA-34: Same as 3-MX-1627/URN-3<br>4-MX-2229/GRA-34: Same as 4-MX-1627/URN-3<br>5-MX-2229/GRA-34: Same as 5-MX-3627/URN-3

6.MX-2229/GRA-34: Same as 7-MX-1627/URN-3

7-MX-2229/GRA-34: Same as 8-MX-1627/URN-3.
EIC L630
1-MX-3195/USQ-20(V): Digital Data Introducer (Keyset Universal) Incorporation of Factory Field Service Orders as a Unit Field Change

2-A NA NS0967-213-3020 None
SERIAL: I through 27
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-MX-3195/USQ-20(V): Digital Data Introducer (Keyset Universal) - Corrective Action of Wire Placement and Gusset Plate Fastening

Correction Material: None
2-A FA. 1 NS0967-213-3020 None
SERIAL: I through 31, AI through A6, and A8 through A29 IDENTITY: Visual inspection of TB-1 noting that the terminal lugs have been bent sufficiently to permit adequate clearance from the outer case and self locking nuts have replaced the four nut-lockwasher assemblies on the four triangular gusset plate that attach the switching diode chassis to the vertical chassis supports.

3-MX-3195/USQ-20(V): Keyset Keyboard Overlay Kit
Correction Material: NS0285-081-1000
1-A FA-4 NS0967-213-3020
SERIAL: All
IDENTITY: Presence of thick black lucite overlay superimposed over a thick clear lucite underlay secured to the keyboard by two thumb screws.

4-MX-3195/USQ-20(V): Digital Data Introducer (Universal Keyset) - Improvement of Data Entry Rate

Correction Material: T- to NS94097(A)
2-A FA-3 NS None
SERIAL: All
IDENTITY: Energizing the keyset and activating the MESSAGE/WORD keys and then depressing TRANSMIT. If this entry is accepted, this field change is incorporated.

1-MX-4845A/SRA-34(V): Operation from External 28 VDC Power Source

Correction Material: T-1, NS0967-304-3011 to TM, NS0967-304-3010

I-A FA-2 NS0967-304-3160 EIC Q94LO03

SERIAL: All serial numbers
IDENTITY: Addition of new connector to outside rear plate and addition of relay board to inside rear plate.

2-MX-4845A/SRA-34V): Coupler Adapter OPR/STBY/
TUNE Switch Modification
Correction Material: T-1, NE0967-LP-304-3011 to NE0967-LP-304-3010

I-A FA-0.5 NS0967-LP-304-3220 EIC Q94K003 SERIAL: All serial numbers
IDENTITY: Inspect AISI OPR/STBY/TUNE switch mounted on the front panel of MX-4845A/SRA-34(V) and observe that a SPDT center off switch has been installed in lieu of a spring loaded switch.

1-MX-4847B/SRA-34V): Operational from External 28 VDC Power Source

Correction Material: T-2, NS0967-304.3012 to NS0967-3043010

I-A FA-2 NS0967-304-3170 EIC Q94L003
SERIAL: All serial numbers
IDENTITY: Addition of new connector to outside rear plate and addition of relay board inside rear of top plate chassis.

1-MX-7647(XN-1)/UPX: AC Coupled Input Card IA1A87
Correction Material: T-1, NS0967-302-6011 to NS0967-302-
6010 and T-1, NS0967-384-801 1 to NS0967-384-8010
3-A FA-5 NS0967-302-6030
SERIAL: All serial numbers
IDENTITY: The new printed circuit fits in the A87 slot of the defruiter.

1-MX-7961/G: Same as 2-OA-8398/GRD-6

1-MX-8025/UYA-4V): Same as 9-OA-7979(V)/UYA-4(V) except
SER1AL: AI and A2
1-MX-8054/UYA-4(V): Correct Wising Error to High Frequency Driver and Addition of High Voltage to Test Panel

Correction Material: T-1, NS0967-238-7191 to NS0967-2387190

3-A FA-I NS0967-238-7480 EIC QM06000
SERIAL: MX-8054/UYA-4(V) serials A1, A2, and A3
IDENTITY: The installation of this field change can be determined by a ohmmeter reading of zero ohms between J11 and J 12 on the test panel.

1-MX-8055/UYA-4(V): Same as 1-MX-8054/UYA-4(V) except SERIAL: AI through A8 and AI0 through A14

2-MX-8055/UYA-4(V): Mod Test Set Adapter Kit Update.
Correction Material: To be Provided.
1-A FA-12 NS0967-LP-562-6550
ElC P804,QM05
SERIAL: MX-8055: A1-A8, A10-A14, B1-B6, C1, D1, D2, and E1. MX-8588: A1, B1.
IDENTITY: Remove front test panel and visually inspect for installation of TBI electronic component board assembly on right-hand side of back cover.

1-MX-8107/SPN-10: Under Development (09-77).
2-MX-8107/SPN-10: Same as 2-ID-1573/SPN-10.

1-MX-8430/URC-9: Improvement in Rigidity of Front Panel Correction Material: None
2-A FA-I NS0967-420-6030
EIC FH24000
SERIAL: All equipments
IDENTITY: Presence of two pan head machine screws, one each installed slightly above and about $3 / 4$ inch to the right of switch S601 and fuse holder XF602 on the front panel.

1-MX-8588/UYA-4(V): Same as I-MX-8054/UYA-4(V) except SERIAL: AI

2-MX-8588/UYA-4(V): Same as 2-MX-8055/UYA-4(V).

EIC QM05

1-MX-9767/UYA-4(V): Test Set Adapter Modification. Correction Material: To be provided.
1-A FA-8 NS0967-LP-562-6520
EIC QM06
SERIAL: AI-A36, BI-B26.
IDENTITY: Verify installation of two switches adjacent to 11 on the Test Set Adapter: S1, toggle switch, labeled UPPER/ LOWER; and S2, rotory switch, labeled MODE.

1-NT-23524: Wiring Change
Correction Material: T-1 to NS91791
2-A FA-2 NS
None
SERIAL: All TCS Adapter Units NT-23524
IDENTITY: When Audio Pad R603 has been properly connected and terminals 7 of TB602 and 8 of TB603 have been reversed.

1-NT-51007A: Canceiled

2-NT-51007A: Conversion to Dynamic Microphone and Receiver and Addition of Noise Cancelling Adapter

## 2-A FA-1/4 NS

None
SERIAL: Al!
IDENTITY: Removed parts, all black, replaced by light grey parts.

1-NT-66046: Modification to Installation Mounting Boit Correction Material: None
2-A FA-4 None
SERIAL: All
IDENTITY: Visual inspection will determine if this change has been accomplished.

1-NT-66047: Same as 1-NT-66046

1-NT-66143: Modification to Ground Plane Radials Correction Material: None
2-A FA-4 NS
None
SERIAL: All
IDENTITY: Presence of safety wire installed on all four ground plane radials of the antenna.

1-O-714, UR: Fuse Repıacement

2-A FA-I 14S None
SERIAL: TMC model CBE-1, component unit of transmitter AN/FRT-39F, Serial 19391
IDENTITY: Field change number stamped on Field Change Accomplished plate.

1-O-1207/URC: Battery Cover Modification
Correction Material: T-1, NS 967-245-7011
2-A FA-4.5 NS0967-245-9020
SERIAL: All
IDENTITY: Presence of a cover on the rear of the synthesizer as being part plexiglass for visual inspection of the battery.

1-O-1612/URC: Correction of Undesired Discharge of External Battery by the FrS.

Correction Material: T-1, NE0967-LP-421-9022, to TM, NE0967-LP.421-9020.

1-A FA-2 NE0967-LP-42 1-9190
EIC QM4E SERIAL: CPN 792-6653-001, serial nos. A-1 thru A-56.
IDENTITY: Resistance between Pins C and D of J2 on rear panel should be 100 K ohrns or greater vice less than 400 ohms.

1-OA-365/SIC-1: Addition of Squelch Control for AN/GRC27

> Correction Mater zal: None

B FA. 4 NS 98423
F5820-311-
3272
SERIAL: First 5 delivered
IDENTITY: Presence of R-F gain control.
1-OA-553(XN-3)/URN-3: Same as 1-OA-591/URN-3

2-OA-553(XN-3)/URN-3: Same as 1-OA-591/URN-3

1-OA-553/URN-3: Same as 1-A-591/URN-3

2-OA-553/URN-3: Same as 1-OA-591/URN-3
1-OA-591/URN-3: Replacing Low Band Central Array E-3202
or High Band Central Array E-3201
Correction Material: None required
1-A FA-3 NS98661
None
SERIAL: See bulletin

2-OA-591/URN-3: Improvement of Antenna Base AB-361/ URN-3

Correction Material: None required
2-A FA-2 NS98680 None
SERIAL: See bulletin

3-OA-591/URN-3: Modification to Disable Azimuth Servo System
2-A FA-0.5 NS981126 None

SERIAL: All shore station equipments
IDENTITY: Decal denoting that azimuth servo switch must be in OFF position.

## 4-OA-591/URN-3: Cancelled

5-OA-591/URN-3: Installation of a BNC Receptacle for Meas

## uring Tachometer Frequency

Correction Material: T-12, NS0967-052-6304 to TM, NS0967-052.6010 (formerly NS92348A)
SERIAL: All antenna groups utilizing C-1349/URN-3
IDENTITY: Presence of BNC receptacle on the top of the cable entrance box of the C-1349/URN-3 Antenna Control Unit.

1-OA-592/URN-3: Same as 1.OA-59 I/URN-3
2-OA-592/URN-3: Same as 2-OA-591/URN-3
3-OA-592/URN-3: Same as 3-OA-591/URN-3
4-OA-592/URN-3: Cancelled
5-OA-592/URN-3: Same as 5-OA-591/URN-3
1-OA-878/URN-3: Cooling Modification in Control Antenna C-1700/URN-3

Correction Material: Change 1 to NS92348(A)
I-A FA-16 NS98953 F5820.543. 0982
SERIAL: 1 thru 18
IDENTITY: Ventilation blower motor and air switch circuit instatled.

1-OA-878A/URN-3: Same as 1.OA-878/URN. 3 except
SERIAL: I thru 44
1-OA-1545/SRN-6: Replacing Antenna Balancing Weight
Rivets with Toggle Bolts
Correction Material: None
1.A YF-8 NS981050 F5820.624.

4454
SERIAL: Алtелла Group OA-1545/SRN.6; Antenna AS889 Serial No.'s. 002, 003, 004, 005, 006
IDENTITY: Toggle bolts replace rivets which hold the balancing weights to the modulating cylinder.

2-OA-1545/SRN-6: Modification Kits for Aftenna Groups Correction Material: T-2 to NiS92986(A)
1.A FA. 3 NS98 1250 F5820-799- 7434
SERIA L: Serial Nos. 1 through 72
IDENTITY: No visual evidence that field change has been accomplished. Appropriate records should indicate accomplishment of this field change.

3-OA-1545/SRN.6: Replacing Pulser Plate Brushes with New Design Brushes, Spacer Clamps, Shims, and Springs as a Moditication Kit

Correction Material: T-2 to NS92986(A)
1-A FA-1 NS981251
F5820.799.
7429

## SERIAL: 1 through 72

IDENTITY: No visual evidence of accomplishment. Appropriate records shouid reflect accomplishment of this field change.

4-OA-1545/SRN-6: Replacement to Mounting Bolts for Roll-
and-Pitch Sector Gears
Correction Material: None
2-A FA-I NS981275
SERIAL: All
IDENTITY: The accompl thment of this field change may be identified by the presence of $1 / 2$-inch mounting bolts used to secure the roll-and-pitch sector gears.
5.OA-1545/SRN-6: Protective Screen Bands Correction Material: None
2-A FA-0.5 NS0967-073-5110
SERIAL: All
IDENTITY: Screen mesh band, bolted around the antenna drive motor.

1-OA-1547/URN-3: Same as !-OA-IS4S/SRN-6 except SERIAL: Antenna AS891, Nos. 01 thru 06, 09 thru 11, 15, 17, 18. $20,21,24,26.29,33,34,36,39,41,42,43,45,46,47,48$, 50

2-OA-1547/URN-3: Same as 3-OA-591/URN-3
3-OA-1547/URN-3: Same as 2-OA-1545/SRN-6 except SERIAL: 1 through 63

4-OA-1547/URN-3: Same as 5-OA-IS45/SRN-6
1-OA-1548/URN-3: Same as I-OA-1545/SRN-6 except
SERIAL: Antenna AS892 Nos. 01, 07, thiu 69
2-OA-1548/URN-3: Same as 3-OA-591/URN-3
3-OA-1548/URN-3: Same as 5-OA-1545/SRN-6
1.OA-1801/SRN-6: Prevention of Antenna Tumbling from Side to Side when Ship's Roll Reference is Lost

> 2-B FA-6 NSO967-886-7020

SERIAL: All shipboard antenna groups
IDENTITY: New relay and auto-tranisformer are connected between terminal boards TB6003, TB6004, TB6009, TB6016, and TB6017.

2-OA-1801/SRN-6: Installation of Lifiting Handles on Antenna Radome

Correction Material: None required
2-B FA-4 NS0967.886-7030 EIC L601700 SERIAL: All equipments
IDENTITY: Presence of lifting bandles on the antenna radomes.

3-OA-1801/SRN-6: Electrical Limsting of Antenna Roll Cor. recton to 024 Degrees.

Correction Material: Chg. 1, NS0967-886-7011 io NS0967886 -7010.

I-A FA-2 NS0967-886-7040 EIC L601000 SERIAL: All serial numbers.
IDENTITY: The Amplifier Group OA-2619/SRN-6 control panel (NAVSHIPS 0967-886.7010, page 3.0, figure 3.1) will have a red indicator marked 'ROLL LIMIT.' The location of this indicator will be just above the H27A phone Jack.

4-OA-1801/SRN-6: Addition of a Front Panel Test Jack for Checking Antenna Speed

Correction Material: TM change to NS0967-886-7010
11-A FA-2 EIB 862
EIC L601000
SERIAL: All equipments
IDENTITY: Presence of a BNC Jack labeled ‘ANTENNA SPEED' located in the lower right corner of the hinged control panel on Antenna Control Unit OA-2619/SRN-6.
5.OA-1801/SR: i-6: Delete Roll Stabilization. (E1B 963),

Correction Material: None required.
4-A FA-1 EIB 963
E1C L601 or

L603
SERIAL: All serial nos. of OA-1801/SRN-6, OA-1801A/ SRN-6, and OA-3801B/SRN-6.
IDENTITY: Verify that terminal 4 of relays K 6004 and K6007 have no wires attached.

1-OA-1801A/SRN-6: Same as 5-OA-1801/SRN-6

1-OA-1801B/SRN-6: Same as 5-OA-1801/SRN-6.

1-OA-3069/SYA-1(V): Decreasing the Voltage to the Read Out Device and Pushbutton Lamps

Correction Material: T-1, NS0967-961-7011 to TM, NS0967-961-7010 (NS93274A)

2-A FA-4 NS0967-961-6030
SERIAL: All
IDENTITY: Presence of a wire connected to terminal 1 of T ] and terminals 12 and 15 of T2

2-OA-3069/SYA-I(V): Improved Type Labels for the Intercommunication Panels

Correction Material: T-1, NS0967-961-6011 to TM, NS0967-961-6010 (NS93723B)
2.A FA. 2 NS0967-044.1040 None SERIAL: Aij AN/SYA-l(V), AN/SYA-4(V) Consoles and LS-482/SYA-4(V) Intercommunication Station
IDENTITY: Noting that the labels are attached underneath the front lucite plate of panel (A-6).
3.OA-3069/SYA-1(V): Same as 3-OA-3953/SYA-4(V) except SERIAL: All

4-OA-3069/SYA-1(V): Data Input Display Console - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in CTM NS0967-9616040

2-A NS0967-961-6050 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

5-OA-3069/SYA-I(V): Same as 6.OA.3953/SYA.4(V)
6.OA.3069/SYA-1(V): Addition of Noise Controls in SIF Enable Unit

Correction Material: T-2, NS0967-96i-6013 to TM, NS0967-961-6010 (Vol. 1); T-1, NS0967-961-6022 to TM. NS0967-961-6020 (Vol. 11)

$$
\text { 1.A FA. } 8 \text { NS0967.961-6070 }
$$

SERIAL: All use in Air Identification Position only
IDENTITY: The SIF enable unit A 17 has a general purpose clocked flip-flop card, HAC P/N \$76375, in slot J20
7.OA-3069/SYA-1.(V): Change Hook Message Indicator for Sedective Identification Feature (SIF) to Ball Tab Message Indicator

Correction Material: T- to NS93723(B)
2.A FA-0.5 NS0967-961-6090

SERIAL: All
IDENTITY: Removing the Display Programmer (A72) and checking for the wiring changes as specified under Material Required.
8.OA-3069/SYA-1(V): Protection of SCR-1 in Intensity Unit

Correction Material: T-1, NS0967-953-1011 to TM, NS0967-953-1010 (formerly NS93737(A))
SERIAL: Only those serial numbers which have been modified with CRT resolution improvement, Hughes Aircraft Company Field Bulletin 204
IDENTITY: Presence of CR 10 (1N914) across R3 in the lntensity Unit (575044) A 21.

9-OA-3069/SYA-1(V): Trackball X \& Y Pickoff Wheel lmprovement

Correction Material: None required
1.A FA. 2 NS0967-961-6100

EIC DQ10000
SERIAL: Als
IDENTITY: Presence of Stainless Steel Pickoff Wheels vice Aluminum Alloy.
10.OA-3069/SYA-1(V): Standardization of Bearing Lines

Correction Material: T-4, NS0967-961-6015 to NS0967-9616010; T-3, NS0967-961-6024 to NS0967.961-6020; T-5, NS0967-961-7016 to NS0967-961-7010; T-2, NS0967-961-7023 to NS0967.961-7020; T-2, NS0367-140-2013 to NS0367-1402010

## 2-A FA-5 NS0967.961.61!0 <br> EIC P801000

SERIAL: All equipments
IDENTITY: Noting the presence of the wiring changes as listed in the procedure.

11-OA-3069/SYA-1(V): Capability to Display Unaddressed PHAST Symbol

Correction Material: T-5, NS0967.961-6016 to NS0967-961. 6010; T.4, NS0967-961-6025 to NS0967-961-6020; T-6, NS0967.961.7017 to NS0967.96!-70!0; T-3, NS0967.961-7024 to NS0967-961-7020; T.3, NS0367-140-2014 to NS0367-1402010
SERIAL: All equipment
IDENTITY: Removing the display programmer, A27, and verifying that wiring connections have been added as follows: OA-3069/SYA-l(V); from J13.43 to J10-58 and from J13-36 to J17-22.

12-OA-3069/SYA-1(V): Modification to Utilize the KY-438/ SYA-4(V)

Correction Maten al: T-6, N-S0967-961-6017 to NS0967-961. 6010; T.5, NS0967-961-6026 to NS0967-961-6020

1-A FA-40 NS0967.961-6130 EIC P801000

SERIAL: Only the OA-3069/SYA-3(V) installed aboard the USS LONGBEACH (CGN-9)
IDENTITY: A KY-438/SYA-4(V) video decoder installed in area Al7.

1-OA-3070/SYA-1(V): Same as 1-OA-3069/SYA-1(V)
2-OA-3070/SYA-1(V): Same as 2.OA-3069/SYA-l(V)
3.OA-3070/SYA-1(V): Same as 3-OA-3953/SYA-4(V) except SERIAL: All

4-OA-3070/SYA-1(V): Data Utiiization Display Console - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in the CTM NS0967. 961-6040
2-A NA NS0967-961-6050 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change
Accomplished plate.

5-OA-3070/SYA-1(V): Same as 6-OA-3953/SYA-4(V)
6-OA-3070/SYA-1(V): Provision of Switching Remote Track Symbols to DOTS Capability

Correction Material: T-1, NS0967-961-7011 to TM, NS0967-961-7010 (formerly NS93724A)

2-A FA-4 NS0967-183-4080 None
SERIAL: All
IDENTITY: Noting that Remote Tracks can be changed to DOTS by depressing the Remote Tracks to DOTS button.

7-OA-3070/SYA-1(V): Enlargement of Own Ships Interceptor Symbol Only

Correction Material: T-4, NS0967-961-7015 to NS0967-9617010; T-1, NS0967-961-7022 to NS0967-961-7020

2-A FA-1 NS0967-961-7050
SERIAL: All equipments
IDENTITY: Noting that only Own Ships Interceptor Symbos enlarges when the 'ENLARGE LOC CON INTCPTR' Switch is turned to the ON position.
8.OA-3070/SYA-1(V): Same as 8-OA-3069/SYA-I(V)
9.OA-3070/SYA-1(V): Same as 9-OA-3069/SYA-J(V)

10-OA-3070/SYA-1(V): Modification to Utilize the KY-438/ SYA-4(V)

Correction Material: Included in Supp. Tech Manual, NS0967-965-5090

1-A FA-50 NS0967.961-7070 EIC DQ10000
SERIAL: Equipments as directed by NAVSECNORDIV. Sesial numbers not affected will not have the Selective Identification Feature Capability
IDENTITY: Presence of console SIF decal, as shown in figure 3 of FCB
11.OA-3070/SYA-1(V): Same as 10-OA-3069/SYA-l(V)

12-OA-3070/SYA-1(V): Same as 11-OA-3069/SYA-1(V) except

IDENTITY: Removing the display programmer, A27, and verifying that wiring connections have been added as follows: OA-3070/SYA-I(V); from J32-70 to J17-32 and from J11-45 to 358-10.

## 1.OA-3071/SYA-1(V): Same as 2-OA-3069/SYA-l(V)

2.OA-3071/SYA-1(V): Video Display Height - Size Console Incorporation of Factory Field Change Bulletins as a Unit Field Change

Correction Material: Incorporated in the CTM NS0967-961-6040

2-A NA NS0967-961-6050 None SERIAL: All
IDENTITY: Change number stamped on the Fiefd Change Accomplished plate.

1-OA-3072/SYA-1(V): Data Input Readout Console - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: CTM NS0967-961-6040
2-A NA NS0967-961-6050 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Plate.

2-OA-3072/SYA-1(V): Standardization of Wiring in the Readout Cells

Correction Material: T-1, NS0967-961-901I to TM, NS0967-961-9010 (formerly NS93727(A)), CTM NS0967-9616040

2-A FA-1.5 NS0967-961-6050 None SERIAL: All
IDENTITY: Noting the absence of Readout errors when new films, applicable to the model 11 program, are installed.

1-OA-3073/SYA-1(V): Data Utilization Readout Console - Incorporation of Factory Field Bulletins as a Unit Field Change Correction Material: Incorporated in revised publication
2-A NS0967-961-9020 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-OA-3073/SYA-1(V): Same as 2-OA-3072/SYA-!(V)
1-OA-3074/SYA-1(V): Symbol Generator Group - Incorporation of Factory Field Bulletin as a Unit Field Change Correction Material: Incorporated in revised publication
2-A NA NS0967.961-9020
None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-OA-3075\{XN-1\}/SPS-33: Same as 1.OA-3071/SYA.4(V)
1.OA-3953/SYA-4(V): Data Input Display Console - Incorporation of Factory Fieid Bulletins as a Unit Field Change

Correction Material: None
2-A NA NS0967-957-2040 None
:SERIAL: AI through A 122

IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-OA-3953/SYA-4(V): Same as 2-OA-3069/SYA-1(V)
3.OA-3953/SYA-4(V): Intensity Amplifier Reliability Improvement

Correction Material: T-1, NS0967-183-4012 to TM, NS0967-183-40i0 (formerly NS94640(A))

2-A FA-1.5 NS0967-183-4050 None
SERIAL: Al through Al51
IDENTITY: Removing the 575044 Unit from the console and checking for the additional parts as shown on Figures I and 2.

4-OA-3953/SYA-4(V): Replacement of Guide Pin Stud in Bullnose Link Mechanism

Correction Material: None
1-A FA-1.5 NS0285-081-0700
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

5-OA-3953/SYA-4(V): Same as 2-CV-1545/SYA-4(V) except SERIAL: AI through A 153

6-OA-3953/SYA-4(V): Modification of Video Pre-Amplifier to Improve Intensity

2-A FA-I NS0967-183.4080 None
SERIAL: Equipments which have been modified with CRT Resolution Improvement HAC
IDENTITY: Noting that resistor R3 has been replaced by a jumper wire on the Intensity Summing Amplifier Card 580625.

7-OA-3953/SYA-4(V): Correct Distortion in the Left-Half and Full Bar Symbols

Correction Material: T-2, NS0967-059-2014; T-2, NS0967-059-2023

2-A FA.I NS0967-059-2040
SERIAL: All equipments having an ' $A$ ', ' $B$ ', and ' $C$ ' prefix before the serial numbers
IDENTITY: Checking wiring changes as indicated in Field Change

8-OA-3953/SYA-4(V): Modification of Card Hold Down Bar Correction Material: None
2-A FA-I NS0967-059-2130
SERIAL: Alt
IDENTITY: By cranking the console partially open and visually noting inat portion of the card hold down bar on the A 16 and A22 card boxes has been removed.

9-OA-3953/SYA-4(V): Illegal Selective Identification Feature Enable Gate Prevention

Correction Material: T- to NS94629(A)
2-A FA-I NS0967-059-2140
SERIAL: All equipments which have the KY-438/SYA-4(V) Video Decoder (A 17) installed
IDENTITY: Checking the Video Decoder (Al7) for wiring change as specified in field change.

10-OA-3953/SYA-4(V): Alert Message Indicator Change for

Selective Identification Feature (SIF)
Correction Material: T- to NS94629(A)
2-A FA-0.5 NS0967-059-2140
SERIAL: A1 through A151, 153, 154; B1 through B18; C1 through C4
IDENTITY: By removing the Display Programmer (A27) and checking for the wiring changes as specified in the field change.

11-OA-3953/SYA-4(V): Trackball X \& Y Pickoff Wheel Improvement

Correction Material: None required
1-A FA-2 NS0967-059-2090
SERIAL: All serial numbers
IDENTITY: This field change can be identified by presence of Stainless Steel Pickoff Wheels vice Aluminum Alloy.

12-OA-3953/SYA-4(V): Correction of CRT Shield Stenciling Correction Material: None
1-A FA-0.5 NS0967.059-2030
SERIAL: All equipment
IDENTITY: Presence of Decals indicating Pin Numbers installed on CRT Shield.

13-OA-3953/SYA-4(V): Ramp Generator Improvement Correction Material: T- to TM, NS94640(A)
2-A FA-1 NS0967.059-2100
SERIAL: All equipment
IDENTITY: Noting that a 68 pf capacitor is connected in parallel with R49 on ramp generator (580623).

14-OA-3953/SYA-4(V): NTDS Inter-Com Modification for CATCC

Correction Material: T-1, NS0967-238-5012 to TM,
NS0967-238-5010 (formerly NS94637)
1-A FA-3.5 NS0967-059-2060
SERIAL: All in CATCC
IDENTITY: Visually observing the presence of the new Radio Push-to-Talk switch.

15-OA-3953/SYA-4(V): Disable Offset Adder when Hook or Ball Tab Message is Received. (EIB 707, 715).

Correction Material: T-6, NS0967-059-2018 to NS0967-059-
2010; T-5, NS0967-059-2026 to NS0967-059-2020
2-A FA-2 NS0967-059-2150
SERIAL: All having an ' $A$ ', ' $B$ ', ' $C$ ', or ' $D$ ' prefix
IDENTITY: Noting presence of additional wiring in symbol coordinate and offset drawer A26, as described under Procedure, step 2 of bulletin.

16-OA-3953/SYA-4(V): Replacement of Filament Circuit Breaker with Improved Type

Correction Material: None required
1-A FA-2 NS0967-059-2110
SERIAL: All
IDENTITY: Presence of HAC P/N 711520-101 (FSN IN5925-979-9076) in position 025A29CB6.

17-OA-3953/SYA-4KV): Correction to Mechanization of the Offset Adder

Correction Material: T-6, NS0967-059-2018 to NS0967-059.

2010; T-S, NS0967-059-2026 to NS0967-059-2020
4-A FA-2 NS0967-059-2150
SERIAL: All equipment
IDENTITY: Noting the presence of wining as shown on figures 1 and 2 of field change.

18-OA-3953/SYA-4(V): Capability to Blink Special Category Symbols

Corroction Material: T-6, NS0967-059-2018 to NS0967-0592010; T-5, NS0967-059-2026 to NS0967-059-2020; T-7, NS0967-059-3018 to NS0967-059-3010; T-6, NS0967-059-3026 to NS0967-059-3020

FA-1.5 NS0967-059-2150
SERIAL: All equipment having ' $A$ ', ' $B$ ', ' $C$ ', or ' $D$ ' prefix before the serial number
IDENTITY: Nowing that the special category symbols blink when bit 17 of the Velocity/Category Word is true.

19-OA-3953/SYA-4(V): Protection of SCR-1 in Intensity Unit Correction Material: T-S, NS0967-183-4016 to TM, NS0967-183-4010

1-A FA-1 NS0967-059-2120
SERIAL: All serial numbers
IDENTITY: Presence of CR10 (IN914) across R3 in the Intensity Unit (575044) A 21.

20-OA-3953/SYA-4(V): Utilize Console for Sweeps if Symbol Generator Fails

Correction Material: T-7, NS0967-059-2019 to TM, NS0967-059-2010 (Vol. 1); T-6, 0967-059-2027 to TM, NS0967-059-2020 (Vol. 2); T-8, NS0967-059-3019 to TM, NS0967-0593010 (Vol. 1); T-7, NS0967-059-3027 to TM, NS0967-059-3010 (Vol. 2)

## 1-A FA-5 NS0967-059-2130

SERIAL: All serial numbers
IDEN'TITY: The Display Programmer (A27) has an added general purpose pulse regenerator printer circuit card, HAC P/N 580603, in slot 353 of the Data Utilization Consoles.

21-OA-3953/SYA-4(V): Same as 3-CV-1320/SYA-4(V) except 1-A FA-5 NS0967-959-3030 EIC DQ02100
SERIAL: A1 through A154 and B1 through B5
22-OA-3953/SYA-4(V): Provides a Reliable Output of the 580683 Card

Correction Material: T-3, NS0967-183-4026 to TM, NS0967-183-4020

1-A FA NS0967-059-2170 EIC DQ02100 SERIAL: A 1 through A 154 and Bl through B5
IDENTITY: Installation of this change can be identified by noting on the 580683 card (slot 40) in the $X$ and $Y$ Deflection Control Units that Q12 and Q15 are 2N2905, R5 is 100 ohms, and C 2 has been removed.

23-OA-3953/SYA-4(V): Improve Accuracy of Digilog 'A' Correction Material: T- to NS0967-183-4020 (Vol 2)
4-A FA-1.0 NS0967-059-2180 EIC DQ02100
SERIAL: All equipments
IDENTITY: Noting on the Digilog A Card, 580696, that C39 is 1000 picrof arad and C40 is 820 picrofard.
24.OA-3953/SYA-4(V): Same as 4-CV-1320/SYA-4(V) except 1-A FA-3 NS0967-959-3040 EIC DQ02100
SERIAL: AI through A154, BI through B5
25.OA-3953/SYA.4(V): Standardization of Bearing Lines

Correction Material: T-8, NS0967-059-2200 to NS0967-0592010; T-7, NS0967-059-2028 to NS0967-059-2020; T-9, NS0967-059-3100 to NS0967-059-3010; T-9, NS0967-059-3029 to NS0967-059-3020; T-1, NS0967-965-3013 to NS0967-9653010

2-A FA-0.5 NS0967-059-2190 EIC DQ02100 SERIAL: All equipments
IDENTITY: Presence of wiring changes as listed under 'Procedure" in the field change bulletin

26-OA-3953/SYA-4(V): Modification to Display Fleet Center Symbol

Correction Material: T-8, NS0967-059-2029 to NS0967-0592020

2-A FA-0.5 NS0967-059-2210 EIC P804100 SERIAL: All equipments
IDENTITY: Presence of the wiring changes as listed under Procedures.

27-OA-3953/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except 1-A FA-0.5 NS0967-959-3050

EIC P804100
SERIAL: A! through A154, BI through B10
28-OA-3953/SYA-4(V): Prevent Auto Energizing of Console after Power Loss

Correction Material: T-9, NS0967-059-2201 to NS0967-0592010 and T-9, NS0967-059-2301 to NS0967-059-2020

1-A FA-3.5 NS0967-059-2400 EIC P804100
SERIAL: OA-3953/SYA-4(V) - All A, B and C serial numbers
IDENTITY: Noting the addition of the new reset switch on the front panel of the Output Data Unit, A28.

## 29-OA-3953/SYA-4(V): Same as 5-LS-482/SYA-4(V).

30-OA-3953/SYA-4(V): TACS/TADS Hardware Changes
Correction Material: T-9, NS0967-059-2201 to NS0967-0592010; T-9, NS0967-059-2301 to NS0967-059-2020; T-3, NS0967-965-3015 to NS0967-965-3010

1-A FA-10 NS0967-059-2440
EIC P804000
SERIAL: Serial numbers Al thru A154, Bl thru B18, and Cl thru C10
IDENTITY: Check in the console for the addition of a 580605 card in A27-J55. The 580605 card can be located by referring to the card location chart installed on the top of the A27 card box drawer.

31-OA-3953/SYA-4(V): Improve Regulation of 28 V P.S.
Correction Material: T-3, NS0967-238-5013 to NS0967-2385010

1-A FA-1.5 NS0967-059-2430 EIC P804000 SERIAL: Equipment serials Al-A154, Bl-B18, Cl-Cll
IDENTITY: Open the hinged panel on the lower side of the console bullnose and observe the installation of a resistor-capacitor filter assembly adjacent to J 3 on lamp blinking control panel, Al0.

32-OA-3953/SYA-4(V): Symbol Switching Amplifier Modification

Correction Material: T-9, NS0967-183-4103 to NS0967-1834010

I-A FA-2 NS0967-059-2450 EIC P804000
SERIAL: Serial numbers Al thru A 154, Bl thru B18, and C1 thru C11
IDENTITY: Note in all AN/SYA-4(V) data display consoles the symbol switching amplifier P.C. cards (580638-100, located in area 16 slot 56 and area 22 slot 57 , that R26, R29, and R45 are variable resistors. Also, the presence of a filter capacitor (3300 PF) from pin 76 (TP-20) to ground.

33-OA-3953/SYA-4(V): Prevent Burning of CRT Phosphor
Correction Material: Included in Permanent Change to be Supplied

I-A FA-16 NS0967-LP-059-2460 EIC P804000
SERIAL: All serial numbers
IDENTITY: Check the card box in area 22. An intensity com-
pensator card, 162582-100, should be installed in J2.
34-OA-3953/SYA-4(V): Addition of DDEU Panel Correction Material: Incorporated into TMs
1-A FA-4 NS0967-LP-059-2470
SERIAL: Al-A154, B1-B18, Cl-Cl1. (Authority for installation directed by NAVSEC.)
IDENTITY: Observe installation of DDEU, DI, Panel, PN 361292-011 in All.

35-OA-3953/SYA-4(V): Add Barred Alpha/Numeric Capability.

Correction Material: OA-3953: Chg. 4, NS0967-LP-0592204, to TM, NS0967-LP-059-2010; Chg. 4, NS0967-LP-0592304, to TM, NS0967-LP-059-2020. OA-3955: Chg. 4, NS0967-LP-059-3106, to TM, NS0967-LP-059-3010; Chg. 4, NS0967-LP-059-3204, to TM, NS0967-LP-059-3020.
i-A FA-4 NS0967-LP-059-2490
EIC P84
SERIAL: All serial numbers.
IDENTITY: OA-3953: Verify continuity between A27-12-04 and A27-12-07 (open) and between A27-13-61 and A27-12-04 (zero ohms). OA-3955: Verify continuity between A27-06-86 and A27-53-44 (open) and between A27-08-83 and A27-16-17 (zero ohms).
NOTES: Prerequisite Field Change: 30-OA-3953/UYA-4(V) or $28-\mathrm{OA}-3955 / \mathrm{SYA}-4(\mathrm{~V})$.

36-OA-3953/SYA-4(V): Under Development (08.75)
37-OA-3953/SYA-4(V): DDI Addition.
Correction Material: Use of TM for IP-1304/UYA-4(V), SE675-A V-MMO-0:0/UYA-4(V). Other TM changes to be provided.

3-C YF-8 NS0967-I.P-059-2500 EIC P804
SERIAL: All serial numbers of OA-3953/SYA-4(V) and OA-3955/SYA-4(V).
IDENTITY: Verify installation of the DDI (Digital Display Indicator) IP-1304/UYA-4(V), mounted beside the Data Input Display Console OA-3953/SYA-4(V) or the Data Utilization Console OA-3955/SYA-4(V).

38-OA-3953/SYA-4(V): Prevent ALPHA from Disabling

Off set Adder. (EIB 936).
Correction Material: EIB 936.
4-A FA-1 EIB 936
EIC P804
SERIAL: A-1 thru A-154, B-1 thru B-18, C-1 thru C-10, and D. 1 .

IDENTITY: Continuity (zero ohms) between A26J3-53 and A26J41-77 and between A26J41-73 and A26J42-82.
1.OA-3954/SYA-4(V): Data Input Readout Console - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in revised publication
2-A NA NS0967-961-9020 None
SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-OA-3954/SYA-4(V): Wiring of DIRO Lamps
Correction Material: T-3, NS0967-LP-957-8014 to NS0967-LP-957-8010

I-A FA-8 NS0967-LP-957-8050 EIC P804000 SERIAL: All serial numbers
IDENTITY: Note presence of the added wiring of this change.

1-OA-3955/SYA-4(V): Data Utilization Display Console - Incorporation of Factory Bulletins as a Unit Field Change Correction Material: None
2-A NA NS0967-961-9020 None
SERIAL: Al thru All9
IDENTITY: Change number stamped on the Field Change Accomplished plate.
2.OA-3955/SYA.4(V): Same as 2-OA-3069/SYA-1(V)
3.OA-3955/SYA-4(V): Same as 3-OA-3953/SYA-4(V) except SERIAL: AI thru A140

4-OA-3955/SYA-4(V): Same as 4-OA-3953/SYA-4(V)
5-OA-3955/SYA-4(V): Same as 2-CV-1545/SYA-4(V) except SERIAL: Al thru A144

6-OA-3955/SYA-4(V): Same as 6-OA-3953/SYA-4(V)
7-OA-3955/SYA-4(V): Same as 7-OA-3953/SYA-4(V) except
Correction Material: T-3, NS0967-059-3014; T-3, NS0967-059-3021

8-OA-3955/SYA-4(V): Enlargement of Own Ships Interceptor Symbol Only

Correction Material: T- to NS94630(A), Vols I \& II
2-A FA-1 NS0967.059-3060
SERIAL: Al through A143, B1 through B20, and Cl through C12
IDENTITY: By noting that Own Ships Interceptor Symbol enlarges only, when the 'ENLARGE LOC CON INTCPTR' switch is turned to the ON position.

9-OA-3955/SYA-4(V): Same as 8-OA-3953/SYA-4(V)

11-OA-3955/SYA-4(V): Same as 12-OA-3953/SYA-4(V)
12-OA-3955/SYA-4(V): Same as 13-OA-3953/SYA-4(V)
13-OA-3955/SYA-4(V): Same as 14-OA-3953/SYA-4(V)

14-OA-3955/SYA-4(V): Same as 16-OA-3953/SYA.4(V)

15-OA-3955/SYA-4(V): Same as 18-OA-3953/SYA-4(V)
16-OA-3955/SYA-4(V): Adjustable Leader Accuracy Improvement

Correction Material: T-3, NS0967-183-4014 to TM, NS0967-183.4010

1-A FA-I NS0967-059-3040
SERIAL: All
IDENTITY: Noting that R21 on the 580608 Summing Amplifier in all applicable AN/SYA-4(V) uniws is a 2.21 K ohm resis. tor

17-OA-3955/SYA-4(V): Same as 19-OA-3953/SYA-4(V)
18-OA-3955/SYA.4(V): Provide Selective Identification Feature (SIF) in AN/SYA 4(V) Data Utilization Consoles

Correction Material: T-5, NS0967-059-3016 to TM, NS0967.059-3010 (Vol. 1) and T-5. NS0967-059-3025 to TM, NS0967-059-3020 (Vol. II)
1.A FA. 75 NS0967.059.3050

SERIAL: Those serial numbers of the OA-3955/SYA-4(V) as directed by NAVSEC
IDENTITY: Presence of connectors J61 and J62 in Area 17.
19-OA-3955/SYA-4(V): Same as 20-OA-3953/SYA-4(V)
20-OA-3955/SYA-4(V): Same as 3-CV-1320/SYA-4(V) except 1-A FA-5 NS0967-959-3030 EIC DQ02300 SERIAL: Al thru A143. Bi thru B10

21-OA-3955/SYA-4(V): Same as 22-OA-3953/SYA-4(V) except J-A FA NS0967-059-2170 EIC DQ02100

22-OA-3955/SYA-4(V): Same as 23-OA-3953/SYA-4(V) except 4-A FA-1 NS0967-059-2180 EIC DQ02300

23-OA-3955/SYA-4(V): Same as 4-CV-1320/SY A.4(V) except I-A FA-3 NS0967-959.3040

EIC DQ02300
SERIAL: A1 thru A143, Bl thru B10

24-OA-3955/SYA-4(V): Same as 25-OA-3953/SYA.4(V) except 2.A FA-0.5 NS0967-059-2190 EIC DQ02300

25-OA-3955/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except 1-A FA-0.5 NS0967-959-3050 EIC P804400
SERIAL: AI thru A143, B10
26.OA-3955/SYA-4(V): Same as 28-OA-3953/SYA-4(V) except Correction Material: T-12, NS0967-059-3103 to NS0967. 059-3010, T-10, NS0967-059-3201 to NS0967-059-3020 1-A FA-3.5 NS0967-059-2400 EIC P804400

27-OA-3955/SYA-4(V): Same as 5-LS-482/SYA-4(V).

28-OA-3955/SYA-4(V): Same as 30-OA-3953/SYA-4(V) except Correction Material: T-13, NS0967.059-3104 to NS0967-059-3010; T-11, NS0967-059-3202 to NS0967-059-3020; T-3, NS0967-965-3015 to NS0967-059-3010
SERIAL: Al thru A143, Bl thru B20, and Cl thru C15
IDENTITY: Check in the OA-3955/console for the addition of a 580605 card in A27-J18. The 580605 card can be located by referring to the card location chart installed on the top of the A27 card box drawer.

29-OA-3955/SYA-4(V): Same as 31-OA-3953/SYA-4(V) except SERIAL: A1 thru A143, Bl thru B20, Cl thru C15

30-OA-3955/SYA-4(V): Same as 32-OA-3953/SYA-4(V) except SERIAL: AI thru A143, Bl thru B20, and Cl thru C15

31-OA-3955/SYA-4(V): Same as 33-OA-3953/SYA-4(V)

32-OA-3955/SYA-4(V): Addition of DDEU Panel Correction Material: Incorporated into TMs 1-A FA. 4 NS0967-LP.059-2480
SERIAL: A1-A143, B1-B20, Cl-C15. (Authority for installation directed by NAVSEC.)
IDENTITY: Observe installation of DDEU, DU, Panel, PN 361293-011, in AII.

33-OA-3955/SYA-4(V): SAme as 35-OA-3953/SYA-4(V).

34-OA-3955/SYA-4(V): Add Secure Radio Channel Select Ca pability (Under Development)

35-OA-3955/SYA-4(V): Same as 37-OA-3953/SY A-4(V).

1-OA-3956/SYA-4(V): Data Utilization Readout Console - Incorporation of Factory Field Bulletins as a Unit Field Change Correction Material: Nonc
2-A NA NS0967-96i-9020 None SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-OA-3956/SYA-4(V): Data Utilization Readout Console - Relocation of Projection Indicators

Correction Material: Change 1 and T- to NS94632(A)
2.A FA-1.5 NS0967-957-8030

SERIAL: All OA-3956/SYA-4(V) having ' $A$ ' or ' $B$ ' prefix serial numbers only
IDENTITY: By checking the continuity between P37 and pin 93 and cell A9 lamp terminal 10.

3-OA-3956/SYA-4(V): Wiring of Duro Lamps
Correction Material: T-2, NS0967-957-8013 to TM, NS0967-957-8010

1-A FA-8 NS0967-957-8040 EIC DQ02600 SERIAL: All equipments
IDENTITY: Added wiring as indicated in field change.
1-OA-3957/SYA.4(V): Video Display Height Size Console . Incorporation of Factory Field Bulletin as a Unit Fie!d Change

Correction Material: None

2-A NA NS0967-957-2040<br>None SERIAL: All<br>IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-OA-3957/SYA-4(V): Same as 2-OA-3069/SYA-I(V)

3-OA-3957/SYA-4(V): Same as 4-OA-3953/SYA-4(V)

4-OA-3957/SYA-4(V): Erratic Function Codes Improvement in Height Size Console

2-A FA. 4 NS0967-957-2070 None
SERIAL: A1 thru A27
IDENTITY: Checking the Voltage on A-1, SW-2 terminal 4 for -28 VDC .

5-OA-3957/SYA-4(V): Modification of Track Call-up Switches 2-A FA-3 NS0967-957-2070 None SERIAL: All Height-Size Video Display Consoles having serials with 'A' prefin
IDENTITY: Ability to rotate Track Call-up Switches more than 360 degrees in either direction.

6-OA-3957/SYA-4(V): Increase Bearing Gate to Allow All Sweeps to Paint

Correction Material: T- to NS94631(A), Vol. I, II and Tto NS95747, Vol. I and II

2-A FA-8 NS0967-957-2090
SERIAL: OA-3957/SYA-4(V) A1 thiu A28
IDENTITY: Checking the presence of wiring changes as specified in field change.

7-OA-3957/SYA-4(V): Replacement of Filament Circuit Breaker with Improved Type

Correction Material: None required
1-A FA-2 NS0967-957-2100
SERIAL: All
IDENTITY: Presence of HAC P/N 711520-109 in position 250A40CB4

8-OA-3957/SYA-4(V): Modification to Prevent Computer Lock-up

Correction Material: T-2, NS0967-965-3014 to NS0967-9653010; T-2, NS0967-957-2013 to NS0967-957-2010; T-2, NS0967-957-2023 to NS0967-957-2020, T-3, NS0967-138-0015 to NS0967-138-0010; T-3, NS0967-138-0024 to NS0967-1380020

IV-A FA-1.0 NS0967-957-2120 ElC P804500
SERIAL: All serials (also those OA-3957's modified to operate as OA-4755A/SYA-4(V))
IDENTITY: Noting that the -14 volts in area 35 and area 39 is controlled by the same circuit breaker (CB-2)

1-OA-3958/SYA-4(V): Symbol Generator Group - Incorporation as a Unit Field Change

Correction Material: None
2-A NA NS0967-957-2070 None
SERIAL: A 1 thru A10 and A12 thru A15
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-OA-3958/SYA-4(V): Provision of Additional Symbols (HAC P/N 575713-902)

Correction Material: Include in NS94635(B)
1-A FA-8 NS0967-138-1050
SERIAL: A1 thru A10, A12 thru A21, A24, A25, A27, Bl and B2, C2 thru C3. All subsequent equipments will be factory modified.
IDENTITY: Check card slot 53 in the Symbol Driver Unblanking Units in Areas (A3) and (A5). If slot contains a (580605) card assembly this change has been previously accomplished. If number is (581307-110), the power supply portion of this change has not been accomplished.

3-OA-3958/SYA-4(V): Transmission of RHI Messages with Various Azimuth and Elevation Angles (HAC P/N 57513-901) Correction Material: Included in Technical Manual
1-A FA-24 NS0967-138-1063
SERIAL: A1 thru A10, A12 thru A21, A124, A25, A27, B1, $\mathrm{B} 2, \mathrm{C} 2$ and C 3 . All subsequent equipments will be factory modified.
IDENTITY: If the front panel of the D.I.S. contains two rotary switches labeled SINE (DEG) and OPERATING MODE, and three toggle switches labeled HSI GRNG (DEG), 180, 90 and 45 then this field change has been previously accomplished. The Field Change Record Plate should also indicate prior accomplishment.

4-OA-3958/SYA-4久V): Correction to Card Location Chart Correction Material: None required
2.A FA-0.5 NS0967-138-1070

SERIAL: A1 thru A27 and Bl thru B2
IDENTITY: Visually noting that the card location charts for the area A3 and A5 units have been changed to reffect no uses of slot 53 and General Purpose Nor Gate, 580605, is used in slot 57

5-OA-3958/SYA-4(V): Reduction of Noise on Large Circles Correction Material: T-1, NS0967-138-1022 to TM, NS0967-138-1020

1-A FA-1 NS0967-138-1081
SERIAL: All
IDENTITY: This field change can be identified by presence of jumper cables having white sleeving with J21-72 to J31-72 inscribed, between 521-72 and J31-72 in A4 and A6 boxes.

6-OA-3958/SYA-4久V): Modification to Prevent Collapsing Symbols

Correction Material: T-2, NS0967-138-1013 to TM, NS0967-138-1010 (formerly NS94635(B))

1-A FA-6 NS0967-138-1090
SERIAL: All serial numbers
IDENTITY: Inspecting equipment for wising changes as listed, and by the presence of proper triangle trapezoid waveforms.

7-OA-3958/SYA-4(V): Improve Rise Time of the Timing Gates
Correction Material: T-5, NS0967-138-1016 to TM, NS0967-138-1010; T-2, NS0967-138-1023 to TM, NS0967-1381020

1-A FA-8 NS0967-138-1100 EIC DQ02B00
SERIAL: All equipments

IDENTITY: Presence of 580606 card (Digital Amplifier) in slot 49 in Area 3 and Area 5 of the Symbol Generator
8.OA-3958/SYA-4(V): Capability to Generate Dashed Lines Correction Material: T-6, NS0967.338-1017 to NS0967-1381010 (formerly NS94635(B), Volume J) and T-3, NS0967-1381024 to NS0967-138.1020 (Formerly NS94635(B), Volume 2) 2-A FA-4.0 NS0967-138-1110

EIC DQ02B00
SERIAL: All equipments modified with Field Change 2-OA-3958/SYA-4(V)
IDENTITY: Presence of wising changes
9-OA-3958/SYA-4(V): Improve Operation of Dashed Lines
Correction Material: T-7, NS0967-138-1018 to NS0967-138-
1010; T-4, NS0967-138-1025 to NS0967-138-1020
Il-A FA-1.0 NS0967-138-1120
EIC P804000
SERIAL: All OA-3958/SYA-4(V) Symbol Generators modified with Field Change 8.OA-3958/SYA.4(V)
IDENTITY: Remove the symbol driver, unblanking, size/ threat and decoding units A3 and A5 and verify that wiring connections have been made as follows: Removed: From J7.84 to J11-3 - Added: From J20-2 to J11-3.

10-OA-3958/SYA.4(V): Under Development. (09-72)
1-OA-3958A/SYA-4(V): Symbol Generator Large Circle Gap Correction Material: See E1B 926
IV-A FA-4 ElB 926
SERIAL: A1, A2, A5, A6, A9, All, Al4 thru Al7, Al9, A22 thru A25, A27, B2, C2 thru C5
IDENTITY: Installation of jumper wires between DL-1 Tap 1 and Pin 2 and between DL. 1 Tap 1 and TP13 on 580619 cards located in A3J47 and A5J47.

2-OA-3958A/SYA.4(V): Add Barred APHPA/Numeric Capabiltiy.

Correction Material: Chg. i, NS0967-LP.563-601i, to TM, NS0967-LP-6010; Chg 1, NS0967-LP-563-6021, to TM, NS0967-LP-563-6020.

I-A FA-24 NS0967-LP-563-6030 EIC P804 SERIAL: All serial numbers.
IDENTITY: Installation of 580600 card in A2-41. Verify continuity between A3-5-67 and A3-28-25 (open) and between A3-5-67 and A3-11-03 (zero ohms).
NOTES: Prerequisite Field Change: 10-OA-3958/SYA-4(V).
3-OA-3958A/SYA-4(V): Correct ODR Timing. (EIB 958). Correction Material: EIB 958.
4-A FA-1 EIB 958 ElC P804
SERIAL: A1-A27, B1, B2, C1-C5.
IDENTITY: Gain access to the wiring on card jacks on the Symbol Driver Unblanking, Size/Threat and Decoding Units A3 and AS. Verify continuity (zero ohms) between J16.47 and J19-25, and continuity (open) between J16-45 and J19-25, of both the A3 and A5 units.

1-OA-3973(XN-1)/FRD-10(V): Modification to Automatic Indicator, Unit 19 of AN/FRD-IO(XN-2) to Control Relay Operations within the OA-3970(XN-1)/FRD-10 RF Switching Equipment

Correction Material: To Technical Manual for AN/FRD.

10(XN-2), NS0967-141-4020, NS0967-141.4030, and NS0967. 141-4040

## II-A FA-3 EIB 870

SERIAL: Serial numbers A2, A3, A4, and A5 ONLY
IDENTITY: The presence of a toggle switch on the automatic indicator, unit 19, with the ON (up) position and the OFF (down) position marked BEAM and OMNI respectively.

1-OA-3973/FRD-10(V): Modification to Automatic Indicator IP-693/FRD-10(V) to Control Relay Operations within the OA-4434/FRD-10(V) RF Switching Equipment

Correction Material: To Technical Manual for AN/FRD10(V), NS0967-141-3020, NS0967-141-3030. and NS0967-1413040

2-A FA-3 EIB 870
SERIAL: Serial numbers A2, A7, A9, A14, A4, and A5 ONLY
IDENTITY: Presence of a toggle switch on the automatic indicator IP-693/FRD-1O(V) with the ON (up) and OFF (down) positions marked BEAM and OMNI respectively.

1-OA-4391/FSA-17: Install Fuse Alarm Circuit, CY-3790A/ FSA-17; Install Variable Load Balance, PP-3609A/FSA-17

Correction Material: Change 1, NS0967-052.4011 to TM, NS0967.052-4010 (formerly NS94757)

I-A FA-4 NS0967-052-4030
SERIAL: All serial numbers
IDENTITY: Presence of terminal board, TB-1, on the rear cover of equipment cabinet CY-3790A/FSA-17

1-OA.4464/USQ-20(V): Converter Group, Fire Contro! Data, used with NTDS/WDS MK-11

Correction Material: None required
2-A FA.0.5 NS0967-057-1090
None
SERIAL: A1 through A3
IDENTITY: Change number stamped on Field Change Accomplished plate.

2-OA-4464/USQ-20(V): Converter Group Fire Control Data
2-A FA-3 NS0967-057-1090 None SERIAL: CV-1482/USQ-2O(V) - Converter portion of OA-4464/USQ-20(V) Serials A1 through A8
IDENTITY: Inspection of CV-1482/USQ-20(V) for accomplishment of wire changes.

3-OA-4464/USQ-20(V): Increase Resolution of Quantity RV-2 Correction Material: T-l to NS95771 (NS0967-057-1011)
2-A FA-1 NS0967.057-1110 None SERIAL: Al through A8
IDENTITY: Check continuity from $\{A 1 A 5 J 15-J 12$ to 1A1A5J15-4.

4-OA-4464/USQ-20(V): Implementation of PSNS Air Filter Modification Kit and Fort lnstrument Co. Modification Kit SK.409-A4

Correction Material: Contained in Modification Kit
2-A FA-2 NS0967.057-1090
None
SERIAL: Al through A8
IDENTITY: Inspect Air Filter Bracket for presence of 3 matn powered fuses of 15 amps .

5-OA-4464/USQ-20(V): Chaff Passive Angle Track Status Signal

Correction Material: T-2 to NS95711 (NS0967-057-1012)
1-A FA-2 NS0967-057-1130
SERIAL: All
IDENTITY: Presence of Relay type J50E2P6AS-1 in following existing sockets $1 \times K$ ?, IXK7, \}XK15, and IXK21.

6-OA-4464/USQ-20\{V): Replacement of Power Supply Units 2A1, 2A3, 2A2, and 2A4 Zener Diode, CR2 and Bleeder Resistor, R6

Correction Material: T-4, NS0967-057-1014 to NS0967-057. 1010 (NS95771)

1-A FA-1 NS0967-057-1140
SERIAL: AI through A8
IDENTITY: Observing that a Zener Diode Type IN4240 and a 150 ohm, wirewound, 3 watt resistor are occupying CR2 and R6 component location positions in the Power Supplies $2 \mathrm{~A} 1,2 \mathrm{~A} 3,2 \mathrm{~A} 2$, and 2 A 4 of the FCDC.

7-OA.4464/USQ-20(V): Fire Control Data Converter Test Blocks

Correction Material: T-5, NS0967-057-1015 to TM, NS0967-057-1010 (Vol 1), T-1, NS0967-057-1051 to TM, NS0967-057-1050 (Vol. 5)

1-A FA-40 NS0967-057-1150
SERIAL: Al through A8
IDENTITY: Addition of 3 wired test blocks located on the wiring side of chassis lA 1 .
8.OA-9464/USQ-20(V): Addition of Spare Cards Storage Rack in Converter Unit CV-1482/USQ-20

Correction Material: None
1-A FA-2 NS0967-057-1160
SERIAL: Al through A 8
IDENTITY: Presence of a Ready Spares Rack located in the lower section of 1A3 drawer in the Converter Unit, CV-1482/ USQ-20.

9-OA $464 /$ USQ-20(V): Addition of New Signals for Immediate Term CCM Fix

Correction Material: Change 1 , NS0967-057-1016 to NS0967-057-101 (Vo3. 1). Change 1, NS0967-057-1052 to NS0967-057-1050 (Vol. 5), Change 1, NS0967-057-1031 to NS0967-057-1030 (Vol. 2)

3-A FA-20 NS0967-057-1170 E1C FQ05000 SERIAL: All equipments IDENTITY: Presence of a relay subassembly consisting of eight relays in location 1A2AI and relays in positions K3, KS, and K19 on the relay plate in the lower right-hand corner of the junction box.

1-OA-4755/SYA-4(V): Same as 2-OA-3069/SYA-1(V)
2-OA-4755/SYA-4(V): Same as 4-OA-3953/SYA-4(V)

3-OA-4755/SYA-4(V): Same as 4-OA-3957/SYA-4(V) except SERIAL: Al through Al7

4-OA-4755/SYA-4(V): Enter Height Enable Function Code

Changes
Correction Material: None
2-A FA-3 NS0967-138-0060 None
SERIAL: A 2 through A17
IDENTITY: Noting that the function code for Enter Height is octal 15 and the functions code for Enable is octal 34.

5-OA-4755/SYA-4\{V): Same as 2-CV-1545/SYA-4(V) except SERIAL: A 2 through A 17

6-OA-4755/SYA-4(V): Same as 5-OA-3957/SYA-4(V)

7-OA-4755/SYA-4(V): Video Display Height-Size Console Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in revised publication
2-A FA-1 NS0967-138-0060 None SERIAL: Al]
IDENTITY: Presence of a Jumper between contacts 25 and 27 and contacts 26 and 28 on card 580656 in Deflection Control Unit Area A38A 18.
8.OA-4755/SYA-4(V): Change RHI Low Altitude Scale to 12,000 Feet

Correction Material: T-1 to NS95757, Vol I and II
1-A FA-2 NS0967-138-0120 HAC P/N
575250-910
SERIAL: All
IDENTITY: Units incorporating this change will not automatically expand the height display to low altitude presentation for targets having a predicted height greater than 12,000 feet, and contain a threaded detent plunger to engage the drag ledge of the height roller wheel.
9.OA-4755/SYA-4(V): Same as 6-OA-3957/SYA-4(V) except SERIAL: Al through A17, Bl through B4, Cl through C3

10-OA-4755/SYA-4(V): Logic Correction to ENTER HEIGHT Button

Correction Material: None
2-A FA-1.0 NS0967-138-0130
SERIAL: Al through A17, Bl through B4. Cl through C3 IDENTITY: Removing the SAI Control Unit (A39) and checking for the wining changes as specified below.

11-OA-4755/SYA-4(V): Output Data Unit Lock-Up Correction Correction Material: T- to NS95747, Vol I and Il
2-A FA-1 NS0967-138-0130
SERIAL: A1 through A17, B1 through B4, C1 through C3
IDENTITY: Proper operation of steps 1.5.15.3.4 through 1.5.15.3.6 of Height/Size Mode and Radar Test in the PX 1899 POFA Manual.

12-OA-4755/SYA-4(V): Same as 7-OA-3957/SYA-4(V)
13-OA-4755/SYA-4(V): Changes Required to Permit 48 HGT/ Size to Operate with other Height Inputs

Correction Material: Included in Supplemental Technical Manual, NAVSHIPS 0967-965-5070

1-A FA-80 NS0967-957-2110
SERIAL: B1 and C4

IDENTITY: Check RHI Video Control Panel. If R5 and R6 have been replaced by a relay (K2), this change has been previously accomplished. In all of the previous cases the field change identification plate should also indicate prior accomplishment.

## 14-OA-4755/SYA.4(V): Same as 8.OA-3957/SYA.4(V) except IV-A FA-i. 0 NS0967-957-2120 <br> EIC P804J00

1-OA-4755A/SYA-4(V): Modification of TRACK CALL-UP Switches

Correction Material: None required
4.A FA.3 NS0967.138-0030

SERIAL: A1, A2, and A3 in the USS ALBANY (CG 10)
IDENTITY: Ability to rotate the TRACK CALL-UP switches more than 360 degrees in either direction.

2-OA-4755A/SYA-4(V): Logic Correction to ENTER HEIGHT Button

Correction Material: None required
2-A FA-1 NS0967-138-0030
SERIAL: A1, A2, and A3 onboard the USS ALBANY (CG. 10)

IDENTITY: Removing the SAl Control Unit (A39) and checking for the wiring changes as specified in the field change.
3.OA.4755A/SYA-4(V): Output Data U'nit Lock-up Correction Correction Material: None required
2-A FA-1 NS0967-138-0030
SERIAL: A1, A2, A3 onboard the USS ALBANY (CG-10) IDENTITY: Proper operation of steps 1.5.15.3.4 through 1.5.15.3.6 of Height/Size Mode and Radar Test in the PX 1899 POFA Manual.

4-OA-4755A/SYA-4(V): Same as 8-OA-3957/SYA-4 except
IV-A FA-1.0 NS0967-957-2:20 EIC P80 $\ddagger \mathrm{M} 00$
5.OA-4755A/SYA-4(V): Replaces Filament Circuit Breaker with Improved Type

Correction Material: None required
II-A FA-2 NS0967-138-0140
EIC P81M000
SERIAL: Serial numbers A1, A2, and A3 in the USS ALBANY (CG-10)
IDENTITY: Remove drawer retaining screws that secure the A39/A40 area and slide the area out to its limit. Remove the screws holding the protective cover plate in place (ieft side) and slide cover plate to one side. Observe that circuit breaker CB4 is: HAC P/N 71 1520-109.
6.OA-4755A/SYA-4(V): Improved Guide Pin Studs Correction Material: None required
II-A FA-2 NS0967-138-0150 EIC P81M000
SERIAL: Equipments AI, A2, and A3 in the USS ALBANY (CG-10)
IDENTITY: Noting the new guide pin stud is threaded and is screwed into the bullnose housing.

7-OA.4755A/SYA-4(V): Improved Type Labels for the Intercommunications Panels

Correction Material: None required

II-A FA-2 NS0967-138-0160
EIC P81M000
SERIAL: Equipment serials A1, A2, and A3 in the USS ALBANY (CG-10)
IDENTITY: Noting that the labels are attached underneath the front lucite plate of panel (A-6).

1-OA-4792/SRC-23(V): Access for External 28 VDC
Correction Material: T-1, NE0967-304-2042 to NE0967. 304-2040; T-2. NE0967-304-2053 to NE0967.304-2050

I-A FA-3 NS0967-304-2190 EIC QD6E000 SERIAL: All serial numbers
IDENTITY: Visually check rear of Electrical Equipment Cabinet CY.4029/SRC-23(V) for addition of new connector, directly above existing connector 17. (See NAVSHIPS 0967. 163.9040, Vol. 4, page K5-0, figure 5-1 for locations of connectors.)

1-OA-7203/URN-20: Installation of Lifting Handles for Antenna Radome

Correction Material: None
2-B FA-4 NS0967-041.0110
SERIAL: All
IDENTITY: Presence of lifting handles on Antenna Radome

## 2-OA-7203/URN-20: Cancelled

3-OA-7203/URN-20: Electrical Limiting of Antenna Roll Correction to $/-24$ Degrees

Correction Material: Change 6, NS0967-041.0085 to iNS0967-041-0080; Change 2, NS0967-041-0132 to NS0967-04i0130

1-A FA-2 NS0967.041-0400
EIC L606500
SERIAL: All serial numbers
IDENTITY: The amplifier group control panel, below the bearing amplifier 'ON' switch, will have a red indicator marker ROLL LIMIT.

4-OA-7203/URN-20: Improvement of Antenna Roll Circuitry Correction Material: Ch. 3, NS0967-041-0133 to NS0967. (141-0)30

1-A FA. 4 NS0967.041-0410 EIC PD30660 SERIAL: All equipments if FC-7-AN/URN-20 (NSO967-041O210) has not been installed; (EIB 918).
IDENTITY: A subchassis, mounted within the antenna control unit and on the side of the 6Al servo-amplifier group, writh identification of 6A1A7. A transformer ( Tl ) and two relays (K1 and K2) will be mounted on this subchassis.

5-OA-7203/URN-20: Deiete Roll Stabilization. (EIB 963).
Correction Material: None required.
4-A FA-1 ElB 963
SERIAL: All serial nos. of OA-7203/URN-20, OA-7203A/ URN-20 and -20(V), OA-7203C/URN-20(V), OA-7203D/ URN-20(V), OA-7203E/URN-20(V), and OA.7203F/URN20(V).
IDDENTITY: Verify that terminal B2 of relay 6 K 3 has no wires attached.
NOTES: EIC's L608, L609, L60B, or L60C.
1-OA.7203A/URN-20: Same as 1-OA-7203/URN-20

## 2-OA-7203A/URN-20: Cancelled

3-OA-7203A,URN-20. Same as 3-OA-7203/URN-20
4-OA-7203A/URN-20: Same as 4-OA-7203/URN-20 except SERIAL: Certain equipments as designated

5-OA-7203A/URN-20(V): Same as 5-OA-7203/URN-20.
1-OA-7203C/URN-20: Same as 3-OA-7203/URN-20

2-OA-7203C/URN-20(V): Same as 5-OA-7203/URN-20.
1-OA-7203D/URN-20: Cancelled
2-OA-7203D/URN-20(V): Same as 5-OA-7203/URN-20.

1-OA-7203E/URN-20(V): Same as 5.OA-7203/URN-20.

1-OA-7203F/URN-20(V): Same as 5-OA-7203/URN-20.

1-OA-7436/GYK-3(V): 'O' RH 'O' LH Console Switch Modification

Correction Material: See EIB 921
IV-A FA-1 EIB 921
SERIAL: All serial numbers, except installation at NCS Rota, Spain
IDENTITY: Noting proper character print-out on the 'MON. ITOR' TTY for each modified switch pressed. (Modified switches are S-100 thru S-109 and S-200 thru S-209.)

2-OA-7436/GYK-3(V): Console Switch Modification. (EIB 952).

Correction Material: TM changes not required.
4-A FA-1 EIB 952 ElC QK16
SERIAL: All serial numbers of OA-7436/GYK-3(V) ${ }^{\text {F Fix }} \mathrm{Va}$ lidator` Display Control Consoles.
IDENTITY: Verify that the 'Local' and 'Distribute' tiles (push-button switches) on the console are separated by one other switch. Before this field change, the switches were adjacent to each other.

1-OA-7490/SYA-4(V); Power Supply Modification Correction Material: NS93737(A)
2-A FA-1 NS0967-138-0060 None
SERIAL: All
IDENTITY: Proper operation of the over-temperature alarm circuit.

1-OA-7491/SYA-4(V): Same as 1-OA-7490/SYA-4(V)
1-OA-7549/SYA.4(V): Same as 4-OA-3953/SYA-4(V)

2-OA-7549/SYA-4(V): Same as 2-OA-3069/SYA-I(V)
3-OA-7549/SYA-4(V): Same as 3-OA-3953/SYA-4(V)
4.OA-7549/SYA-4(V): Same as 6.OA-3953/SYA-4(V)

5-OA-7549/SYA-4(V): Same as 8-OA-3953/SYA-4(V)
6.OA-7549/SYA-4(V): Same as 11.OA-3953/SYA.4(V)

7-OA-7549/SYA-4(V): Same as 12-OA-3953/SYA.4(V)
8-OA-7549/SYA-4(V): Same as 13-OA-3953/SYA-4(V)
9-OA-7549/SYA-4(V): Same as 14.OA-3953/SYA-4(V)
10-OA-7549/SYA-4(V): Same as 16-OA-3953/SYA-4(V)
11-OA-7549/SYA-4(V): Same as 17-OA-3953/SYA-4(V)
12-OA-7549/SYA-4(V): Same as 19-OA-3953/SYA-4(V)
13-OA-7549/SYA-4(V): Same as 20-OA-3953/SYA-4(V)

14-OA-7549/SYA-4(V): Same as 3-CV-1320/SYA-4(V) except 1-A FA.S NS0967-959-3030 EIC DQ02000
SERIAL: A!
15-OA-7549/SYA.4(V): Same as 22-OA.3953/SYA-4(V) except 1.A FA NS0967-059-2170 ElC DQ02000

16-OA-7549/SYA-4(V): Same as 23-OA-3953/SYA-4(V) except 4-A FA-1 NS0967-057-2180 EIC DQ02000

17-OA-7549/SYA-4(V): Same as 4-CV-1320/SYA-4(V) except 1-A FA-3 NS0967-259-3040 EIC DQ02000 SERIAL: Al

18-OA-7549/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except 1-A FA.0.5 NS0967-959-3050

EIC P804000
19.OA-7549/SYA.4(V): Same as 28.OA-3953/SYA-4(V) except 1-A FA-3.5 NS0967-959-2400 ElC P804000

20-OA-7549/SYA-4(V): Same as 32-OA-3953/SYA-4(V) except SERIAL: Al

1-OA-7550/SYA-4(V): Same as 4-OA-3953/SYA-4(V)
2-OA-7550/SYA-4(V): Same as 2-OA-3069/SYA-I(V)
3-OA-7550/SYA-4(V): Same as 3-OA-3953/SYA-4(V)
4-OA-7550/SYA-4(V): Same as 6-OA-3953/SYA.4(V)

5-OA-7550/SYA-4(V): Same as 8-OA-3953/SYA-4(V)
6-OA-7550/SYA-4(V): Same as 11-OA-3953/SYA-4(V)
7-OA-7550/SYA-4(V): Same as 12-OA-3953/SYA-4(V)

8-OA-7550/SYA-4(V): Same as 13-OA-3953/SYA-4(V)
9-OA-7550/SYA-4(V): Same as 14-OA-3953/SYA-4(V)
10-OA-7550/SYA-4(V): Same as 16-OA-3953/SYA-4(V)
11-OA.7550/SYA-4(V): Same as 16-OA-3955/SYA-4(V)

12-OA-7550/SYA-4(V): Same as 19-OA-3953/SYA-4(V)

13-OA-7550/SYA-A(V): Same as 20-OA-3953/SYA-4(V)

14-OA-7550/SYA-4(V): Same as 3.CV-1320/SYA-4(V) except 1-A FA-S NS0967-959-3030 EIC DQ02000 SERIAL: A1 and A2

15-OA-7550/SYA-4(V): Same as 22-OA-3953/SYA-4(V) except 1.A FA NS0967.059-2170 EIC DQ02000

16-OA-7550/SYA-4(V): Same as 23-OA-3953/SYA-4(V) except 4-A FA-1 NS0967-059-2180 EIC DQ02000

17-OA-7550/SYA-4(V): Same as 4-CV-1320/SYA-4(V) except 1-A FA-3 NS0967-959-3040 EIC DQ02000
SERIAL: A1 and A2

18-OA-7550/SYA-4(V): Same as 5.CV-1320/SYA-4(V) except 1-A FA-0.5 NS0967-959-3050 EIC P804000
SERIAL: A1 and A2
19-OA-7550/SYA-4(V): Same as 28-OA-3953/SYA-4(V) except 1-A FA-3.5 NS0967.059-2400 EIC P804000

20-OA-7550/SYA-4(V): Same as 32-OA-3953/SYA-4(V) except SERIAL: A1 and A2

1-OA-7639/UYA-1(V): Modification to Intensify Amplifier Connector Bracket

Correction Material: None
4-A FA-1 NS0967-078-7250
SERIAL: All serial numbers
IDENTITY: By visually noting that a portion of the intensity unit connector bracket on the intensity unit to facilitate disconnecting connectors P1 and P2.

2-OA-7639/UYA-1(V): Intensity Amplifier Reliability Improvement

Correction Material: T-1, NS0967-078-7191 to TM, NS0967-078-7190

1-A FA-1.5 NS0967-078-7210
SERIAL: All
IDENTITY: This field change can be identified by removing the intensity unit from the console and checking for the additional parts and wiring as specified in this change.

3-OA-7639/UYA-1(V): Correction of CRT Shield Stenciling
Correction Material: None
1-A FA-0.5 NS0967-078-7230
SERIAL: All
IDENTITY: Presence of Decals indicating Pin Numbers, installed on CRT Shield.

## 4-OA-7639/UYA-1(V): Same as 1-LS-527/UYA-1(V)

5-OA-7639/UYA-1(V): Modification to Select Test Messages, Own-Ship, Downed-Aircraft, and Test Dot

Correction Material: Included in revised technical manual
1-A FA-6 NS0967-078-7260
SERIAL: All equipments, Al thru A36

IDENTITY: No symbols will appear when the data utilization console is in Function CODE TEST. In addition, the test pattern will be displayed after the console operator enters the DISPLAY TEST mode with an operational program selected.

6-OA-7639/UYA-1(V): Correction to Mechanization of the Offset Adder

Correction Material: T-2, NS0967-078-7034 and 7044 to NS0967-078-7030 (Vol. I) and 7040 (Vol. II)

4-A FA-2.0 NS0967-078-7350 SERIAL: All equipments
IDENTITY: Noting presence of the wiring changes as noted in the field change bulletin.

7-OA-7639/UYA-1(V): Modification of Radio Control Circuits for PUSH-TO-TALK

1-A FA-3 NS0967-078-7320 EIC FU0A000 SERIAL: All (Al thru A36) OA-7639/UYA-1(V) equipments IDENTITY: New relays K10 and K 11 will be located on the intercom panel of the Data Input OA-7642/UYA-1(V) (DI), Data Utilization OA-7639/UYA-1(V) (DU), and Height-Size Video Display OA-7640/UYA-I(V) (HSI) consoles.

8-OA-7639/UYA-1(V): Trackball X \& Y Pickofí Wheel Improvement

## Correction Material: None

1-A FA-2 NS0967-078-7310 EIC FU0A000 SERIAL: All equipments
IDENTITY: Presence of stainless steel pickoff wheels vice aluminum alloy.

9-OA-7639/UYA-1(V): Correct Arcing of Range Selector Switch

Correction Material: T-1, NS0967-078-7013; T-1, NS0967-078-7023; T-1, NS0967-078-7033; T-1, NS0967-078-7043

1-A FA-4 NS0967-078-7340 EIC FU0A000 SERIAL: All equipments
IDENTITY: Noting that the three capacitors on the Range Panel have been replaced by three diodes.

10-OA-7639/UYA-1(V): Enlargement of Own Ship Interceptor Symbol Only

Correction Material: T-2, NS0967-078-7034 and 7044 to NS0967-078-7030 (Vol. I) and 7040 (Vol. II)

2-A FA-i NS0967-078-7350
EIC FUOA000 SERIAL: A!!
IDENTITY: Noting that only Own Ship Interceptor Symbol enlarges when the 'ENLARGE LOC CON INTCPTR' switch is turned to the ON position.

11-OA-7639/UYA-1(V): Rewiring of Remote Tracks " or 'S' Select Switch

Correction Material: T-3, NS0967-078-7035 to NS0967-0787030 (Vol. I); T-3, NS0967-078-7045 to NS0967-078-7040 (Vol. II)

4-A FA-1.0 NS0967-078-7360 EIC FU0A000 SERIAL: All serials
IDENTITY: Noting that remote tracks can be displayed as dots when all symbols are selected.

12-OA-7639/UYA-1(V): Improve Accuracy of Digilog ' $\mathrm{A}^{\prime}$

Correction Material: T-1, NS0967-078-7202 to NS0967-0787200

4-A FA-1.0 NS0967-078-7370 EIC FUOA000 SERIAL: All equipments
IDENTITY: Noting on the Digilog A Card 104696, that C39
is 1000 picof arad and C40 is 820 picofarad.
13-OA-7639/UYA-1(V): Disable Offset Adder when Hook or Ball Tab Message is Received

Correction Material: T-3, NS0967-078-7015 to NS0967-0787010; T-3, NS0967-078-7025 to NS0967-078-7020; T-4, NS0967-078-7036 to NS0967-078-7030; T-4, NS0967-078-7046 to NS0967-078-7040

2-A FA-2.0 NS0967-078-7380 EIC FUOA000 SERIAL: All equipments
IDENTITY: Noting presence of the wiring changes listed in the procedure.
14.OA-7639/UYA-1(V): Correct Error in 'Y' Axis Trackball Counter Logic

Correction Material: T-3, NS0967-078-7015 to NS0967-0787010; T-4, NS0967-078-7046 to NS0967-078-7040

4-A FA-1.0 NS0967-078-7380 EIC FUOA000 SERIAL: All equipments
IDENTITY: Presence of the wiring changes as listed under PROCEDURE.

15-OA-7639/UYA-1(V): Standardization of Bearing Lines
Correction Material: T-5, NS0967.078-7037 to NS0967-0787030, T-S, NS0967.078-7047 to NS0967-078-7040; T-4, NS0967.078-7016 to NS0967-078-7010; T.4, NS0967-078-7026 to NS0967-078-7020

II-A FA-1.0 NS0967-078-7390 EIC QM05000 IDENTITY: Remove the display programmer, A28, and verify connections have been removed as follows: From J2548 to J25-59 and from J23-44 to J25-48 (OA-7639/UYA-1(V)); From J22-78 to J25-42 and from 525-42 to J26-80 (OA.-7642' UYA-l(V)).

16-OA-7639/UYA-1(V): Utilize Console for Sweeps if Symbol Generator Failed

Correction Material: T-6, NS0967-078-7038 to NS0967-0787030; T-6, NS0967-078-7048 to NS0967-078-7040

I-A FA-10 NS0967-078-7410 EIC QM0SC00 SERIAL: Serials Al thru A36
IDENTITY: Pull out the display programmer, A28, and note that a General Purpose pulse regenerator card, 104603, is installed in card slot J27. The General Purpose pulse regenerator can be located by referring to the assembly location diagram on page 3-315 of NAVSHIPS 0967.078-7030 for the OA-7639/UYA-1(V) and page 3-318 of NAVSHIPS 0967.078. 7010 for the OA-7642/UYA-1(V).

17-OA-7639/UYA-1(V): Modification to Prevent Automatic Energizing of Console after Power Loss

Correction Material: T-7, NS0967.078-7039 to NS0967-0787030; T-7, NS0967-078-7049 to NS0967-078-7040

I-A FA-3.5 NS0967-078-7420 EIC QM05000
SERIAL: Al thru A 36 (OA-7639/UYA-1(V))
IDENTITY: Note the addition of the new reset switch on the lower right hand drawer, power control panel.

18-OA-7639/UYA-1(V): TACS/T ADS Hardware Changes
Correction Material: T-1, NS0967-LP-078-7102 to NS0967. LP-078-7100

I-A FA-44 NS0967-LP-078-7430 EIC QM05000 SERIAL: OA-7639/UYA-I(V) - AI thru A36
IDENTITY: Presence of a 580605-100/101 card in area A28 slot J2 of Data Input or Data Utilization Display Console, This field change may be identified in the pulse amplifier by making the following continuity checks. Remove the access panel above the AS power control panel and disconsect A40P10. Remove cards from Al0J83 and A20J83 and check for continuity between A40P10.AP and Al0J83-69, between A40P10-AZ and Al0J83-70, between A40P10-BN and A20J83-69, and between A40P10-BP and A20J83-70. If continuity exists between these four sets of points, this field change has been installed.

19-OA-7639/UYA-1(V): Same as 3-LS-527/UYA-1(V).
20-OA-7639/UYA-1(V): Add Secure Radio Chansel Select Capability (Under Development)

21-OA-7639/UYA-1(V): Modify 104683 Card for Proper Sweep Enable

Correction Material: T- to NAVSEA 0967-LP-078-7200
IV-A FA-1.0 EIB 915
SERIAL: Al-A36
IDENTITY: This field change can be identified by removing the sweep/symbol control cards, 104683, from areas A16J37 and A22J38 and noting the capacitor C5, 47 picofarads, is in parallel with R9 and no capacitor is in parallel with R11.

22-OA-7639/UYA-1(V): DDI Addition.
Correction Material: Use of TM for 1P-1304/UYA-4(V), SE675-AV-MMO-010/UYA-4(V). Other TM changes to be provided.
1.C YF-8 NS0967-LP-078-7620 EIC QM05 SERIAL: All serial numbers of OA-7639/UYA-1(V) and OA-7642/UYA-1(V).
IDENTITY: Verify installation of DDI (Digital Display Indicator) 1P-1304/UYA-4(V), mount either on top of or near the Data Input Display Console OA-7642/UYA-1(V) or the Data Utilization Display Console OA-7639/UYA-1(V).

## 1-OA-7640/UYA-1(V): Same as 1-LS-527/UYA-1(V)

2-OA-7640/UYA-1(V): Modification for Compatibility with both Elevation Data Converters CV-1799/SPS-48, CV-1858/ SPS-48, and existing NTDS Radar Switchboard Inputs

Correction Material: Included in revised technical manual
1-A FA.16 NS0967-078-7270
SERIAL: All equipments A1 thru A8
IDENTITY: Placing the HSI console in the F.C. TEST mode, and the RHI RADAR selector switch in position S. If depressing either of the RHI ENABLE pushbuttons results in a FUNCTION CODE of 34 (octal) as observed on the (A2) TEST PANEL, the field change has been incorporated.

3-OA-7640/UYA-I(V): Same as 7-OA-7639/UYA-1(V)
4-OA-7640/UYA-I(V): Replaces Filament Circuit Breaker with

## Improved Type

Correction Material: T-1, NS0967-078-70SI to TM, NS0967-078-7050

1-A FA-2 NS0967-078-7300 EIC FUOA000
SERIAL: All equipments
IDENTITY: Presence of Circuit Breaker, P/N 711520-109 in position 3CBS.
5.OA-7640/UYA-1(V): Same as 17-OA-7639/UYA-1(V) except Correction Material: T-2, NS0967-078-7054 to NS0967-0787050; T-1, NS0967-078-7063 to NS0967-078-7060, and SERIAL: AI thru A\& (OA-7640/UYA-1(V))

1-OA-7641/UYA-I(V): Modification to make the Countering
Weapon Symbols and Engagement Status Symbols independent of each other

Correction Material: Included in revised technical manual
2-A FA. 2 NS0967-078-7280
SERIAL: All equipments, A 1 thra A5
IDENTITY: After installation, it is recorded and dated on the field change template located on the symbol generator group. Remove either assembly A3 or A5 and check for the wiring changes specified in the bulletin.

1-OA-7642/UYA-1(V): Same as !-OA-7639/UYA-I(V)
2.OA.7642/UYA-1(V): Same as 2.OA-7639/UYA-1(V)

3-OA-7642/UYA-1(V): Same as 3-OA-7639/UYA-I(V)

4-OA-7642/UYA-1(V): Same as 1-LS-527/UYA-1(V)

5-OA-7642/UYA-1(V): Modification to Select Test Messages, Own-Ship, Downed-Air-Draft, and Test Dot

Correction Material: Included in revised technical manual
1-A FA-6 NS0967-078-7290
SERIAL: All equipments A1 thru A32
IDENTITY: No symbols witl appear when the data input console is in F CODE TEST. In addition, the test pattern will be displayed after the console operator presses ENTER MODE and RADAR switch and sets DISPLAY FUNCTION switch to DISPLAY TEST mode, with an operational program selected.
6.OA-7642/UYA-1(V): Same as 6-OA-7639/UYA-1(V) except

Correction Material: T-2, NS0967-078-7014 and 7024 to NS0967-078-7010 (Vol. I) and 7020 (Vol. II)

7-OA-7642/UYA-1(V): Same as 7-OA-7639/UYA-1(V)
8-OA-7642/UYA-1(V): Same as 8-OA-7639/UYA-1(V)

9-OA-7642/UYA-1(V): Same as 9.OA-7639/UYA-1(V)
10.OA-7642/UYA.1(V): Same as 6-OA.7639/UYA-1(V)

11-OA-7642/UYA-1(V): Same as 13-OA-7639/UYA.1(V) except

Correction Material: T- to NS0967-078-7010 (Vol. 1) and NS0967.078-7020 (Vol. 2)

12-OA-7642/UYA-1(V): Same as 14OA-7639/UYA.1(V) except

Correction Material: T- to NS0967-078-7020 (Vol. II)
13-OA-7642/UYA-1(V). Same as 15-OA-7639/UYA-1(V)
14.OA-7642/UYA-1(V): Same as 16-OA-7639/UYA-1(V) except
SERIAL: Al through A32
15-OA-7642/UYA-1(V): Same as 17-OA-7639/UYA-1(V) excep:

Correction Material: T-6, NS0967-078-7018 to NS0967-0787010; T-6, NS0967-78-7028 to NS0967-078-7020, and SERIAL: Al thru A 32 (OA-7642/UYA-1(V))
16.OA-7642/UYA-1(V): Same as 18-OA-7639/UYA-1(V) except
SERIAL: A1 thru A32

17-OA-7642/UYA-1(V): Modification to Display Fleet Center Symbol

Correction Material: T- to NS0967-078-7010 and NS0967. 078-7020

## II-A FA-1

EIC QMOSOOO
SERIAL: Serial numbers AI thru A 32
IDENTITY: Open lower right drawer of console and verify that wiring changes have been accomplished in display programmer A28 as follows: Removed: J22-33 to J22-42 - Added: J22-33 to J22-48.

18-OA-7642/UYA-1(V): Same as 3-LS-527/UYA-1(V).
19-OA-7642/UYA-1(V): Add Secure Radio Channel Select Capability (Under Development)
20.OA-7642/UYA-XV): Same as 2:-OA-7639~نYA-1(V) except
SERIAL: AI-A32
21-OA-7642/UYA-1(V): Same as 22-OA-7639/UYA•1(V).
1-OA-7979(V)/UYA-4(V): Improved CRT Support Bracket Correction Material: None

> 1-A FA-1 NS0967-238-7260

SERIAL: B1 thru B4 (OA-7979(V)2,UYA-4(V)), A4 thru A 14 (OA-7979(V)4/UYA.4(V))
IDENTITY: Installation of this field change can be identified by inspecting equipment for an adjustable support bracket ( P / N 1568629) at the rear of the CRT shield.

2-OA-7979(V)/UYA.4(V): Wire Change to Dual Offset
Correction Material: T-1, NS0967-238-7021 to NS0967-238. 7020

2-A FA-0.5 NS0967-238-7310
SERIAL: Al thru A 6 (OA-7979(V)5/UYA-4(V))
IDENTITY: Checking for incorporation of wire changes
3-OA-7979(V)/UYA-4(V): Wire Change to Deflection Amplifier

Correction Material: T-1, NS0967-238-7021 to NS0967-238-

## 7020

4-A FA-I NS0967-238-7310
SERIAL: OA-7979(V)I/UYA-4(V) - AI thru A28 and B1 thru B6; OA-7979(V)2/UYA-4(V) - AI, A 2 and Bl thru B6; OA-7979(V)4/UYA-4(V) - AI thru A24; and OA-7979(V)5/ UYA-4(V) - AI thru A6
IDENTITY: Absence of wire W9450

4-OA-7979(V)/UYA-4(V): Wire Change to Dual Offset TV TURN ON

Correction Material: T-1, NS0967-238-7021 to NS0967-2387020

2-A FA-0.5 NS0967-238-7310
SERIAL: PPI Console OA-7979(V)5/UYA-4(V) - Serial AI thru A8
IDENTITY: Checking the wiring changes
5-OA-7979(V)/UYA-4(V): Component Change to the Encoder Read Amplifier

Correction Material: T-1, NS0967-238-7101 to TM, NS0967-238-7100, T-1, NS0967-238-7131 to TM, NS0967.2387130

1-A FA.0.5 NS0967-238-7240
SERIAL: OA-7979(V)I/UYA-4(V) - AI thru A28 and B1 thre B6, OA-7979(V)2/UYA-4(V) - AI, A2, B1 thru B4, OA-7979(V)4/UYA-4(V) - AI thru A22, OA-7979(V)5/UYA.4(V) - AI thru A6

IDENTITY: Inspect R52 on the Amplifier, Encoder Read (1537574.300) Card Assembly for a RC07GF362J (3.6K) resistor. If this appears, this change has been accomplished.

6-OA-7979(V)/UYA-4(V): Modification to Prevent Transient Voltages

Correction Material: T-2, NS0967-238-7102 to TM, NS0967-238-7100, T-2, NS0967-238-7132 to TM, NS0967-2387130

1-A FA-! NS0967-238-7250 EIC FU09000 SERIAL: OA-7979(V)1/UYA-4(V) - AI thru A28 and B1 thru B6, OA-7979(V)2/UYA-4(V) - A 1, A2, and B1 thru B4, OA-7979(V)4/UYA-4(V) - AI thru A6, OA-7979(V)S/UYA. 4(V) - Al thru A6
IDENTITY: Visual inspection of the plug-in assembly, HAC 1537574.100, Encoder Read Amplifier cards and verif ying that resistors RIO and R15 of the card have a value of 68 K ohms.
7.OA-7979(V)/UYA.4(V): Modification to Prevent Arcing in H.V. Power Supply (1537673)

Correction Material: None required
1-A FA-I NS0967-238-7200
EIC FU09000 SERIAL: OA-7979(V)1/UYA-4(V) - AI thru A28 and B1 thru B6, OA-7979(V)2/UYA-4(V) - AI, A2, and B1 thru B4, OA-7979(V)4/UYA.4(V) - AI thru A6, OA-7979(V)5/UYA4(V) - AI thru A6
IDENTITY: The wire connected between TB-1-El and terminal E46 of the High Voltage Power Supply is changed from $20 \mathrm{GA}, 600 \mathrm{~V}$ insulated wire to 20 KV , red insulated wire.

8-OA-7979(V)/UYA-4(V): Modification to Intercom Amplifier Control Card (1548022)

Correction Material: Included in technical manual
J-A FA-0.5 NS0967-238-7210 EIC FU09000

SERIAL: OA.7979(V)1/UYA-4(V) - AI thru A49 and B1 thru B5, OA.7979(V)2/UYA-4(V) - AI, A2, B1 thru BA, OA-7979(V)4/UYA-4(V) - Al thru A6
IDENTITY: Checking for new addition Diode JAN IN756A
9-OA-7979(V)/UYA.4(V): Improved Keyset Panel
Correction Material: None required
1-A FA. 2 NS0967-238-7220 EIC FU09000
SERIAL: A I thru A6 (OA.7979(V)S/UYA.4(V))
IDENTITY: This change can be identified by checking for Field Bulletin Decal G16 or by checking Keyset Control Panel for a newly added ground lug (E-2). If either of these appears, this change has been previously accomplished.
10.OA-7979(V)/UYA-4(V): Wire Change to the Number Entry Panel

Correction Material: None
4-A FA-1.0 NS0967.238-7310
EIC FU09000
SERIAL: OA.7979(V)1/UY'A-4(V) - AI thru A28 and B1 thru B6, OA-7979(V)2/UYA-4(V) - AI, A2 and B1 thru B4, OA-7979(V)4/UYA-4(V) - A1 thru A6
IDENTITY: Checking wiring changes specified in field change

11-OA-7979(V)/UYA.4(V): Incorporation of HAC Maintenance Bulletins Group I, as a Unit Field Change

Correction Material: None
4-A FA-I NS0967.238-7360 EIC FU09000
SERIAL: As indicated in Table I of this field change
IDENTITY: Observing change number 11 on the Field Change Record plate.

12-OA-7979(V)/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: Delineated in the applicable maintenance bulletin
4.A

EIC FU09000
SERIAL: Serial numbers as shown on Table I of Field change
IDENTITY: Observing Field Change 12 on the Field Change Record Plate.

13-OA-7979(V)/UYA-4(V): Provide Video Output Test Point on Video Amplifier Card

Correction Material: T- to NS0967-238-7100, NS0967-2387020, NS0967-238-7150

II-A FA.0.5
EIC FU09000
SERIAL: OA-7979(V)I/UYA-4(V) - All A and B serials; OA. 7979(V)2/UYA.4(V) - All A and B serials; OA-7979(V)4/ UYA-4(V) - All A and B serials BSC-1, BSC-2, BSC-3; OA. 7979(V)S/UYA-4(V) • All A serials; OA-7981/UYA-4(V) AI; OA-7981A/UYA-4(V) + All A and B serials
IDENTITY: Observing the added wire on the Video Amplifier Card as specified in the procedure of the field change.
14.OA-7979(V)/UYA.4(V): Relocate the Hook, Ball, Tab, and Sequence Buttons

Correction Material: T-3, NS0967-238-7023 to NS0967.2387020; T-2, NS0967-238-7152 to NS0967-238-7150; T-3, NS0967-238-7013 to NS0967-238-7010

IV-A FA-3.0 NS0967-238-7470 EIC FU09000

SERIAL: OA-7979(V)I/UYA-4(V) - All A and B serials; OA7979(V)2/UYA.4(V) - All A and B serials; OA-7979(V)4/ UYA-4(V) - All A and B serials BSC-1, BSC-2, BSC-3; OA-7979(V)5/UYA-4(V) - All A and B serials; OA-7979(V)6/ UYA.4(V) - All; OA-7981/UYA-4(V) - Al; OA-7981A/UYA4(V) - All A and B serials
IDENTITY: Observing that the ball tab label is associated with action entry button number six.

15-OA-7979(V)/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group III, as a Unit Field Change

Correction Material: Delineated in applicable maintenance bulletins

2-A FA-13 NS0967-238-7550 EIC QM06000
SERIAL: Serial numbers as shown in table I of field change IDENTITY: Observing field change number 15 on the Field Change Record Plate.

16-OA-7979(V)/UYA-4(V): Same as 2-LS-537/UYA-4(V) except

Correction Material: T-2, NS0967-238-7112 to NS0967-2387110

NS0967-238-7540
SERIAL: All

17-OA-7979(V)/UYA-4(V): Same as 3-LS-537/UYA-4(V) except
SERIAL: All (OA-7979(V2)/UYA-4(V)) and All A and B serials, and BSC-1, BSC-2, and BSC-3 (OA-7979(V)4/UYA. 4(V))

18-OA-7979(V)/UYA-4(V): Front Accessibility Modification Correction Material: Ch. I, NS0967-238-7024 to NS0967-238-7020

## 1-A FA-8 NS0967-238-7490 EIC QM06000

SERIAL: OA-7979(V)l/UYA-4(V) ser A-1 thru A-28 and B-1 thru B-6, OA-7979(V)2/UYA-4(V) ser A-1, A-2, and B-1 thru B-4, OA-7979(V)4/UYA-4(V) ser A-1 thru A-339, B-1 thru B78, C-1 and C-2, and BSC-1 thru BSC-3, OA-7979(V)5/UYA$4(\mathrm{~V})$ ser A-1 thru A-6 and B-1 and B-2, OA-7979(V)6/UYA$4(V)$ ser A-1 thru A-29, B-1 thru B-4, and F-1 thru F-9, OA-7979(V)7/UYA-4(V) ser A-1 thru A-10, OA-7979(V)8/UYA. $4(\mathrm{~V})$ ser $\mathrm{A}-1$ and F-1 thru F-5, OA-7979(V)9/UYA-4(V) ser A-1 thru A-4, OA-7979(V)10/UYA-4(V) ser A-1 thru A-161, and OA-7979(V)12/UYA-4(V) ser A-1 thru A-10.
IDENTITY: Open card box door and check for the presence of the new brackets and mounting blocks that support and secure the card guides.

19-OA-7979(V)/UYA-4(V): Provide the Fourth Module of 18 Cells in the Read-out

Correction Material: Included in Technical Manual, NS0967-238-7020

1-A FA-5
NS0967-238-7500
EIC QM06000
SERIAL: To be Installed in Equipments Assigned by NAV. SHIPS
IDENTITY: The fourth read-out is installed and accomplishment of the field change recorded on the Field Change Record Plate.

20-OA-7979(V)/UYA-4(V): Under Development. (07-71)
21-OA-7979(V)/UYA-4(V): Advance Assignment
22-OA-7979(V)/UYA-4(V): Same as 5.LS-537/UYA-4(V) except
SERIAL: OA-7979(V)1/UYA-4(V) - Al thru A28, Bl thru B6; OA-7979(V)5/UYA-4(V) - Al thru A6, Bi and B2; OA7979 (V)6/UYA-4(V) - A 1 thru A29, Bl thru B4

23-OA-7979(V)/UYA-4(V): Make OA-7979(V) and OJ-194(V)/ UYA. 4 Compatible with AN/SYA-4(V)

Correction Material: Incorporated in Technical Manual
3-A FA-3 NS0967-LP-238-7670 EIC QM06000 SERIAL: All equipments installed in AN/SYA-4(V) environment, as specified by NAVSEC 6172B
IDENTITY: On consoles using Reformatter CV-2689(XN-I), note that the Radar Select Siwitch has mechanical stops which prevent rotation of the switch beyond position 7. On all other consoles, note that the part number for the P/C card in slot A9A6 is 1537724 vice 1537558 .

24-OA-7979(V)/UYA-4(V): Disable Offiset Addet When Hook or Ball Tab Message is Received

Correction Material: Included in revised technical manual for AN/UYA-4(V)

I-A FA NS0967-238-7680 EIC P81Z000 SERIAL: OA-7979(V)!/UYA-4 - All A and B serials, OA-7979(V)2/UYA-4 - All A and B serials; OA-7979(V)4/UYA-4 - All A, C, BSC serials and serials BI-B44; OA-7979(V)5/ UYA-4 - All A and B serials; OA-7979(V)9/UYA-4 All A serials
IDENTITY: A 1550381 card should be installed in slot AlOJ27.

25-OA-7979(V)/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group IY, as a Unit Fie!d Change

Correction Material: Delineated in the applicable maintenance bulletins

II-A FA-16 NS0967-238-7780
EIC QM06000
SERIAL: OA-7979(V)10/UYA-4(V) serial Ail thru A150 and OA-7979(V)12/UYA-4(V) serial Ai thru A 10
IDENTITY: Diode CR20 on card 1579927-100 changed to type 1 N752A and resistor R33 on card 1599306-100 changed from 1 watt to 3 watts.

26-OA-7979(V)/UYA-4(V): Wiring Change for Interface with New SAC

Correction Material: None
iV-A FA-I EIB 906
EIC QM06000
SERIAL: Equipment serials Al thru A6
IDENTITY: Confirm that continuity (zero ohms) exists between Al0J21, pin 72 and A10J14, pin 73.

27-OA-7979(V)/UYA-4(V): Same as 6-LS-537/UYA-4(V)
28-OA-7979(V)/UYA-4(V): Same as 8-LS-537/UYA-4(V).
29-OA-7979(V)/UYA-4(V): Replace Action Entry Panel Mounting Screws

Correction Material: None Required

1-A FA-* NS0967-238-7730 EIC QM06000 SERIAL: OA-7979(V)1/UYA-4(V) - A1-A28, B1-B6; OA-7979(V)2/UYA-4(V) - A1, A2, Bl - B4; OA-7979(V)4/UYA$4(\mathrm{~V})$ - Al - A339, Bl - B78, C1, C2, BSC-1, BSC-2, BSC-3; OA-7979(V)S/UYA-4(V) - A1 - A6, B1, B2; OA-7979(V)6/ UYA-4(V) - A2 - A29, B1 - B4; OA-7979(V)9/UYA-4(V) - A1 - A4; OA-7979(V)10/UYA-4(V) - A1 - A161, B1 - B5, C1 Cl0; OA-7979(V)12/UYA-4(V) - A1 - Al0, Bl, B2; OA-7981A/UYA-4(V) - A1 - A4, B1 - B4
IDENTITY: Remove several of the screws used to mount the ACTION ENTRY PANEL to the console and observe that the screws are stainless steel vice soft brass. Also note that the screws threads are not being stripped and the screws are relatively easy to remove.
NOTES: *2.0 per console

## 30-OA-7979(V)/UYA-4(V): Advance Assignment

31-OA-7979(V)/UYA-4(V): TACS/TADS Hardware Changes Correction Material: To be supplied
1-A FA-24 NS0967-441-2020 EIC QM06000 SERIAL: All serial numbers for OA-7979(V)1, (V)2, (V)4, (V)5, (V)9, (V)10, (V)!2. All serial numbers for OJ-194(V)3, (V) 4.

IDENTITY: OA-7979(V)1, (V)2, (V)4, (V)10, and OJ. 194(V)3, (V)4: verify continuity (zero ohms) between A9J6-15 and A10J16.69, and between A9J6-60 and A9J5-80. OA7979(V)S, (V)9, (V)12: verify continuity (zero ohms) between A9J6-15 and A10J16-48, and between A9J6-60 and A9J5-80. NOTES: Prerequisite Field Changes: 24-OA-7979(V)/UYA4(V) and 6-AM-4534/UYA-4(V). If operating in AN/SYA4(V) system, field changes 6-AM-3377/SYA-4(V) and 10-OA-3958/SYA-4(V) must also be accomplished.

## 32-OA-7979(V)/UYA-4(V): Drainage for NTDS Console Heat

 ExchangersCorrection Material: None required
IV-A FA-2 NS0967-562-6090
EIC QM06000
SERIAL: OA-7979(V)I/UYA-4(V) - A1-A28, B1-B6; OA-7979(V)2/UYA-4(V) - A1, A2, B1 - B4; OA-7979(V)4/UYA-$4(\mathrm{~V})-\mathrm{A} 1-\mathrm{A} 399, \mathrm{Bl}$ - B78, BSCl - BSC3; OA-7979(V)5/ UYA-4(V) - A1-A6, B1, B2; OA-7979(V)6/UYA-4(V) - A2 A29, B1 - B4; OA-7979(V)9/UYA-4(V) - A1 - A4; OA-7979(V)10/UYA-4(V) - A1-A161, B1-B5, Cl - C30; OA7979(V) 12/UYA-4(V) - A1 - A 10, B1, B2
IDENTITY: Inspecting for the presence of a $3 / 16^{*}$ drain hole on each end of the bottom surface of the heat exchanger housing.

33-OA-7979(V)/UYA-4(V): Reduce Leader Jitter
Correction Material: TM's have been changed.
1-A FA-2 NS0967-LP-562-6270 EIC QM06000 SERIAL: OA-7979(V) 10 : Al-A161, Bl-B5, Cl-C30. OA7979(V)12: A1-A10, B1, B2. OJ-194(V)3: Al-Al9, Bl-B122, Cl-C18. OJ-194(V)4: A1-A7, Bl, Cl. OJ-196(XN-1): 001, 002. IDENTITY: Remove the deffection summing amplifier ( 1599342 -100) from slots Al1J7 or Allj13 and verify that resistor R29 is 1.5 megohms, $1 / 4$ watts. (For card location information, refer to the card location decal installed on the interior surface of the console front door.

34-OA-7979(V)/UYA-4(V): PPI/HS Spare Fuse Labe! Change Correction Material: None required
IV-A FA-1.5 EIB 906
ElC QM06000
SERIAL: OA-7979(V)10/UYA-4(V) - A1 thru A161, B1 thru B5, Cl thru C34, Dl thru D46 and El thru E27; OA-7979(V)12/UYA-4(V) - A1 thru A10 and B1 thru B3
IDENTITY: The top six spare fuse positions are labeled on OA-7979(V) and OJ-194(V)/UYA-4(V). The top nine spare fuse positions are labeled on OA-7980A/UYA-4(V).

## 35-OA-7979(V)/UYA.4(V): PPI RFI Change.

Correction Material: Incorporated into revised TM's.
1-A FA-7 NS0967-LP-562-6330
SERIAL: OA-7979(V)4: A39, A86, A111, A133, A145-A154, A!69, Al74, Al88, Al92, A193, A196, A204, A221, A229, A230, A238, A241-A243, A245, A247-A250, A254, A259, A297, A298, A302, A308, A309, A323, A334, B4, B11-B14, B17, B18, B27, B29-B31, B41, B42, B44, B50, B54, B55, B57B62. OA-7979(V)10. Al-A61, Bl-B5, Cl-C30. OA-7979(V)12: A1-A10, B1, B2. OJ-194(V)3: A1-A19, Bl-B27, Cl-C18. OJ194(V)4: AI-A7, Bl, Cl, DI-D4.
IDENTITY: OA-7979(V) and OJ-194(V): The console card box swings out a full 90 degrees without disconnecting the ground wires connected to A20E1. OJ-194(V) only: Open the console lid and check E. L. Dimming Control Panel A!7, !ocated in the right-front corner, for the addition of resistor R 9 and capacitor Cl .
36.OA-7979(V)/UYA-4(V): Capacitor Change for MED/ HIGH Voltage Power Supply

Correction Material: T-1, NS0967-238-7761 to NS0967-2387760

1-A FA.* NS0967-238-7880 EIC QM06000 SERIAL: OA-7979(V)l/UYA-4(V) - A1 thru A28, Bl thru B6; OA-7979(V)2/UYA-4(V) - A1, A2, B1 thru B4; OA-7979(V)4/UYA-4(V) - A1 thru A339, Bl thru B78, C!, C2, $\mathrm{BSCl}, \mathrm{BSC} 2$, and BSC3; OA-7979(V)5/UYA-4(V) - Al ithru A6, B1, B2; OA-7979(V)9/UYA-4(V). Al thru A4
IDENTITY: Inspection of the Medium/High voltage power supply, area 12, and verifying that the capacitor in tocation A12TBICl is .05 uf, 5 KV .
NOTES: *2 per console.
37-OA-7979(V)/UYA-4(V): Use Bit 19 to Identify Offset
Correction Material: T-1, NS0967-238-7021 to NS0967-2387020; T-7, NS0967-238-7127 to NS0967-238-7120

II-A FA-1 NS0967-562-6110 EIC QM06000 SERIAL: A1-A10, A14, A16-A19, A25-A27, B2-B6 (OA-7979(V)1/UYA-4(V)); A1, A2, B1-B4 (OA-7979(V)2/UYA4(V)); A1-A339, Bl-B78, C1, C2, BSCl-BSC3 (OA-7979(V)4/ UYA-4(V))
IDENTITY: Use an ohmmeter to verify continuity between A10J27-TP17 and A9J29-TPS.

38-OA-7979(V)/UYA.4(V): Provide A.E. Panel illumination with Radar Select Switch 'OFF'

Correction Materia!: Included in revised technical manual
I-A FA-2 NS0967-238-7890 EIC QM06000 SERIAL: OA-7979(V),UYA-4(V) - A1-A10, A14, A16-A19, A25-A27, B2-B6; OA-7979(V)2/UYA-4(V) - A1, A2, B1-B4; OA-7979(V)4/UYA-4(V) - Al-A339, B1-B44, BSI-BSC3, Cl-

C2; OA-7979(V)5/UYA-4(V) - Al-A6, B1, B2; OA-7979(V)9/ UYA $4(V)$ - Al-A4
IDENIMY: Select the 'OFF' position of the Radar select switch and observe that the action entry panel is illuminated when the enter mode and radar pushbutton is depressed.

39-0A-7979(V)/UYA-4(V): Prevent Burning of CRT Phosphor I-A FA-10 NS0967-LP-562-6240 EIC QM06000 SERIAL: OA-7979(V)1/UYA.4(V) - Al thru A10, A14, A16 thru A19, A25 thru A27, B2 thru B6; OA-7979(V)2/UYA$4(V)$ - A1, A2, Bl thru B4; OA-7979(V)4/UYA.4(V) - A1 thre A339, B1 thru B78, BSC-1 thru BSC-3, Cl and C2; OA. 7979(V)5/UYA-4(V) - A1 thru A6, B1 and B2; OA-7979(V)6/ UYA-4(V) - Al thru A29, Bl thru B4, Fl thru F9; OA. 7979(V)9/UYA.4(V) - Al thru A4; OA-7979(V)10/UYA.4(V) - Al thru Al6!, Bl thru B5, Cl thru C30; OA-7979(V)12/ UYA.4(V) - Al thru A10, Bl thru B3
IDENTITY: Check the card box assembly for a 159987 card in A11-J23; the 159987 card can be located by referring to the cand location chart installed on the inside of the card box door.

40-0A-7979(V)/UYA.4(V): Shield Card Removal
Correction Material: T- to NS0967-238-7150, NS0967-2387760, NS0967-441-2010

IV-A FA-0.5
EIC QM06000
SERIAL: Serial numbers AI thru Al47 (OA-7979(V)10/ UYA-4(V)) and A1 thru A10, Bl and B2 (OA-7979(V)12/ UYA-4(V))
IDENTITY: Absence of shield cards, HAC P N 1557793, in the indicated equipment as follows: OA-7979(V)/UYA-4(V) AllJ6, Allj14, and AllJ20.

41-OA-7979(V)/UYA-4(V): DDEU Logic Timing Change
Correction Materjal: T-1, NS0967-238-7121 to NS0967-238. 7120; T-3, NS0967-238-7153 to NS0967-238-7150; T-1, NS0967.441-2011 to NS0967.441-2010

I-A FA-1 NS0967-238-7910 EIC QM06000 SERIAL: OA-7979(V) 10 /UYA $4(\mathrm{~V})$ - Serials Al thru A161, Bi thru B4, Cl thru C30, OA-7979(V)12/UYA-4(V). Serials Al thru Al0, B1, and B2
IDENTITY: Remove the 1579929 card from the subject console, locate flat pack Z 17 and observe that pin 7 (count clockwise from the dot marking pin 1) has been clipped (rom the flat pack body and the board etch.

42-OA-7979(V)/UY A.4(V): Lines and Leaders Improvement Correction Material: None
1-A FA-1.5 NS0967-238-7920 EIC QM06000 SERIAL: OA-7979(V)I/LYA.4(V) - Al thru A28, Bl thru B6; OA-7979(V)2/UYA-4(V) - A1, A2, B1 thru B4; OA7979(V)4/UYA.4(V) - Al thru A339, B1 thru B78, BSC-1, BSC-2, BSC-3, C1, and C2; OA-7979(V)5/UYA.4(V) - Al thru A6, B1, and B2; OA-7979(V)6/UYA-4(V) . A 2 thru A29, Bl afur B4; OA-7979(V)9/UYA.4(V) - Al thru A4
IDENTITY: Remove the /-5V Digilog Reference Power Supply, 1537585, and verify that Q8 and Q9 are 2N3799, R20 is 390 ohms, R21 and R23 are 22 K and R26 is 3 K .

43-OA-7979(V)/UYA-4(V): Same as 7-LS-537A,UYA.4(V)
except
SERIAL: OA-7979(V2)/UYA.4(V) - All serjals; OA-7979(V4)/UYA-4(V) - All A and B serials, BSC-1 thru BSC-3, Cl and C2; OA-7979(V9)/UYA.4(V) - Al thru A4, and
IDENTITY: Remove intercom amplifier control card A10 J. 31 (OA-7979(V2); A10 J-31 (OA-7979(V4)); A10 J-31 (OA7979(V9)) and note that a IN914 diode CR25 has been added between K9X2 and ground.

44OA-7979(V)/UYA-4(V): Same as 8-LS.537A/UYA-4(V) except
SERIAL: OA-7979(V)10, LIYA.4(V) - Al thru A161, BI thru B4, Cl thru C34, D1 thru C23, and El thru E23; OA. 7979(V)12/UYA-4(V) - A I thru A10, B1, B2, and B3
IDENTITY: Remove intercom amplifier control card (1548022) at card location A10J31 and note the addition of a IN914 diode between K9X2 and ground.

## 45-OA-7979(V)/UYA-4(V): Advance Assignment

46OA-7979(V)/UYA\&V): ARC Protection of CRT Deflection and Intensity Drive Circuits

Correction Material: T-3, NS0967-238-7123 to NS0967-2387120; T-2, NS0967-238-7762 to NS0967-238-7760; T-2, NS0967.441-2012 to NS0967-441-2010

1-A FA-20 NS0967-238-7950
EIC QM06000
SERIAL: OA-7979(V)10/UYA-4(V) - Ai thru A161, Bl thru B4, Cl thru C34, and E9; OA-7979(V)12/UYA.4(V) - Al thru A10, Bl thru B3
IDENTITY: Remove the $1599306 \cdot 100$ CRT drive unit from A18, the 1599311-100 coupler and bias network from A11J29, and the 1599310-100 video amplifier from AllJ27 and check for the modifications indicated in the procedure $A$ and $B$ of the field change bulletin.

47-0A-7979(V)/UYA-4(V): Modification to Console Lid Latch Mechanism

Correction Material: T-4, NS0967-238-7014 to NS0967-2387010

1-A FA-I NS0967-238-7970 EIC QM06000 SERIAL: OA-7979(V)1/UYA.4(V) - Al thru A10, A14, A16 thru A19, A25 thru A27, B2 thru B6; OA-7979(V)2/UYA. 4(V) - A1, A2, Bl thru B4; OA-7979(V)4/UYA-4(V) - Al thru 339, B1 thru 78, C1, C2, BSCl thru 3; OA-7979(V)5/ UYA-4(V) - Al thru 6, B1, B2; OA-7979(V)6,UYA.4(V) - A 2 thre 29, Bl thru 4; OA-7979(V)9/UYA-4(V) - AI thru 4
IDENTITY: Lid Latch coil type tension spring is replaced by a tee shaped spring and maximum console lid opening is 105 vice 90 .
.48-OA-7979(V)/UYA.4(V): Install Overtemperature and Alert Buzzer in Bullnose

Correction Material: T-4, NS0967-238-7025 to NS0967-2387020, T-7, NS0967-238-7118 to NS0967-238-7110; T-3, NS0967-238-7763 to NS0967-238-7760
2.A FA-6 NS0967-562-6050

EIC QM06000
'SERIAL: OA-7979(V)I/UYA.4(V) - A! thru A10, A14, A 16 thru A19, A25 thrn A27 and B2 thrn B6; OA-7979(V)2/UYA. \&(V) - Al, A 2 and Bl thru B4; OA-7979(V)\&NYA.4(V) - Al thru A339, B1 thru B78, C1, C2 and BSCl-3; OA-7979(V)5/ UYA.4(V) - Al thru A6, Bl and B2; OA-7979(V)6/UYA-4(V)

- A2 thru A29 and B1 thru B4; OA-7979(V)9/UYA-4(V) - A1 thru A4
IDENTITY: Presence of four buzzer roounting screws in the front right comer of the bullnose.

49-OA-7979(V)/UYA-4(V): Delete Video Bright Control
Correction Material: T. to NSU967-238-7010. NS0967-2387020, NS0967-238-7760, NS0967-441-2010 and APL

IV-A FA-1 EIB 886 EIC QM06000 SERIAL: OA-7979(V)!/UYA.4(V) - Al thru AlO. A14, A 16 thru A19. A25 tbru A27, B2 thru B6, OA-7979(V)2/UYA4(V) - A1, A2, B1 thru B4; OA-7979(V)4/U'A-4(V) - A1 thru A339, BSCI thru BSC3, B1 thru B78, C1 and C2; OA7979(V)5/UY A-4(V) - Al thru A6. B1 and B2; OA-7979(V)6/ UYA-4(V) - A2 thris A29, B1 thru B4; OA-7979(V)9/UYA4(V) - Al thru A4; OA-7979(V) I0NYA-4(V) - AI thru Ai61, B1 thru B4, Cl thru C34, D1 thru D46, E1 thru E76: OA-7979(V)i2/UYA-4(V) - Al thru AlO, B 1 thru B3
50.OA-7979(V)/UYA-4(V): Improved Pick-Off Wheels

Correction Material: None sequired
J-A 2. NS0967-LP-562.6150 EIC QM06000
SERIAL: All serial numbers - OA.7979(V)1, (V)2, (V)4, (V)5. (V)6, and (V)9/UYA-4(V)

IDENTITY: Remove the trackball assembly from the plan position indicator display console or the operations summary console and verify that the large $X$ and $Y$ pickoff wheels (MP1 and MP2) are stainless steel.

51-OA-7979(V)/UYA-4(V): Inhibit Offsct Message Blanking of Sonar Sweep

Correction Material: To be supplied
I-A FA-] ElB 911
EIC QM06000
SERIAL: OA-7979(V)10/UYA.4(V) - Serials Al thru A16i, BI thru B4 and CI thru C30: OA-7979(V)I2/UYA-4(V) - Serials Al thru Al0and B1, B2
IDENTITY: An ohmmeter reading of zero ohms between the points of the card box listed in these instructions.

52-OA-7979(V)/UYA-4(V): Arti-Condensation Coaung for Deflection Amplifier

Correction Material: T-4. NS0967-LP-441-2015 to NS0967. LP.441-2010; T-5, NS0967-LP-238-7027 io NS0967-1.P-2387020

1-A FA-26 NS0967-LP. $562-6210$ EIC QM06000 SERIAL: OA-7979(V)1/UYA-4(V): Al-A9, A14.A19, A25A27, and B2-B6: OA-7979(V)2/UYA.4(V) - A1. A2 and Bl thru B4; OA-7979(V)4/UYA-4(V) - Al thru A339. BSCl thiu BSC3. B1 thru B78. C1 and C2; OA-7979(V)5/UYA-4(V) Al thru A6, Bi and B2; OA.7979(V)6/UYA-4(V) - A2 thru A29, Bl thru B4. Fl thru F9; OA -7979(V)9/LY'A 4(V) - Al thru A4; OA-7979(V) 10. UYiA-4(V) - Al thru A 161, Bl thru B4. Cl thru C34, Dl thru D46, and El thru E76: OA. 7979(V)12/UYA-4(V) - Al thru A 10 and B1 thru B 3
IDENTITY: Turn off console and primary power. Open top of cabinct and loosen eight retaining screws securing deflection amplifier Al8 (located in right rear corner) to cabinet. Carefully pull the deflection amplifier out of the air duct and observe that the printed circuit boards have a continuous transparent coating.
53.OA.7979(V)/UYA.4(V): Provide Touch Entry Capability.

Correction Material: TM, NS0967-LP-238-7020, requires change.

I-A FA-10 NSO967-LP-562.6470
EIC QM06 SERIA L: OA-7979(V) !: A1-A28, B1-B6. OA-7979(V)2: A!, A2, B1-B4, OA-7979(V)4: A1-A334, B1-B78, BSC1-BSC3, C1, C2.
IDENTITY: Verify installation of Digital Data Entry Unit (DDEU) pin 1579919-100, Unit AS.
54.UA-7979(V)/LYA.4(V): Digital TV Lid Addition.

Correction Material: Supplemental TM to be prepared.
1-C YF-24 NS0967-L.P.562-6460 EIC QM06 SERIAL: OA-7979(V)1, (V)2, (V)4, (V)5. (V)9, (V)10, and (V)12: All serial numbers. $O J-194(V) 3$ and $(V) 4$ : all serial numbers.
IDENTITY: The CRT readout on top of the console uses a display POFA.

55-OA-7979(V)/UYA-6(V): Add Secure Radio Channel Select Capability.

Correction Material: To be provided.
1-C YF. 40 SE686-AD-FCB-010
EIC QM06
SERIAL: OA-7979(V)1. (V)2, (V)4, (V)5, (V)6. (V)9. (V)io. and $(V) 12$ : All serial numbers.
IDENTITY: Observe the Intercom Select Panel and verify that the lamp $m$ the center is labelled NO ACCESS, READY and has a green lens.
NOTES: Prerequisite field Change: 28-OA•7979(V)/UYA. 4(V).
56.OA.7979(V)/UYA-4(V): Prevent IDR Hangup

Correctien Material: To be provided
4.A FA.i 5 ElB 920

SERIAL OA-7979(V) J. Al-A 28. Bl-B6. OA-7979(V)2. AI. A 2, BI-B4 OA-7979(V14: A1-A 339. BSCl-BSC3. B1-B78. C1. C2. OA-7979(V)5: Al-As, B1. B2 OA-7979(?)9: A!-A4. OA7979(V)10: Al.A161. B1-B4, C1.C34, D1-D47, E1-E80, G1. G2. OA-7979(V)12: Al-A10, B1.83, C1, C2, OA-7981A: A1A4. Bl-B4. OJ-194(V): Al-A7, Bl, C!, D1-D5. E1, E2. OJ. 195: A1-A7, B1. C1, D1, D2. OJ-197: Al-A4, B1-B30, C1, D1, D2, E1, E2, G1.G4.
IDENTITY This lield change may be identified by performing the following continuity checks in the card box waring: A952 Pin 53 to Al0J27 Pin 59 Short: Al0j27 Pin 60 to A9J9 Pin 61 Short.

57-OA-7979(V)/UVA-4(V): Replace Console Wiring to Eliminate Personnel Hazard

Correcion Material: None required
1.A FA. 1 NS0967-LP-562-6290

SERIAL: OA-7979(V)10: E78-E80, G1, G2. OA-7979(V)12: C1. C2. OJ-194(V)3: G1-G2O, H1-H!7.
IDENTITY. Open corisole lid and inspect for red high-volt. age wire between A12P1-65 (HVPS plug) and Al8P3-20 (CRT drive unit plug). (Before this lield change, the ligh-voltage wire was Orange, 16 gauge، 600 volls. Type B.)

58-OA.7979(V)/LA-\&(V): Correct Sonar Sweep Fading/Terminate DL4

Correction Material: T-7. NS0967-LP-238.7128, to NS0967.

LP-238-7120 dtd 2 May 72; and either T-6, NS0967-LP-2387767. to NS0967-LP-238-7760 dtd 25 Apiil 72, or T-9, NS0967-LP-238-7779, to NS0967-LP-238-7770 dtd 25 Apill 72.

1-A FA-4 NS0967-LP-562-6300
SERIAL: OA-7979(V)10: A1-A161, Bl-B4, Cl-C34, D1-D13, E68. OA-7979(V)12: Al-A10, B1-B3. OJ-195: A1-A7, B1.
IDENTITY: Remove the 1579920-100 Clock Counter and Register cards from AllJ1 and J19 of the OA-7979(V), or from A16A1J1 and $J 19$ of the OJ-195, and verify that $\mathrm{C}, \mathrm{C} 7$, Ci1, C21, R9, R10, R11, R13, CR1, CR2, and Q4 have been removed and that $R 58$ ( 47 ohms) has been added to the base circuit of Q 8 .

59-OA-79790)/UYA-4(V): Under Development

60-OA-7979(V)/UYA-4(V): Correct Erratic Sweep.
Correction Material: T-9, NS0967-LP-238-7129, to NS0967-LP-238-7120 dtd 2 May 72, and T-7, NS0967-LP-238-7768, to NS0967-LP-238-7760 dtd 25 April 72, and T-5, NS0967-LP-441-2016, to NS0967-LP-441-2010 dtd 26 April 72, or T-10, NS0967-LP-238-7773, to NS0967-LP-238-7770 dtd 25 April 72, and T-6, NS0967-LP-238-7157, to NS0967-LP-238-7150 dtd 26 Apsil 72.

1-A FA-12 NS0967-LP-562-6340*
SERIAL: OA-7979(V)10: A1-A161, B1-B4, Cl-C34, D1-D47, E1-E27, E29-E68. OA-7979(V)12: A1-A10, B1-B3. OJ-195: Al-A7, Bl.
IDENTITY: OA-7979(V): Continuity (zero ohms) between A11J2-1 and Al1J2-7 and between A11J18-1 and A11J18-7. OJ-195: Continuity (zero ohms) between A16A1J2-1 and A16A1J2-7 and between A16A1J18-1 and A16A1J18-7.
NOTES: Prerequisite field Changes: 58-OA-7979(V)/UYA4(V) or 20-OJ-195/UYA-4(V). *FCB dtd 19 July 78 supersedes FCB dtd 5 Nov 76.

61-OA-7979(V)/UYA-4(V): Improved Trackball Support Bearing.

Correction Material: Revised TM's.
1-A FA-1 NS0967-LP-562-6390 EIC QM06 SERIAL: OA-7979(V)1: A1-A28, B1-B6. OA-7979(V)2: A1, A2, B1-B4. OA-7979(V)4: A1-A339, B1-B78, C1, C2, BSClBSC3. OA-7979(V)5: Al-A6, B1, B2. OA-7979(V)6: A1-A29, B1-B4. OA-7979(V)9: A1-A4. OA-7981A: A3, A4, B2-B4.
IDENTITY: The new trackball support bearing is a solid plastic type vice a roller or shaft mounted bearing.

62-OA-7979(V)/UYA-4(V): Install Four Button Trackball Assembly.

Correction Material: Chgs. to TM, NS0967-LP-441-2010, to be provided.

1-A FA-24 NS0967-LP-562-6570 EIC QM06 SERIAL: OA-7979(V)5/UYA-4(V) Display Consoles, serial numbers A1-A6, B1, and B2.
IDENTITY: Verify that the ball tab (center), hook, and sequence switch functions are relocated to new Four Button Ball Panel A6, (360736-11).
NOTES: Prerequisite Field Changes: 14-OA-7979(V)/UYA4(V).

63-OA-7979(V)/UYA-4(V): Under Development (06-77).

64-OA-7979(V)/UYA-4(V): Modification to Allow Keyset Data Entry at Anytime. (EIB 955, 978).

Correction Material: EIB 955.
4-A FA-2 EIB 955, 978
EIC QM06
SERIAL: OA-7979(V)2: B1-B4. OA-7979(V)5: A1-A6, B1, B2. OA-7979(V)12: Al-A10, B1-B3, C1, C2.
IDENTITY: Remove the 1548038-100 card from A9A18 and verify presence of jumper between 221-9 and Z21-12. Verify continuity (zero ohms) between A9J20 pin 17 and A9J22 pin 71 , A9J21 pin 17 and A9J22 pin 48 and A9J20 pin 20 and A9J22 pin 70. Verify open-circuit between A9J22 pin 48 and A9J22 pin 70, A9J22 pin 70 and A9J22 pin 71, A9J22 pin 71 and A9J22 pin 84, and A9J19 pin 58 and A9J18 pin 77.

1-OA-7980/UYA-4(V): Same as 5-OA-7979(V)/UYA-4(V) except
SERIAL: A1, A2, and B1
2-OA-7980/UYA-4(V): Same as 6-OA-7979(V)/UYA-4(V) except
SERIAL: A1, A2, and B?

3-OA-7980/UYA-4(V): Same as 8-OA-7979(V)/UYA-4(V) except
SERIAL: A1 and B1
4-OA-7980/UYA-4(V): Incorpozation of HAC Maintenance Bulletins, Group 1, as a Unit Field Change

Correction Material: None
4-A NS0967-238-7360 EIC FU09000
SERIAL: As indicated in Table 1 of this field change
IDENTITY: Observing FC-4 on the Field Change Record plate.

5-OA-7980/UYA-4(V): Incorporation of HAC Maintenance Bulietins, Group III, as a Unit Field Change

Correction Maieriai: Deineat in the appiicable maintenance bulletins

2-A FA-12 NS0967-238-7560 EIC QM06000
SERIAL: Serial numbers as shown in table 1 of the field change
IDENTITY: Observing field change number 5 on the Field Change Record plate.

6-OA-7980/UYA-4(V): Same as 2-LS-537/UYA-4(V) except
Correction Material: T-2, NS0967-238-7112 to NS0967-2387110

## NS0967-238-7540

SER1AL: A1, A2, B1

7-OA-7980/UYA-4(V): Same as 3-LS-537/UYA-4 except
SERIAL: A1, A2, and B1

8-OA-7980/UYA-4(V): Same as 18-OA-7979(V)/UYA-4(V) except

Correction Material: Ch. 2, NS0967-238-7034 to NS0967-238-7030
SERIAL: A-1, A-2, B-1, C-1 thru C-3, D-1 and E-1
9-OA-7980/UYA-4(V): Same as 5-LS-537/UYA-4(V) except

SERIAL: A1, A2, B1, C1, C2, C3, and E1

10-OA-7980/UYA-4(V): Elimination of Erase Pulse Flash Correction Matesial: Included in AN/UYA-4(V) Data Display Technical Manuals

I-A FA-3.5 NS0967-238-7590 EIC P837000
SERIAL: All serial numbers
IDENTITY: Removing the Delay Pulse Generator Card, 1537598 from card slot A10111 and noting the addition of transistors Q13, Q14, and Q15 and resistors R46 thru R58. (The delay pulse generator card can be located by referring to the card location chart installed on the inside of the card box door.)

11-OA-7980/UYA-4(V): Same as 32-OA-7979(V)/UYA-4(V) except
SERIAL: A1, A2, B1, C1, C2, C3, G1

12-OA-7980/UYA-4(V): Same as 47-OA-7979(V)/UYA-4(V) except
SERIAL: A1, A2, and B1
13-OA-7980/UYA-4(V): Same as 48-OA-7979(V)/UYA-4(V) except

Correction Material: T-2, NS0967-238-7035 to NS0967-2387030 and
SERIAL: OA-7980/UYA-4(V) - A1, A 2 and B1
14-OA-7980/UYA-4(V): Prevent IDR Hang-up Correction Material: See EIB 922
4-A FA-2 EIB 922
SERIAL: OA-7980: A 1, B1. OA-7980A: Al-A50, B1-B10, C1C18, D1-D5, El-E6, G1-G5.
IDENTITY: Remove the 1537593-100 card from card slot A8J10 and observe that a wire has been added between pin 22 and 24 pin 13.

15-OA-7980/UYA-4(V): Provide Correct SPS-48 Reference Voltage in Test Mode

Correction Material: See EIB 928
4-A FA. 4 EIB 928
SER1AL: OA-7980: Al-A2, B1, Cl-C3, D1, E1, Fl-F4. OA7980A: A1-A50, B1-B10, C1-C18, D1-D5, E1-E6, G1-G5.
IDENTITY: Check for continuity (zero ohms) between P2101 and K2-D2 and between P1-22 and K2-A3 wiring on the RHI-A panel.

16-OA-7980/UYA-4(V): Same as 6-LS-537/UYA-4(V).
1-OA-7980A/UYA-4(V): Same as 5-OA-7979(V)/UYA-4(V) except
SERIAL: AI thru A4, A6
2.OA-7980A/UYA.4(V): Same as 6-OA-7979(V)/UYA-4(V) except
SERIAL: A1 and A6
3-OA-7980A_UYA-4(V): Same as 8-OA-7979(V)/UYA-4(V) except
SERIAL: A1 and A6

4-OA-7980A/IYA-4(V): Incorporation of HAC Maintenance Bulletins, Group 1, as a Un't Field Change

4-A NS0967-238-7360 EIC FU09000
SERIAL: As indicated in Table I of this field change
IDENTITY: Observing FC. 4 on the Field Change Record plate.

5-OA-7980A/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: Delineated in the applicable mamtenance bulletins

2-A FA-12 NS0967-238-7560 EIC QM06000 SERIAL: Serial numbers as shown in table I IDENTITY: Observing field change number 5 on the Field Change Record plate.

6-OA-7980A/UYA-4(V): Same as 2-LS-537/UYA-4(V) except Correction Material: T-2, NS0967-238-7112 to NS0967-2387110

NS0967-238-7540
SERIAL: A1 thru A50, Bl thru B10
7-OA-7980A/UYA-4(V): Same as 3-LS-537/UYA-4(V) except SERIAL: A1 thru A50 and Bl thru B10

8-OA-7980A/UYA-4(V): Same as 10-OA-7980/UYA-4(V) except

EIC P838000
9-OA-7980A/UYA-4(V): Same as 18-OA-7979(V)/UYA-4(V) except

Correction Material: Ch. 2, NS0967-238-7034 to NS0967-238-7030
SERIAL: A-1 thru A-50, B-1 thru B-10, and C-1 thra C-18
10-OA-7980A/UYA-4(V): Advance Assignment
11-OA-7980A/UYA-4(V): Same as 6-LS-537/UYA-4(V)
12-OA-7980A/UYA-4(V): Same as 32-OA-7979(V)/UYA-4(V) except
SERIAL: A1-A50, B1-B10, C1-C18, D1-D5
13-OA-7980A/TJYA-4(V): Same as 34-OA-7979(V)/UYA-4(V) except
SERIAL: Cl thru C18, Dl thru D5, and El thru E6
14-OA-7980A/UYA-4(V): Same as 7-LS-537A/UYA-4(V) except
SERIAL: A1 thru A50 and B1 thru B10
IDENTITY: Remove intercom amplifier control card A9J2 and note that a IN914 diode CR25 has been added between K9X2 and ground.

15-OA-7980AMYA-4(V): Same as 8-LS-537A/UYA-4(V) except
SERIAL: OA-7980A/UYA-4(V) - C1 thru CI8, D1 thru D5, El thru E5

IDENTITY: Remove intercom amplifier control card (1548022) at card location A9J2 and note the addition of a 1N914 diode between K9X2 and ground.

16-OA-7980A/UYA-4(V): Same as 47-OA-7979(V)/UYA-4(V) except
SER1AL: AI thri A50, and B1 thru B10
17-OA-7980A/UYA-4(V): Same as 48-OA-7979(V)/UYA-4(V) except

Correction Material: T-2, NS0967-238-7035 to NS0967-2387030 and
SERIAL: OA-7980A/UYA-4(V) - Al thru A50 and Bl thru B10

18-OA-7980A/UYA-4(V): Compatibility Change for AN/SYA$4(V)$ Installation

Correction Material: T-3, NS0967-LP-238-7036 to NS0967-LP-238-7030 dtd 26 June 67.

1-A FA-12 NS0967-LP-562-6130
SERIAL: All serials installed in AN/SYA-4(V) environment, as specified by NAVSEC.
IDENTITY: Rotate the two radar select switches and note that the switches have mechanical stops which prevent rotation beyond radar position 7.

19-OA-7980A/UYA-4(V): Cancelled, Never Developed. (1176).

20-OA-7980A/UYA-4(V): Cancelled, Never Developed. (1177).

21-OA-7980A/UYA-4(V): Same as 14-OA-7980/UYA-4(V)
22-OA-7980A/UYA-4(V): Modification to (Si) Radar Select Switch

Correction Material: To be Provided
1-A FA-4 NS0967.LP-562-6350
EIC QM06
SERIAL: All A, B, C serial numbers
IDENTITY: Gain access to area A16 and note that above the rear area of A3 on the mounting bracket that TBl has ten terminals.

23-OA-7980A/UYA-4(V): Same as 15-OA-7980/UYA-4(V)
24-OA-7980A/UYA-4(V): OA-7980A Compatibility Change for UYA-1 Installation.

Correction Material: None Required.
1-A FA-16 NS0967-LP-562-6380 EIC QM06 SERIAL: All serial numbers of OA-7980A/UYA-4(V) installed in AN/UYA-l(V) environment as specified by NAVSEC.
IDENTITY: Rotate the radar select switches on the RH1 AND SAI panels through positions 1 through 11 and verify that the corresponding radar positions are selected at the switchboard RHI and SAI channels.

1-OA-7981/UYA-4(V): Same as 5-OA-7979(V)/UYA-4(V)
except
SERIAL: A1

2-OA-7981/UYA-4(V): Same as 6-OA-7979(V) NYA.4(V) except
SERIAL: Al

3-OA-7981/UYA-4(V): Same as 8-OA-7979(V)/UYA-4(V) except
SERIAL: AI
4-OA-7981/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group I, as a Unit Field Change

Correction Material: None
4-A NS0967-238-7360
EIC FU09000
SERIAL: As indicated in Table I of this field change IDENTITY; Observing F.C. \#4 on the Field Change Record plate.

5-OA-7981/UYA-4(V): Same as 13-OA-7979(V)/UYA-4(V)
6-OA-7981/UYA-4(V): Same as 14-OA-7979(V)/UYA-4(V)
7-OA-7981/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: Delineated in the applicable maintenance bulletins
2-A FA-10 NS0967-238-7570 EIC QM06000

SERIAL: Serial numbers as shown in table I
IDENTITY: Observing field change number 7 on the Field Change Record plate.

8-OA-7981/UYA-4(V): Same as 2-LS-537/UYA-4(V) except
Correction Material: T-2, NS0967-238-7112 to NS0967-2387110

NS0967-238-7540
SERIAL: A 3
9-OA-7981/UYA-4(V): Same as 3-LS-537/UYA-4(V) except SERIAL: Al

1-OA.7981A/UYA.4(V): Same as 5-OA-7979(V)/UYA.4(V) except
SERIAL: AI thru A4

2-OA-7981A/UYA-4(V): Same as 6.OA-7979(V)/UYA.4(V) except
SERIAL: A1 thru A4

3-OA-7981A/UYA-4(V): Wire Changes for Correct Computer Interface

Correction Material: None
2-A FA-2 NS0967-238-7330
EIC FU09000
SERIAL: AI thru A4
IDENTITY: Checking for incorporation of wire changes as specified below.

4-OA-7981A/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group I, as a Unit Field Change

Correction Material: None
4-A FA-1 NS0967-238.7330
E1C FU09000

IDENTITY: Observe this change number on the Field Change Record plate.
5.OA-7981A/UYA-4(V): Same as 13-OA-7979(V)/UYA-4(V)

6-OA-7981A/UYA-4(V): Same as 14-OA-7979(V)/UYA-4(V)
7-OA-7981A/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: Delineated in the applicable maintenance bulletins

2-A FA-10 NS0967-238-7570 EIC QM06000
SERIAL: Serial numbers as shown in table 1
IDENTITY: Observing field change number 7 on the Field Change Record plate.

8-OA-7981A/UYA-4(V): Same as 2-LS-537/UYA-4(V) except Correction Materiai: T-2, NS0967-238-7112 to NS0967-2387110

NS0967-238-7540
SERIAL: B1 thru B4

9-OA-7981A/UYA-4(V): Same as 3-LS-537/UYA-4(V) except SERIAL: BI thru B4

10-OA-7981A/UYA-4(V): Advance Assignment
11-OA-7981A/UYA-4(V): Same as 6-LS-537/UYA-4(V)
12-OA-7981A/UYA-4(V): Resistor Change to SMC Trigger Generator (1547996-100)

Correction Material: Included in TM.
1-A FA-1 NS0967-LP-562-6260 EIC QM06000 SERIAL: OA-7981A/UYA-4(V) - Serial numbers A3, A4, BI thru B4. OJ-195: Al-A7.
IDENTITY: Remove the SMC trigger generator card (1547996) from slot AI7AIA8 and verify that resistor R6 is 100 K vice 15 K ohms. Refer to card location decal on interior surface of right hand card box access door for location of affected card.

13-OA-7981A/UYA-4\{V): Same as 5-LS-537/UYA-4(V) except SERIAL: A1 thru A4, B1 thru B4

14-OA-7981A/UYA-4(V): Same as 29-OA-7979(V)/UYA-4(V) except
SERIAL: A1 thru A4, B1 thru B4

15-OA-7981A/UYA-4(V): TACS/TADS Hardware Changes Correction Material: TBS
I-A FA-24 NS0967-562-6010 EIC QM06000
SERIAL: All serial numbers
IDENTITY: Remove 1537558-100 or 1537724-100 display select and deflection control card assembly from A16A3J22 of the OSC console and check for incorporation of card modifications indicated on the procedure. The 1537724-100 card is used instead of the 1537558.100 card in AN/UYA-4(V) OSC console operating in the AN/SYA-4(V) system.
16.OA-7981A/UYA-4(V): Same as 32-OA-7979(V)/UYA-4(V)
except
Correction Material: None required

## NS0967-562-6090

SERIAL: A1-A4, B1-B4
17-OA-7981A/UYA-4(V): Correct Deflection Amplifier Oscillation

Correction Material: T-5, NS0967-238-7775 to NS0967-238. 7770

I-A FA-2.5 NS0967-562-6100
EIC QM06000
SERIAL: A3, A4, B1 thru 84 (OA-7981A/UYA-4(V))
IDENTITY: Remove the PC card (HAC PN 1548055-100) from area 19 , slot $3,4,5$, or 6 and verify that an 1800 PF capacitor is installed in the location for C35.

18-OA-7981A/UYA-4(V): OSC Wiring Changes.
Correction Material: Incorporated into revised TM's.
1-A FA-6 NS0967-LP-562-6310
SERIAL: OA-7981A: A3, A4, B1-B4. OJ-195: A1-A7, B1. OJ. 197: A1-A4.
IDENTITY: OA-7981A: A two conductor, twisted, shielded, and jacketed wire is connected to A12TB5 terminals A3, A4, and A5. OJ-195: Continuity checks between A16A3J21 40 and A16A2J10-9 (open), A16A1J11-25 and A16A2J10-9(zero ohms), A16A4J25-35 and A16A2J26-53 (open), A16A4J25-35 and A16A3J14-71 (zero ohms), and A16A3J10-9 and A16A3J14-74 (zero ohms). OJ-197: Continuity checks between A16A4J25-35 and A16A2J26-53 (open), A16A4J25-35 and A16A3J14-71 (zero ohms), and A16A3J10-9 and A16A3J14-74 (zero ohms).

19-OA-7981A/UYA-4(V): Cancelled (04-77).
20-OA-7981A/UYA-4(V): Same as 38-OA-7979(V)/UYA-4(V) except
SERIAL: A1-A4, B1-B4

21-OA-7981A/UYA-4(V): Advance Assignment
22-OA-7981A/UYA-4(V): Same as 40-OA-7979(V)/UYA-4(V) except
SERIAL: B1 (Modified to OJ-195 configuration) and
IDENTITY: OA-7981A/UYA-4(V) - A16AIJ6, A16A1J14 and A16A1J21.
23.OA-7981A/UYA-4(V): Same as 42-OA-7979(V)/UYA-4(V) except
SERIAL: Al thru A4, Bl thru B4

24-OA-7981A/UYA-4(V): Same as 7-LS-537A/UYA-4(V) except
SERIAL: A3, A4 and B2, B3 and B4 and
IDENTITY: Remove intercom amplifier control card A17A2J3 and note that a 1N914 diode CR25 has been added between K9X2 and ground.

25-OA-7981A/UYA-4(V): Same as 8-LS-537A/UYA-4(V) except
SERIAL: Bl

ORIGINAL

IDENTITY: Remove intercom amplifier control card (1548022) at card location AI7A2J3 and note the addition of a IN914 diode between K9X2 and ground.
26.OA-7981A/UYA-4V): Operations Summary Console Improvements

Correction Material: T-5, NS0967-238-7125 to NS0967-2387120, T-4, NS0967-238-7155 to NS0967-238-7150

I-A FA.5 NS0967-562-6060 EIC QM06000
SERIAL: Serial numbers AI thru A4, Bl thru B4
IDENTITY: Spot checks of the memory card box, right-hand card box, and left-hand card box wiring changes listed in the bulletin.
27.OA-7981A/UYA-4(V): Power Control Panel Improvernents

Correction Material: T-7, NS0967-238-7777 to NS0967-2387770; T-5, NS0967-238-7156 to NS0967-238-7150

1-A FA-3 NS0967-LP-562-6120 EIC QM06000 SERIAL: OA-7981A: A3, A4, B1 thru B4. OJ-195: AI-A7, B1, B2. OJ-197: A1-A4, Bl-B4, Cl.
IDENTITY: Open the power control panel, area 15 , and check for addition of capacitor C3 ( $330 \mathrm{uf}, 50 \mathrm{VDC}$ ) mounted on a support bracket to the right of 'E97'.

28-OA-7981A/UYA-4(V): Same as 50-OA-7979(V)/UYA-4(V) except
SERIAL: A3, A4 and B2 thru B4
29-OA-7981A/UYA-4(V): Same as 19-CV-2095(V)/UYA-4(V) except
SERIAL: OA-7981A/UYA-4(V) - Ai thru A4, B1 thru B4

30-OA-7981A/UYA-4(V): Same as 56-OA-7979(V)/UYA-4(V)
31-OA-7981A/UYA-4(V): Same as 8-LS-537/UYA-4(V).
32-OA-7981A/UYA-4(V): Add Secure Radio Channel Select Capability (Under Development)

33-OA-7981A/UYA-4(V): Digital TV Addition.
Correction Material: Use of TM for IP-1304/UYA-4(V), SE675-AV-MMO-010/UYA-4(V).

2-C YF-8 NS0967-LP-562-6600 EIC QM06 SERIAL: OA-7981A: All serial numbers. OJ-195: All serial numbers. OJ-197: All serial numbers.
IDENTITY: Verify installation of Digital TV Indicator IP-1304/UYA-4(V), p/n 1631444-100, on the upper rear center of the OCS lid.

34-OA-7981A/UYA-4(V): Correct OSC Hardware Problems.
Correction Material: To be provided.
1-A FA-40 NS0967-LP-562-6370
EIC QM06
SERIAL: OA-7981A: Al-A4, Bl-B4. OJ-195: Al-A7, Bl, Cl, D1, D2. OJ-197: Al-A4, BI-B30, C1, D1, D2, E1, E2, GI-G4, H1-H4. TS-2460: All serial numbers with 1537619 Mod Kit.
IDENTITY: On the 1547689 Circuit Regulator Assembly in the OSC Low Voltage Power Supply (LVPS), Verify that resistors R47 and R67 are 130 ohms, 2W, and that resistors R48 and R68 are 110 ohms, $2 W$.

35-OA-7981A/UYA-4(V): Same as 61-OA-7979(V)/UYA-4(V).
36.OA-7981A/UYA-4(V): Under Development. (01-77).

37-OA-7981A/UYA-4(V): Reliability, Maintainability and Operability (RMD).

Correction Material: To be provided.
1-A FA-12 SE686-AB-FCB-010
EIC QM06 SERIAL: OA-7981A: All serial numbers. OJ-195: All serial numbers. OJ-197: All serial numbers.
IDENTITY: Verify the following: The console lid locks open in the 60 degree position, the grounding strip on the Deflection Amplifier ( $\mathrm{p} / \mathrm{n}$ 1548055-100) is a solid strip, and the alert buzzer is mounted on the right-rear underneath side of the console lid.

38-OA-7981A/UYA-4(V): Under Development. (01-77).
39-OA-7981A/UYA-AN): Remove Paint Behind Time To Go Dial. (EIB 956).

Correction Material: Not required.
4-A FA-1 EIB 956
EIC QM06
SERIAL: OA-7981A: A3, A4, Bl-B4. OJ-195: A1-A7, B1, Cl, D1, D2. OJ-197: A1-A4, Bl-B30, C1, D1, D2, E1, E2, G1-G4. IDENTITY: An area of paint (measuring about $1 / 2$ inches wide by $3 / 4$ inches high) has been removed from a surface behind the left side of the TIME TO GO dizal of the Symbol/ Track Control Panel.

40-OA-7981A/UYA-4(V): OSC Reliability Improvements.
Correction Material: To be provided.
1-C YF-24 NS0967-LP-562-6490
EIC QM06
SERIAL: OA-7981A: B1-B4. OJ-195: AI-A7, B1, C1, D1, D2, El, E2. OJ-197: A1-A4, B1-B30, C1, D1, D2, E1, E2, G1-G4, H1-H20.
IDENTITY: Verify instaliaition of jumper wires between R12 and pin 9 of the two 1549096-100 PC cards in left-hand card box, and between Z29-10 and connector pin 81 of the 1547984-100 PC card in slot A17A1A14.
NOTES: Prerequisite Field Change: 34-OA-7981A/UYA4(V), 23-OJ-195/UYA-4(V), 28-OJ-197/UYA-4(V).

41-OA-7981A/UYA-4(V): Under Development (02-78).
42-OA-7981ANYA-4(V): Correct Battleshort Switch Wiring. (EIB 975).

Correction Material: EIB 975.
4-A FA-1 EIB 975
EIC QM06
SERIAL: OA-7981A: A3, A4, Bi-B4. OJ-197: Al-A4, Bl-B30,
Cl, D1, D2, E1, E2, G1-G4, H1-H6.
IDENTITY: Verify that there is no wire connected to battleshort switch A15S1 pin 3.

1-OA-7984(V)/UYK (UN1VAC 1532): Incorporation of UNIVAC Field Change Orders MPL 201, 250, 265, 286, 297, 329, 333, 335B, 380, 390, 393, 529, 552A, 552B, 613, and 695 Correction Material: Contained in FCO package
1-A FA-29 NS0967-307-3090 EIC HA88000
SERIAL: Serial numbers as designated by Table I of field change
IDENTITY: Check field change in EIB 843 or MPL for indication of accomplishment.

## 1-OA-8012A/SRC-23(V): Same as 2-AM-3799/SRC-23(V)

1-OA-8337(V)/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group I, as a Unit Field Change

Correction Material: Delineated in the applicable maintenance bulletins

4-A FA EIC FU09000 SERIAL: Equipments as shown on Table I of field change IDENTITY: Observing field change number on Field Change plate.

2-OA-8337(V)/UYA-4(V): Modification to Make OA-8337(V)/ UYA-4(V) Compatible with AN/SYA-1, AN/SYA-4, and AN,UYA-1 Programs

Correction Material: T•1, NS0967-238-7141 to NS0967-2387140

2-A FA-I NS0967-238-7520 EIC QM06000 SERIAL: OA-8337(V)]/UYA-4(V), serials AI thru A 12 when used with non AN/UYA. $4(\mathrm{~V})$ installations
IDENTITY: Checking for wire changes as indicated in step 3 under Procedures.

## 1-OA-8337(V)1/UYA-4(V): Cancelled

## 1-OA-8337/UYA-4(V): Cancelled

## 1-OA-8398/GRD-6: Same as 1-OA-8398/FRD-10(V)

2-OA-8398/GRD-6: Improvement of CW Reception
Correction Material: Ch. 2, NS0967-265-8033 to NS0967.
265-8030; Ch. 2, NS0967-265-8082 to NS0967-265-8080

> 2-A FA-2 NS0967-265-8110

SERIAL: OA-8398/GRD-6; All serial numbers. (OA-8396/ FRD-IO(V) and OA.8397/FLR-9(V) equipments NOT affected.)

1-OA-8435/SPN-10: Under Development (09-77).
2-OA-8435/SPN-10: Same as 2-1D-1573/SPN-10
1-OJ-167/UYA-4(V): Load Once Circuitry (Correction to).
Correction Material: ACN 1/1 15 Aug. 77 to TM. NAVSEA 0967-LP-443-9020.

1-A FA-2 NS0967-LP-443-9030 EIC QM06 SERIAL: All serial numbers.
IDENTITY: Check for continuity between $6 \mathrm{E}-14$ and 6 F .11 , $6 \mathrm{~F}-15$ and 4F-6, TP3C-15 and 6F-15 on Chassis A5.

1-OJ-172(V)/UYK: Incorporation of Manufacturers Field Change Orders (ECO's) as a Unit Field Change

Correction Material: Reflected in revised publication
1-C YF: NS0967-323-3120
EIC QK00000
SERIAL: Serial numbers as indicated in TABLEI of the field change bulletin
IDENTITY: Accomplishment of manufacturers (UNIVAC) Field Change Orders (FCO's) may be determined by using the 'Quick Checks' listed in TABLE II of the field change bulletin.
NOTES: *Variable - depending on which field change order is being installed.

2-OJ-172(V)/UYK: Correct Printer Hangup
Correction Material: To be provided
IV-A IFA-1 EIB 908
SERIAL: Serial numbers B1 thru B20 and B22 thru B26
IDENTITY: This field change can be identified by a wire connected between J16C-10 and J16C-08 in the control logic chassis 93A4.

3-OJ-172(V)/UYK: Correct Duplexer/Master Clear Timing Problems.

Correction Material: Chg. 1, NS0967-LP-323-3011, to TM, NS0967-LP-323-3010 did 18 Oct. 72; and Chg. 1, NS0967-3233021, to TM, NS0967-323-3020 ded 18 Oct. 72.

I-A FA-20 NS0967-LP.323-3130 EIC QM4Z SERIAL: |BI thru B103.
IDENTITY: Check for continuity (zero ohms) between the following points in the logic chassis A4: J31A-34-2 and J31A. 41-2, J07C.-53-2 and J03-24-2, J27B-20-2 and J27B-17-2, J26C. $16-3$ and J37C.05-3, J06A-40-3 and J09C-02-3, J03C-103 and J45A-29-3.
4.OJ-172(V')/UYK: Prevent False Mag Tape IDR. (EIB 951) Correction Material: EIB 951.
4.A FA-1 EIB 951
EIC QM4Z

SERIAL: ISI thru Bll6.
IDENTITY: Verify installation of a wire connected between J39C-01 and J52C-04 in the control logic chassis 93A4. Prior to this fieid change, the wire was connected between J39C-01 and J58A-4.6 of chassis 93A4.
5.0J-172(V)/UYK: Under Development. (06-78)

6-OJ-172(V)/UYK: Stop Loop Box Cover Wear.
Correction Material: Chg. 3, NS0967-LP-323-3033, io TM, NS0967-LF. 323-3030 ded. June 72; and Chg. 3, NS0967.\&P. 323-3043, to TM, NS0967-LP-323-3040 did. June 73.

1-A F:A-1 NS0967-LP.323-3160 EIC QM4Z SERIAL: B1-B52, B56, B62, and B63.
IDENTITY: Verify that the loop box cover assembly ( $\mathrm{p} / \mathrm{n}$ 7601743) has window assembly ( $\mathrm{p} / \mathrm{n} 7603587.00$ ) installed which includes a metal insert wear plate.

7-OJ-172(V)/UYK: Power Supply Module Identification. (EIB 003)

Correction Material: None required.
4-A FA-1 EIB 003
EIC QM4Z
SERIAL: E31-B83, B99-B109.
IDENTITY: Verify that the power supply module is identified by UNIVAC $p / n 7073375-03,-05,-07,-11$, or -13 ; has a serial number (inked on module adjacent to $\mathrm{p} / \mathrm{n}$ ) within 147. 156, 284-302, 375-394, 612.623. 639-649, or 747-768; and does not have a nameplate identifying it as a PP.6395/UYK.7(V) Power Supply;

1-OJ-194(V)/UYA-4(V): Same as 20.0A-7979(V), 几'YA-4(V)
2-OJ-194(V)/UYA.4(V): Same as 21-OA-7979(V)/UYA-4(V)

3-OJ-194(V)/UYA-4(V): Same as 31-OA-7979(V)/UYA-4(V)
4-OJ-194(V)/UY A-4(V): Same as 32-OA-7979(V)/UY A-4(V)

## except

SERIAL: OJ-194(V)3: A1-A19, B1-B71, C1-Ci8. OJ-194(V)4: Al-A7, Bl, Ci.

3-OJ-194(V)/UYA-4(V): Add Display Control Panel Wiring.
Correction Material: Incorporated into revised TM's.
1-A FA-1 NS0967-LP-441-2050 EIC QM06
SERIAL: OJ-194(V)3 Serial no. Al-A19, B1-B15, Cl-Cl7. OJ-194(V)4 Serial no. Al-A7, B1, Cl. OJ-197 Serial no. AlA4, B1.
IDENTITY: OJ-194(V): Connections are made to pins 32, 36, 53, 54, 143 and 144 of A3P1. OJ-197: Connections are made to pins 31, 32, 33, 65, 66, and 67 of A1A3P1.
6.OJ-194(V)/UYA-4(V): Same as 33-OA-7979(V),UYA-4(V)
7.OJ-194(V)/UYA•4(V): Correct SAC Sweep Fading.

Correction Material: Incorporated into revised TM's.
1-A FA-9 NS0967-LP-441-2040
SERIAL: OJ-194(V)3: A1-A19, B1-B231, CI-C18, D1-D48 OJ-194(V)4: A1-A7, B1, Cl, D1-D5. OJ-197: A1-A4, Bl-B30, C1.
IDENTITY: Remove the 1604637-100 Clock Control Counter and Register cards from slots A11J! and J19 of the OJ-194(V) and (V)l, or from slots A16A1J) and J19 of the OJ-197, and verify that C7, R21, CR2, R57 and Q4 have been deleted and that R58 (243 ohms) and R59 (47 ohms) are installed.

8-OJ-194(V)/UYA-4(V): Same as 34-OA-7979(V)/UYA-4(V) except
SERIAL: A1 thru A19, B1 thru B265, C1 thru C18, D1 thru D92 and E1 thru E10 (OJ-194(V)3)) and Al thru A7, Bl, Cl and D1 thru D5 (OJ-194(V)4))

9-OJ-194(V)/UYA-4(V): Correct Data Enable Correction Material: None
IV-A FA-1.5 ElB 861 ElC QM06000
SERIAL: Al thru A19, Bl thru B15, C1 thru C3 (OJ-194(V)3/UYA-4(V)), A! thru A7 (OJ-194(V)4/UYA-4(V))
IDENTITY: Use a card extender and ohmmeter to make the following continuity checks: A9J31-22 to A15J3-95 - OPEN; A9J24-22 to A15J3-95 - SHORT

10-OJ-194(V)/UYA-4(V): Same as 35-OA-7979(V)/UYA-4(V)

11-OJ-194(V)/UYA-4(V): Provide Circle and Ellipse Display Capability.

Correction Material: To be provided
1-A FA-40 SE696.AE-FCB-010 EIC QM06
SERIAL: All serial numbers
IDENTITY: Verify that the following four (4) printed circuit boards have been installed: Circle-Eillipse Control ( $\mathrm{p} / \mathrm{n}$ 1606953-100) in siot A10J28, Ellipse Generators (p/n 1606775100) in slots AllJ8 and AllJ12, and SIN/COS Generator (p/ n 1606774-10 ) in slot A 11 JlO .
NOTES: Concurrent Field Changes: 3-OJ-194(V)/UYA-4(V) and 6•AM-6382/UYA-4(V)

12-OJ-194(V)/UYA-4(V): Same as 39-OA-7979(V)/UYA-4(V) except

SERIAL: OJ-194(V)3/UYA•4(V) - A1 thru A19, Bl thru B272, C1 thru C18, D1 thru D92, and E1 thru E32; OJ-194(V)4/UYA-4(V) - Al thru A7, B1, C1, Dl thru D5, El and E2

13-OJ-194(V)/UYA-4(V): Same as 41.OA-7979(V)/UYA-4(V) except
SERIAL: OJ-194(V)3/UYA-4(V) - A1-A19, B1-B195, C1-C18 and OJ-194(V)4/UYA-4(V) - Al-A7, B1, C1, D1-D5

14-OJ-194(V)/UYA-4(V): Same as 8-LS-537A/UYA-4(V) except
SERIAL: OJ-194(V)3/UYA-4(V) - A1 thru A19, Bl thru B231, Cl thru C18, D1 thru D52; OJ-194(V)4/UYA4(V) - Al thru A7, Bl, Cl, DI thru D5
IDENTITY: Remove intercom amplifier control card (1548022) at card location A10J31 (OI-194(V)3, and A!0J3i (OJ-194(V)4) and note the addition of a 1 N 914 diode between K9X2 and ground.

15-OJ-194(V)/UYA-4(V): Same as 46-OA-7979(V)/UYA-4(V) except
SERIAL: OJ-194(V)3/UYA-4(V) - AI thru A19, BI thru B231, Cl thru C18, HAC S/N's 289-297, OJ-194(V)4/UYA4(V) - A1 thru A7, B1, C1, D1 thru D5

16-OJ-194(V)/UYA-4(V): ARO/CRT Symbol Flash Modification

Correction Material: None required
I-A FA-4 NS0967-441-2030 ElC QM06000
SERIAL: Al thru A7, B1, Cl, Dl thru D5
IDENTITY: Presence of C14, C15, and C16 on random access memory, dynamic, card 1606758-100.

17-OJ-194(V)/UYA-4(V): Same as 49-OA-7979(V)/UYA-4(V) except
SERIAL: OJ-194(V)3/UYA-4(V) - Al thru A19, Bl thru B272, Cl thru C18, D1 thru D92, E1 thru E37; OJ-194(V)4/ UYA-4(V) - A! thru A7, B1, C1, D1 thru D5, E1 thru E2

18-OJ-194(V)/UYA-4(V): Same as 23-OA-7979(V)/UYA-4(V)

19-OJ-194(V)/UYA-4(V): Console Internally Generated and Refreshed Symbols (CIGARS).

Correction Material: To be provided.
1-C YF-40 SE686-AA-FCB-010
EIC QM06
SERIAL: All serial numbers.
IDENTITY: Verify installation of the following printed circuit cards: Memory Input-Line/Leader Control (p/n 1631421100 in slot A9A2, Random Access Memory (p/n 1621018-110 in slot A9A3, Circle/Ellipse Control ( $\mathrm{p} / \mathrm{n}$ 1631422-100 in slot A10A15, and symbol Hybrid Attenuator ( $\mathrm{p} / \mathrm{n}$ 1631423-100) in siot A11A11.
NOTES: Prerequisite Field Change: 3-OJ-194(V)/UYA-4(V).
20-OJ.194(V)/UYA.4(V): Special Tracker Mode Implementation

Correction Material: T.1, NS0967-LP-238-7151 to NS0967-LP-238-7150

I-A FA-7 NS0967-LP-562-6180 E1C DQ10000

SERIAL: OJ-194(V)3/UYA-4(V) - Serials Al thru A19, Cl thru C18, DI thru D29; OJ-194(V)4/UYA-4(V) - Serials A1 thru A7, CI, B1, and DI thru D5
IDENTITY: Check to see if the following wire changes have been made: From: A9 J4 pin 36 to A10 J27 pin 33; From: A9 J4 pin 36 to A9 J4 pin 52.

21-OJ-194(V)/UYA.4(V): Same as 51-OA-7979(V)/UYA-4(V) except
SERIAL: OJ-194(V)3/UYA-4(V) - Serials A1 thru A19, B1 thru B231, Cl thru C18, and D1 thru D11

22-OJ-194(V)/JYA-4(V): Same as 52-OA-7979(V)/UYA-4(V) except
SERIAL: OJ-194(V)3/UYA-4 - Serials A1 thru A19, Bl thru B272, C1 thru C18, DI thru D92 and E1 thru E37; OJ-194(V)4/UYA-4(V) - Serials A1 thru A7, B1, CI, D1 thru D5, E1 thru E2

23-OJ-194(V)/JYA-4(V): Same as 54-OA-7979(V)/UYA-4(V).
24.OJ-194(V)/(IYA-4(V): Same as 8-LS-537/UYA.4(V).

25-OJ-194(V)/JJYA-4(V): Add Secure Radio Channel Select Capability.

Correction Material: To be provided.
1.C YF-40 SE686-AC-FCB-010

EIC QM06
SERIAL: OJ-194(V)3 and (V)4: All serial numbers. OJ-197/ UYA-4(V): All serial numbers.
IDENTITY: Observe the Intercom Select Panel and verify that the lamp in the center is labelled NO ACCESS, READY and has a green lens.
NOTES: Prerequisite field Change: 24-OJ-194(V)/UYA-4(V), 19-OJ-197/UYA.4(V).

26-OJ-194(V)/JYA-4(V): Same as 56-OA-7979(V)/UYA-4(V)
27-OJ-194(V)/UYA-4(V): Same as 57-OA-7979(V)/UYA-4(V)
28-OJ-194(V)/JYA-4(V): PPI Cable Routing Improvement Correction Material: None
IV-A FA-1 EIB 917
SERIAL: Serial numbers A1 thru A19, B1 thru B272, C1 thru C18, D 1 thru D92, and E1 thru E10
IDENTITY: Remove the rear access plate or the card box assembly and observe that pin 73 of connector A20J5 is tied back to the hamess and marked with an identifying tag.

29-OJ-194(V) NYA.4(V): AEGIS Lid Two Character to Three Character per Word.

Correction Material: TM's will be changes.
1-A FA-40 NS0967-LP-562-6450 EIC QM06
SERIAL: To be selected by NA VSEA.
IDENTITY: Installation of 1631447-100 card in A51A! and 1631445-100 card in A50A3. Continuity (zero ohms) between A49P1-95 and A13J3-40 and between A49P1-94 and A13J3-25. NOTES: Prerequisite field change: 19-OJ-194(V)/UYA-4(V).

30-OJ-194(V)/JYA-4(V): Add Auto Reset to the DDEU. Correction Material: TM's will be changed.
1-A FA NS0967.LP-562.6430 EIC QM06

SERIAL: OJ-194(V)4 and OJ-197 serial numbers selected by NAVSEA.
IDENTITY: Check for continuity (zero ohms) between A9J25-73 and A5.51-97 and between ASP1-60 and A2J1.44 of the OJ-194(V)4; between A16A4J13-25 and A16A4J15-79 and between $A_{1} 16 \mathrm{~A} 4 \mathrm{~J} 20-73$ and A16A4J15.76 of the OJ- 197.
NOTES: Prerequisite field changes: 19-OA-194(V)4/UYA-
4(V) and 14-OJ-197/UYA-4(V).
31-OJ-194(V)/UYA-4(V): Madify Console to Allow Computer Reset of the Buzzer.

Correction Material: TM's will be changed.
1-A FA. 4 NS0967.LP. 562.6440
EIC QM06
SERIAL: OJ-194(V)4 AND OJ-197 serial numbers selected by NAVSEA.
IDENTITY: Presence of a 2-Input Gate, PC card no. 1550381-1(00, in card slot A10J18 of the OJ-194(V)4 and in card slot A16A4J4 of the OJ-197.
NOTES: Prerequisite field changes: 19-OJ-194(V),UYA-4(V) and 14.OJ-197/UYA.4(V).
32.OJ-194(V)/JY A-4(V): Mod to CCAE Readout Module Cover

Correction Material: Revised TM, NS0967-LP-441-2010 and NS0967-LP-238-7150, will be issued reflecting this field change.

4-A FA-2 EIB 924
SERIAL: OJ-194(V)3/UYA-4(V): A1-A19, B1 thru B272, ClC18, D1-D92, E1-E37, GI-G3, G12-G20. OJ-194(V)4/UYA. $4(V): A 1-A 77, B 1, C l, D 1-D 5, E 1, E 2$. OJ-197: Al-A4, B1-B30, C1, D1, D2, El, E2, G 3 -G4.
IDENTITY: Remove readout assembly from decoder modules (PN 20258-01 or 20258-02) installed in the CCAE panel and observe that a portion of the readout assembly has been removed so that the top lip of the cover does not extend past the end of the readour assembly.
33.OJ-194(V)/UYA-4(V): Under Development. (04-76).

34-OJ-194(V)/IJYA.4(V): CCAE Panel Optical Switch Moditjcation.

Correction Material: To be provided.
1-A FA-8 NS0967-LP-562-6500
EIC QM06
SERIAL: OJ-194(V)3: Al-A19, B1-B272, Cl-C18, D1-D92, El-E37, Cil-G20, H1-H156. OJ-194(V)4: Al-A7, B1, CI, DlD5, E1, E22, G1-G13. OJ-197: A1-A4, B1-B30, C1, D1, D2. E1, E2, G1-G4, H1-H20.
IDENTITY: Verify that the CCAE Panel contains Optical Photocell switch instead of a mechanical screen switch which has metal vertical dividers between switches.

35-OJ-194(V)/JYA-4(V): Direct Computer Interface.
Correction Material: To be provided.
1-A FA-12 NS0967-LP-562-6580
EIC QM06
SER1AL: OJ-194(V)3/UYA-4(V), OJ-194(V)4/UYA-4(V), and OJ-197/UYA-4(V): Serial number to be modified will be determined by NAVSEC 6178.
IDENTITY: Verify installation of Data Line Receiver Printed Circuit Caird (1631457-100) in A9Jl of OJ-194(V)3 and (V)4, or in A16A3Jl of OJ-197.

NOTES: Prerequisite Field Changes 19-OJ-194(V)/UYA-4(V) or 14-OJ-197/UYA-4(V).

36-OJ-194(V)/UYA-4(V): Prevent Oscillations in 1604622-100 card.

Correction Material: OJ-194(V): Use TM, NS0967-LP-2387130 dtd June 74. OJ-200: Use TM, NS0967-LP-238-7130 dtd June 74, and Chg. 1, NS0967-LP-535-3011, to TM, NS0967-LP-535-3010 dtd May 73. IP-1117: Use TM's, NS0967-LP-5355010 dtd June 74, and NS0967-LP-238-7130 dtd June 74.

1-A FA-4 NS0967-LP-535-3040 EIC QM06 SERIAL: OJ-194(V)4: A1-A7, B1, C1. OJ-200: A 1. IP-1117: AI.
IDENTITY: Remove the Major Deflection Amplifier ( $\mathrm{p} / \mathrm{n}$ 1604622-100) from AlA3J7, 8, and 9, and A1A4J7, 8, and 9 for the IP-1117; from A3J22, 23, and 24, and A3J29, 30, and 31 for the OJ-200; or from A50J6, 7, 8, and A5IJ7, 8, and 9 for the OJ-194(V)4, and verify that R26 has been changed from 5.1K ohms to 200 ohms and that $\mathrm{Cl} 5(0.1 \mathrm{uFd})$ has been installed in parallel with R26.

37-OJ-194(V)/UYA-4(V): Under Development. (06-77).
38-OJ-194(V)/UYA-4(V): Under Development (11-77).

39-OJ-194(V)/UYA-4(V): Under Development (11-77).
40-OJ-194(V)/UYA-4(V): Same as 6-LS-537/UYA-4(V).
41-OJ-194(V)/UYA-4(V): Correct Microphone Wiring. (EIB 970).

Correction Material: None required.
4-A FA-1 EIB 970
EIC QM06
SERIAL: OJ-194(V)3/UYA-4(V) serial numbers Gl-G20, H1H53, and H56.
IDENTITY: Verify continuity (zero ohms) between AlOJ3261 and A10J31-9 in the card box.

1-OJ-195/UYA-4(V): Under Development (11-71)
2-OJ-195/UYA-4(V): Same as 12-OA-7981A/UYA-4(V)

3-OJ-195/UYA-4(V): Under Development (06-72)
4-OJ-195/UYA-4(V): Same as 15-OA-7981A/UYA-4(V)
5-OJ-195/UYA-4(V): Same as 32-OA-7979(V),UYA-4(V) except EQU1PMENT - OJ-195/UYA-4(V), SERIAL - Al A7

6-OJ-195/UYA-4(V): Same as 17-OA-7981A/UYA-4(V) except SERIAL: AI thru A7, B1

7-OJ-195/UYA-4(V): Same as 27-OA-7981A/UYA-4(V)
8-OJ-195/UYA-4(V): Same as 18-OA-7981A/UYA-4(V)
9-OJ-195/UYA-4(V): Correct CRT Modulation and Blooming. Correction Material: Incorporated into revised TM's.
1-A FA-6 NS0967.LP-562-6320

SERIAL: OJ-195: A1-A7, B1, C1, D1, D2. OJ-197: AI-A4, B1-B30, Cl, D1, D2, E1, E2, G1-G4.
IDENTITY: Remove Intensity Coupler AI6A1A27 and verify that R18 is 3.3 megohms; K1, K2, VR6, CR7, and Q1 have been removed; and a high voltage waming decal has been added to the back side of the card.

10-OJ-195/UYA-4(V): Under Development (06-73)
11-OJ-195/UYA-4(V): Same as 40-OA-7979(V)/UYA.4(V) except
SERIAL: Al thru A7 and
IDENTITY: OJ-195/UYA-4(V) - A16A1J6, A16A1JI4 and AI6AlJ21

12-OJ-195/UYA-4(V): Same as 41-OA-7979(V)/UYA-4(V) except
SERIAL: A 1 thru A7, B1 and B2
13.OJ-195/UYA.4(V): Same as 8-LS-537A/UYA-4(V) except SERIAL: AI thru A7, and B1
IDENTITY: Remove intercom amplifier control card (1548022) at card location AI7A2J3 and note the addition of a IN914 diode between K9X2 and ground.

14-OJ-195/UYA-4(V): Same as 26.OA-7981A/UYA-4(V) except
SERIAL: AI thru A7, and B, B2
15-OJ-195/UYA-4(V): Same as 19-CV-2095(V),UYA-4(V) except
SERIAL: OJ-195/UYA-4(V) - A I thru A7, B1
16-OJ-195/UYA-4(V): Same as 51-OA-7979(V)/UYA-4(V) except
SERIAL: A1 thru A7, B1 and B2

17-OJ-195/UYA-4(V): Same as 8-LS-537/UYA-4(V).

18-OJ-195/UYA-4(V): Under Development (08-75)
19-OJ-195/UYA-4(V): Same as 56-OA-7979(V)/UYA-4(V)
20-OJ-195/UYA-4(V): Same as 58-OA-7979(V)/UYA-4(V).
21-OJ-195/UYA-4(V): Same as 33-OA-7981A/UYA-4(V).
22-OJ-195/UYA-4(V): Same as 60-OA-7979(V)/UYA-4(V).
23-OJ-195/UYA-4(V): Same as 34-OA-7981A/UYA-4(V).

24-OJ-195/UYA-4(V): Under Development. (06-77).
25-OJ-195/UYA-4(V): Same as 37-OA-7981A/UYA-4(V)
26-OJ-195/UYA-4(V): Under Development. (01-77).
27-OJ-195/UYA-4(V): Same as 39-OA-7981A/UYA-4(V).

28-OJ-195/UYA-4(V): Same as 40-OA-7981A/UYA-4(V).

29-OJ-195/UYA-4(V): Same as 6-LS-537/UYA-4(V).
1-OJ-196(XN-1)/UYA-4(V): Same as 33-OA-7979(V)/UYA4(V)

2-OJ-196(XN-1)/UYA-4(V): Same as 49-OA-7979(V)/UYA4(V) except
SERIAL: 1 and 2
3-OJ-196(XN-1)/UYA-4(V): Same as 52-OA-7979(V)/UYA. 4(V) except
SERIAL: 1 and 2
1-OJ-197/UYA-4(V): Increase Computer Controlled Readout Capability from 54 to 72 Readouts

Correction Material: To be supplied
I-A FA-24 NS0967-LP-562-6230 EIC QM06000 SERIAL: Equipments selected by NAVSEC 6172B
IDENTITY: Note that the II XY-to-R0 converter data readouts (fourth set of readouts from left side of console) have been replaced by 18 (computer controlled) auxiliary data readouts.

2-OJ-197/UYA-4(V): Same as 15-OA-7981A/UYA-4(V)
3-OJ-197/UYA-4(V): Same as 32-OA-7979(V)/UYA-4(V) except EQUIPMENT - OJ-197/UYA-4(V), SERIAL: A1 A4, B1-B5

4-OJ-197/UYA-4(V): Same as 5-OJ-194(V)/UYA-4(V)
5-OJ-197/UYA-4(V): Same as 17-OA-7981A/UYA-4(V) except SERIAL: Al thru A4, Bl thru B4, Cl

6-OJ-197/UYA-4(V): Same as 7-OJ-194(V)/UYA-4(V)
7-OJ-197/UYA-4(V): ODU Transfer of THDUR DATA Correction Material: T- to NS0967-LP-238-7120 4-A FA-2 EIB 899 EIC QM06000
SER1AL: Seisal numbers A1 thru A4, B1, B2, and Cl
IDENTITY: Confirm that continuity (zero ohms) exists between A16A4J22 pin 75 and A16A4J26 pin 81.

8-OJ-197/UYA-4(V): Same as 27-OJ-195/UYA-4(V)
9.OJ-197/UYA-4(V): Same as 18-OA-7981A/UYA-4(V)

10-OJ-197/UYA-4(V): Advance Assignment
11-OJ-197/UYA-4(V): Same as 41-OA-7979(V)/UYA-4(V) except
SERIAL: A1 thru A4, Bi thru B25 and Cl
12-OJ-197/UYA-4(V): Same as 8-LS-537A/UYA-4(V) except
SERIAL: A1 thru A4, B1 thru B32, and Cl
IDENTITY: Remove intercom amplifier control card (1548022) at card location Ai7A2J3 and note the addition of a 1N914 diode between K9X2 and ground.

13-OJ-197/UYA-4(V): Same as 26-OA-7981A/UYA-4(V)

## except

SERIAL: Al thru A4, Bl thru B26, and Cl
14-OJ-197/U YA-d(V): Advance Assignment
15-OJ-197/UYA•4(V): Same as 20-OJ-194(V)/UYA-4 except SERIAL: A 1 thru A4, and Cl

16-OJ-197/UYA-4(V): Same as 19-CV-2095(V)/UYA-4(V)
17-OJ-197/UYA-4(V): Same as 51-OA-7979§V)/UYA.4(V) except
SERIAL: A1 thru A4, Bl thru B25 and Cl
18-OJ-197/UYA-4(V): Same as 8-LS-537/UYA-4(V).
19-OJ-197/UYA-4(V): Same as 25-OJ-194(V)/UYA-4(V).
20-OJ-197/UYA-4(V): Same as 56-OA-7979(V)/UYA-4(V).

21-OJ-197/UYA-4(V): Same as 31-OJ-194(V)/UYA-4(V)
22-OJ-197/UYA-4(V): DRO Coding Change.
Correction Material: TM's will be changes.
1-A FA-4 NS0967.LP-562-6420

## EIC QM06

SERIAL: To be selected by NAVSEA
IDENTITY: Disconnect AIP1 and check for continuity (zero ohms) between AlP1-5 and AlJ13-32. Removal of 18 Readout Cells (P/N 1548135) located in AlA43 thru AlA 60. Removal of Lamp Driver cards (P/N 1537590-100) located in AlA7 thru AlA12.
NOTES: Prerequisite field change: 14-OJ-197/UYA-4(V)
23-OJ-197/UYA-4(V): Same as 30-OJ-194(V)/UYA-4(V).
24-OJ-197/UYA-4(v): Same as 33-7981A/UYA-4(V).
25-OJ-197/UYA-4(V): Same as 9-OJ-195/UYA-4(V).
26-OJ-197/UYA-4(V): Same as 32-OJ-194(V)/UYA-4(V).
27-O3-197/UYA-4(V): Same as 34-OJ-194(V)/UYA-4(V).
28-OJ-197/UYA-4(V): Same as 34-OA-7981A/UYA-4(V).
29-OJ-197/UYA-4(V): Under Development. (04-76).
30-OJ-197/UYA-4(V): Same as 37-OA-7981A/UYA-4(V).
31-O3-197/UYA-4(V): Under Development. (04-76).
32-OJ-197/UYA-4(V): Under Development. (06-77).
33-OJ-197/UYA-4(V): Same as 39-OA-7981A/UYA-4(V).
34-OJ-197/UYA-4(V): Same as 40-OA-798tA/UYA-4(V).
35-OJ-197/UYA-4(V): Under Development (1;-77).
36-OJ-197/UYA-4(V): Same as 6-LS-537/UYA-4(V).

## 37-OJ-197/UYA.4(V): Same as 42-OA-7981A/UYA-4(V).

38-OJ-197/UYA.4(V): Same as 35-OJ-194(V)~UYA-4(V).

1-OJ-200/UYA-4(V): Same as 8-LS-537A/UYA-4(V) except SERIAL: Al thru A2
IDENTITY: Remove intercom amplifier control card (1548022) at card location A312 and note the addition of a 1N914 diode between K9X2 and ground.

2-OJ-200/UYA-4V): Same as 36-OJ-194(V)/UYA-4(V)
1-OJ-2\&2(V)1/UYK: By Pass Thermal Relay (K1) Correction Material: None
1-A FA-2 NS0967-076-7060 EIC QK05000

## SERIAL: All serial numbers

IDENTITY: A 250770 printed circuit card in J13C indicates this field change is accomplished.

## 2-OJ-212(V)1/UYK: Secure Filter Assembly Correction Material: None

1-A FA-0.5 NS0967-076-7070
EIC QK05000
SERIAL: All serial numbers
IDENTITY: The presence of two screws in the filter frame indicate this field change has been accomplished.

3-OJ-212(V)1/UYK: Clear RDUC Function Code
Correction Material: None
1-A FA-1 NS0967-076-7080 EIC QK05000
SERIAL: All serial numbers
IDENTITY: Continuity between J12A-7 and J40B-10 indjcates this field change has been accomplished.

4-OJ-212(V)1/UYK: Switch Safety Shield
Correction Material: None required
I-A FA-1 NS0967-076-7100
SERIAL: All serial numbers
IDENTITY: Open the top of the Input-Output Console and observe that the switches located on the left side of the cover have a plastic shield over the wired side.

5-OJ-212(V)1/UYK: NTDS Teletype Unit Code Standardization

Correction Material: T-1, NS0967-LP-076-7011 to NS0967-LP.076-7010; T-2, NE0967-LP-972-7022 to NE0967-LP-9727020

1-A FA-5 NS0967-LP-076.7110
SERIAL: All serial numbers of new production OJ-212(V)1/ UYK Input-Outpus Consoles. This field change does not apply to OJ-212(V)l/UYK's modified form AN/UGC.13(MOD) by 8-AN/UGC. 13.
IDENTITY: Remove the four screws that secure the page printer. Remove page printer and observe the set of gears that make up the intermediate gear mechanism. Verify that gears, bearing teletype part number 159284, 159285, and 163440 have replaced gears with the numbers 163463. 163464, and 163460 respectively. Re-install page printer. CAUTION: Only qualified personnel should attempt removal and replacement of page printer.

6-OJ-212(V)1/UYK; Low Level Modification

Correction Material: TM, NS0967-530.8010 dtd 30 Oct 72, reflects this modifacation.

1-C YF-120 NE0967-LP-076-7130 EIC QK05 SERIAL: Designated by NAVSEC
IDENTITY: Identification is made by the placement of the Maintenance Control Panel of space location other than under the Transmitter Distributer.
NOTES: Prerequisite field changes: 1, 2, 3, 4, and 5-OJ-
212(V)1/UYK.
1-OJ-212(V)2/UYK: Same as 1-OJ-212(V)1/UYK
2-OJ-212(V)2~UYK: Same as 2-OJ-212(V)1/UYK

## 3-OJ-212(V)2/UYK: Same as 3-OJ-212(V)I/UYK

1-OJ-287/UYK: Incorporation of Mfgr's Changes as a Unit Field Change. Philco Change No.'s 1-7, 1A, 3A-6A. These changes should have been accomplished by field engineers.

Correction Material: Revised Publications
4-A FA-2 EIB 900
SERIAL: AI-A12
IDENTITY: See EIB 900.

2-OJ-287/UYK: Clear Carriage Return F.F. when out of Paper.

Correction Material: EIB 901
2-A FA-5 EIB 901
SERIAL: A1-A21
IDENTITY: Wire Connected between location 0307-03 and 0405-04 in logic assembly 1A1A2A1.

3-OJ-287/UYK: Change Bias on Power Driver Board
Correction Material: T-1, NS0967-LP-535-8012, to NS0967-
LP-535-8010 dtd : Dec 73, and T-1, NS0967-LP-535.8022, to
NS0967-LP-535-8020 dtd 1 Dec 73.
1-A FA.] NS0967-LP-535-8030
SERIAL: A1 thru A21
IDENTITY: Observe Power Driver Assembly (IAIA2A2) and verify that R11, R27, R33, R45, R51, R71, R77 are 200 ohms; R5 is 39 ohms; CR31 is Type IN966B; and C1 thru C12 are removed.

4-OJ-287/UYK: Keyboard Printer, Print First Character. (EIB 945)

Correction Material: EIB 945
2-A FA.1 EIB 945
EIC QM50
SERIAL: A1 thru A21 and B! thru B21.
IDENTITY: Check for continuity (zero ohms) between 05-0905 and 08.02-06, and for an open between 05-09.05 and 05-02-
11 in Logic Assembly 1A1A 2 A1.
22-OJ-197/UYA-4(V): DRO Coding Change.
Correction Material: TM's wo;; be changed.
3-A FA-4 NS0967-LP-562-6420 EIC QM06 SERIAL: To be selected by NAVSEA
IDENTITY: Disconnect A1P1 and check for continuity (zero ohms) between A1P1-5 and AIII3-32. Removal of 18 Readout Cells (P/N 1548135) located in AlA143 thru AlA60. Removal of Lamp Driver cards (P/N 1537590-100) located in A!A7 thru A!A!2.

1-OL-91/FSH-10: Replace Fuse F1 in Signal Electronic and Relay Power Supply Assembly

Correction Material: Ch. 1, NE0967-429-4051 to NE0967. 429-4050

I-A YF-1 NE0967-429.4080
SERIAL: Drum Recorder/Reproducer, Model 4201, Signal Electronic and Relay Power Supplies Assembly (1A1)
IDENTITY: The replacement fuse is a slow-blow 8 ampere, MIL Type F03A250V8A. (See figures 5-6 and 5-8, NAVELEX 0967-429-4050 for location.) Nameplate on front panel of Assembly 1A1 is changed to read 'Spare 8A SB' and 'F1 8A SB.

1-ON-143(V)3/USQ: Conversion of ON-143(V)3/USQ to ON143(V)4/US (Nomenclature changed accordingly.)

Correction Material: None required.
1-A FA-1 NE0967.LP-614-7020
EIC QQ40
SERIAL: 6.10, 13, 15, 17, 19, 20, 30, 31, 32, 34, 35, 41, 42, $54-$ 67, and 74-115.
IDENTITY: Verify that the Red Card Cage (IA4) contains Vocoder cards $1 A 13$ and 1A14. On the right side of the front panel, the nameplate should bear number 74E2N 16 .

2-ON-143(V)3/USQ: Addition of Insulatin strip to Electronic Card Cages.

Correction Material: To be provided.
1-A FA-1 NE0967-LP-614-7040 EIC QQ40
SERIAL: 6-10. Subsequent serial numbers will have this field change installed during production.
IDENTITY: Verify that three plastic (sheet, laminated) insulators have been installed on the inside wall of the card cages: One insulator in the Red Card Cage adjacent to 1A33 and two insulators in the Black Card Cage adjacent to 1A16 and 1A18.

3-ON-143(V)3/USQ: Installation of Modified Power Line Filter.

## Correction Material: To be Frovided

1-A FA-2 NEO967-LP-614-7050
SERIAL: ON-143(V)3/USQ: All serial numbers. ON143(V)4/USQ: All seria! numbers thru 0553. ON-i43(V)5/ USQ: All serial numbers thru A105. Subsequent serial numbers of ON-143(V)4/USQ and ON-143(V)5, USQ will have this field change installed during production.
IDENTITY: Verify installation of new power line filter (lW10FL1): New filter $p / n$ is 74E2N910; old $p / n$ is 74E2N275.

4-ON-143(V)3/USQ: Installation of Cable Retainer.
Correction Material: To be provided.

## 1-A FA-1 NE0967-LP-614.7060

SERIAL: ON-143(V)3/USQ: All serial numbers thru 110. ON-143(V)5/USQ: A1 and A2. RD-396(V)/U: All serial numbers thru 053. Subsequent serial numbers of these three equipments will have this field change installed during production. IDENTITY: Verify installation of a cable retainer ( $\mathrm{p} / \mathrm{n}$ 74 E 2 N 869 ) located over the folded-over end of the ribbonwire harness behind interlock switch S1.

1-ON-143(V)/USQ: Correct Incompatability with CV-3333. Correction Material: To be provided. 1.A FA-1 NE0967-LP-614-7030

SERIAL: ON-143(V)4/USQ: 0120, 0121, 0124-0177, and 02390301. ON-143(V)5/USQ: A001-A007. Subsequent serial numbers of both equipments will have this field change installied during production.
IDENTITY: Verify installation of new Secure Voice Module (1A13). New module is $\mathrm{p} / \mathrm{n} 74 \mathrm{E} 2 \mathrm{~N} 895$; replaced module is $\mathrm{p} /$ п 74E2N384.

2-ON-143(V)4/USQ: Same as 3.ON-143(V)3.USQ.
1-ON-143(V)5/USQ: Same as ?.ON-143(V)4/USQ

## 2-ON-143(V)5/USQ: Same as 3-ON-143(V)3/USQ.

## 3-ON-143(V)5/USQ: Same as 4-ON-143(V)3/USQ

1-OS-54/URN-3: Providing a dummy load for the OS-54 Type Oscilloscope

Correction Material: None
2-A FA-0.5 NS0967-095-4020 None SERIAL: All
IDENTITY: A MX-554A, $\cup$ will be attached to the front of the oscilloscope by a chain, in place of a dust cap for the vertical signal input.

2-OS-S4/URN-3: Same as 2-OS-54A/URN-3 except
Correction Material: T-4, NS0967-095-4011 to NS0967-095. 4010

## NS0967.095-4030

1-OS-54A/URN-3: Same as 1-OS-54/URN-3
1.OU-91(V)/LYA-4(V): Under Development (3-73)

2-OU-91(V)/UYA-4(V): TACS/TADS Hardware Changes
Correction Material: TM, NS0967-LP-535-4020 did 23 Aug 76, reflects this field change

1-A FA-25 NS0967-LP-535-4110
SERIAL: OU-91(V)1: A1-A4, BI, Cl. OU-91(V)2: A1-A4, B1, B2, C1, C2. OU-91(V)3: A!, B1. OU-91(V)6: A1.
IDENTITY: Verify continuity (zero ohms) between the following points in the left-hand card box. OU-99(V)i, (V)2, (V)3 without FC 1 installed: from A2A1J8-62 to A2A1J4-45 and from A2A258-62 to A2A1J4-42. OU-91(V)1, (V)2, (V)3 with FC 1 installed: from A2A1J8-62 to A2A1J4-42 and from A2A2J8. 62 to A2A2J4-42. OU-91(V)6: from A2A1J7-62 to A2A1J3-45 and from A2AlJ4-76 to A2A1J3-51.

3-OU-91(V)/UYA.4(V): Under Development (9-73)
4.OU-91(V)/UYA-A(V): Under Development (10-73)
5.OU-91(V)/UYA-4(V): Same as 16.OJ-194(V)/UYA-4(V) except
SERIAL: OU-91(V)6/UYA•4(V) (CV-3122/UYA-4(V)) - A1 (Al).
NOTES: information in 0 parenthesis applies to the basic unit of the prime equipment being modified.

6-OU-91(V)/UYA-4(V): Same as 2.AM-6382 NYA-4(V) except

SERIAL: (Information in () parenthesis applies to the basic unit of the prime equipment being modified.) OU-91(V)l/ UYA-4(V) (CV-3057/UYA-4(V)) - A1(A1), A2(A2), A3(A3), A4(A5), BI(B3); OU-91(V)2/UYA-4(V) (CV-3057/UYA-4(V)) - Al(A4), A2(A6), A3(A7), A4(A8), B1(B1), and B2(B2); OU-91(V)3/UYA-4(V) (CV-3057/UYA-4(V)) - A1(B4); OU-91(V)6/UYA-4(V) (CV-3056/UYA-4\{V)) - A!(A 1)

7-OU-91(V)/UYA-4(V): Reimplement MSB of Digital Theta
Correction Material: T-1, NS0967-LP-535-4041 to NS0967. LP-535-4040; T-1, NS0967-LP-535-4051 to NS0967-LP-5354050

1-A FA-1.5 NS0967-LP-535-4100 ElC QM06*0 SERIAL: OU-91(V)!/UYA.4(V) (CV-3052/UYA-4(V)) . Al(A1), A2(A2), A3(A3), A4(A4), B1(Bl); OU-91(V)2/UYA4(V) (CV-3053/UYA-4(V)) - Al(A1), A2(A2), A3(A3), A4(A4), B1 (B1), B2(B2)
IDENTITY: Using card extenders and an ohmmeter make the following continuity checks in the RAC channel indicated: CV-3052/UYA-4(V) (SPS-39 RAC). Refer to page 4-0-3 of NAVSEA 0967-LP-535-4040, dated 23 April 1974, for area location: Check Points J15-29 to J17-86 Open; J12-73 to J17-86 Short. CV-3053/UYA-4(V) (SPS-48/52 RAC). Refer to page 4-0-3 of NAVSEA 0967-LP-535-4050, dated 23 April 1974, for area location: Check Points $113-71$ to J13-79 Open; J13-71 to J13-17 Short.

8-OU-91(V)/UYA-4(V): Same as 19-CV-2095(V)/UYA-4(V)

9-OU-91(V)/UYA-4(V): Addition of CV-3211
Correction Material: Supplemental TM, NS0967-LP-6053010 did 23 Aug 76, includes information supporting this field change
1.A FA-16 NS0967-LP-605-3020 EIC QM06 SERIAL: All serial numbers of OU-91(V)1, (V)2, (V)3, (V)8, (V) $9,(\mathrm{~V}) 10$, and (V) $11 / \mathrm{UYA}-4(\mathrm{~V})$.

IDENTITY: Verify that the CV-321 1/UYA-4(V) Radar Azimuth Converter (RAC) is installed in location A7A1.

10-OU-91(V)/UYA-4(V): Same as 11-CV-1321/SYA-4(V) except
SERIAL: OU-91(V)1/UYA-4(V) - Al thru A4, Bl, and Cl; OU-91(V)2/UYA-4(V) - A1 thru A4, B1, B2, C1 and C2; OU-91(V)3/UYA-4(V) - Al and B1; OU-91(V)8/UYA-4(V) - Al

11-OU-91(V)/UYA-4(V): Same as 4-AM-6382/UYA-4(V) except

1-A FA-4 NS0967-LP-483-4040
SERIAL: OU-91(V)1: A1-A4, B1. OU-91(V)2: A1-A4, B1, B2. OU-91(V)3: Al. OU-91(V)6: Al.
IDENTITY: In the CV-3057/UYA-4(V) (P/O OU-91(V)1, 2 , and 3), check continuity (zero ohms) between A2A1J15-15 and A2A1J10-25 and check continuity (open) between A2AlJ10-10 and A2A1J10-25. In the CV-3056/UYA-4(V) (P/ O OU-91(V)6, check for installation of a jumper wire between the plate thru holes ( $\mathrm{Z} 6-9$ and Z 2 , where wire to pin 37 connects) of the 1579981-100 Clock Puise Generator Card, Slot A2AlA9.
12.OU-91(V)/UYA-4亿V): Add E3 Groundstrap for System

Ground Return
Correction Material: None required
1-A FA-1 NS0967-LP-535-4120
EIC QM06
SERIAL: OU-91(V)1: Al thru A4, B1, C1. OU-91(V)2: A! thru A4, B1, B2, C1, C2. OU-91(V)3: A1, B1. OU-91(V)6: AI. OU-91(V)8: Al.
IDENTITY: Installation of ground strap between A7W1E10 and Al0E3.

13-OU-91(V)/UYA-4(V): Under Development. (01-77).
14.OU-91(V)/UYA-4(V): Same as 7-AM-6382/UYA-4(V)

15-OU-91(V)/UY A-4(V): Under Development (08-77)

16-OU-91(V)/UYA-4(V): Addition of CV-3189 RAC.
Correction Material: To be provided.
1-A FA-40 SE690-AB-FCB-010
SERIAL: OU-91(V)1, (V)2, (V)3, (V)9, (V)10, and (V)1 1: All serial numbers.
IDENTITY: Verify that a Radar Azimuth Converter CV-3189/UYA-4(V) has been installed in area A7A1. If Field Change 9.OU-91(V)/UYA-4(V) is installed, the CV-3189/ UYA-4(V) will be in an area other than A7A1.

## 17-OU-91(V)/UYA-4(V): Same as 27-CV-2095(V)/UYA-4(V).

18-OU-91(V)/UYA-4(V): CEG, 5.75V Preload and Meter Centering.

Correction Material: ACN $1 / 2$ to TM, NS0967-LP-5354010 did 26 Jun 75, with Chg. 1, NS0967-LP-535-4011 did 23 Aug 76 incorporated.

1-A FA-8 NS0967-LP-535-4130
SERIAL: OU-91(V)1: Al-A4, Bl, Ci. OU-91(V)2: Al-A4, B1, B2, C1, C2. OU-91(V)3: A1, B1, C1. OU-91(V)6: A1. OU91(V)8: At. OU-91(V)9: A1. OU-91(V)10: A1.
IDENTITY: Verify installation of A6R1 and A6R2 (56 ohm resistors) en top front of A6 Control Relay Bracket. Verify installation of R14 ( 2.5 K ohm pot.) mounted on inside bottom of A 3 Control Panel.

19-OU-91(V)/UYA-4(V): Under Development (01-79).
1-PP-338/U: Modification of Power Supply to Provide Remote High Voltage Control
2-A FA-8 NS0967-213-1020 None

SERIAL: All in use with TDE transmitters at Naval Reserve Shore Installations

2-PP-338/U: Replacement of Circuit Breakers K101 and K102 Correction Material: T-1 to NS91137
A FA-0.5 NS98207 F6130-549.
0823
SERIAL: Al!
IDENTITY: New circuit breakers, K-101 and K-102, are mounted on adaptor plates made to fit front panel mounting holes.

1-PP-765/U: Correction of VX-103 Wiring
Correction Material: 「-3 to NS91557
2.A FA.1 NS98594 F6130-3257495
SERIAL: 1.483
IDENTITY: Pin I of tube socket XV-103 tied directly to ground.

## 1-PP-765A/U: Same as 1-PP-765/U except

SERIAL: 1-100
1-PP-782A/SAR-4: Addition of Adjustable Resistor in Power Supply

Correction Material: T-1 to NS92413
A FA-1/4 NS98670 None
SERIAL: 2056-2065, 2067-2068, 2072, 2073, 2077-2079, 2085 -
2102, 2552-2555
IDENTITY: Unit must be disassembled to identify. R-201, 2500 ohm ww, mounted near input filter X-201. When removing pane! from housing lift panel straight up to avoid damage to P204.

1-PP-1092/U: Installation of Thermal Time Delay Relay in Primary Circuit of T-2

Correction Material: None
2-A FA-2 NS0967-213-1020 None
SERIAL: Equipments when installed for use with AN/ARC.
1, IA
IDENTITY: Presence of a thermal time delay relay installed on the bottom of the power supply chassis adjacent to C.4.

1-PP-1211/U: Correction of Safety Hazard which Exists in Power Supply PP-121\}/U when Connected to Radio Telegraph Transmitting Equipment TBL-12 and TBL-13

2-A FA-8 NS981198
None
SERIAL: Combinations of Power Supply PP-1211/U and Radio Telegraph Transmitting Equipment TBL-12 and TBL13
IDENTITY: Terminal board TB-101 has the word 'SWITCH' in place of 115 VAC.

1-PP-3495C~UG: Housing Assembly Replacement and Addition of Chassis Bottom Cover

Correction Material: T-1, NS0967-254-7011 to TM, NS0967-254-7010

1-A FA-I NS0967.254.7040
SERIAL: All equipments
IDENTITY: The housing assembly will completely cover the terminal board at the rear of the unit and the chassis bottom cover will completely cover the exposed wiring on the bottom of the unit.

1-PP-4665A/U: Prrempt Circuit Disabling. (Nomenclature changed to PP.4665B/U.)

Correction Material: Revised TM, NE0967-LP-207-3140.
1-C YF-20 NE0967-LP-207.3760
SERIAL: All serial numbers of PP.4665A/U used in AN/ WLR-6(V) installations.
IDENTITY: Selector switch has blank panel on left side, cov. ering preempt test positions.

I-PP-4796/FSH-5: Recorder/Reproducer Set - Change in

Value of Fuse to Improve Protection for Secondary Circuits Correction Material: T- to NS0967-226-7010
II-A FA.I
EIB 854
SERIAL: All seitial numbers
IDENTITY: Presence of a 2.5 ampere fuse at 24A4F1.
1-PP-4995/UG: Provides a Visual Indication in the Event that

## Fuse F-2 Blows

Correction Material: None required
II-A FA-I NS0967-459-1030
EIC Q300000
IDENTITY: Notice that the 2 amp fuse will have a light-indicating holder.

1-PRECISION BEARING UNIT (NAVORD Dwg. \#2824239):
Clamp Screws Replacement
Correction Material: None required
2-A FA. 5 NS0967-325-1030
SERIAL: All serial numbers
IDENTITY: Screws holding synchro clamps are socket head (allen) vice phillips head.

1-PRECISION RANGE UNIT (NAVORD DFg. \#2679517):
Clamp Screws Replacement
Correction Material: None required
2-A FA. 5 NS0967.325-1020
SERIAL: All serial numbers
IDENTITY: Screws holding synchro clamps are socket head (allen) vice phillips head.

1-PT.490/UYA-4V): Incorporation of HAC Maintenance Bulletin, Group I. as a Unit Field Change

Correction Material: Delineated in maintenance bulletin 4-A FA

EIC FU09000
SERIAL: Equipments AI thru $\mathrm{Al9}$,Cl and C 20
IDENTITY: Inspect the 'CURSOR' and 'BEARING' knobs on the Plotting Board for the absence of the knob lock assembiy and by inspecting the area adjacent to the Plotting Board assembly number for Field Bulletin Decal indicating this change.

## 1-PI-490A/UYA-4(V): Reflection Plotter Dust Seal

Correction Material: None required
I-A FA. 1 NS0967.562-6030 EIC QM60000
SERIAL: Serial numbers AI thru A71, B1 thiv B28, B30 thru
B179, Cl thru C14, D1 thru D196, D200 thru D233, D235 thru D241. D243, D245 thru D269, E1 thru E36, and G-1 thru G30.
IDENTITY: Remove the reflection plotter panel and check that the dust shield is in place inside the CRT retaining aing against the CRT face.

1-PT-512/S: Improved Air Filtering System and Temperature Override Warning

Correction Material: T.1, NS0924-038-3011 to NS0924-0383010; T•1, NS0924.038-3021 to NS0924.038-3020

I-A FA.0.5 NS0924-038-3030 EIC LD0R000 SERIAL: All serial numbers
IDENTITY: The presence of two filters, 4-11/16' $\times 4-11 / 16^{\circ} \times$ 1/2‘ thick mounted directly to upper west panel assembly (IA1AI) and a caution decal attached directly above table power panel assembly (IAIA3A4).

2-PT-512/S: Insulation of Projector Lamp Cover Assembly. (EIB 939)

Correction Material: None Required.
2-A FA-2 EIB 939 EIC LDOR SERIAL: All serial numbers.
IDENTITY: Installation of insulating paper fitted to the inside top of each of the five Lamp Cover Assemblies, 1A2A7A1, A2, A3, A4, and A5.

1-PU-383A/M: Improved Engine Speed Control and Shutdown

> 1-A YF-8 NS0969-010-4020

SERIAL: Navy owned equipments
IDENTITY: New solenoid valve attached to governor.

1-PU-390/G: Improved Engine Speed Control and Shutdown Correction Material: NS93308
1-A YF-8 NS981496 None

SERIAL: 60 (All Navy owned)
IDENTITY: New solenoid valve attached to governor.
1-PU-712/G: Addition of Automatic Transfer Function Correction Material: Ch. I, NE0967-450-6011 to NE0967-450-6010

I-A FA-12 NE0967-450-6020
SERIAL: All Navy owned equipments
IDENTITY: Presence of shore power connection board in load board compartment; presence of additional controls and indicators on local panels.

1-PU-722/G: Same as 1-PU-712/G
1-R-274B/FRR: Antenna Input Receptacle
Correction Material: T-2, NS0967-995-00II to TM, NS0967-995-0010

2-A FA-i NS0967.995-0030 None
SERIAL: All
IDENTITY: Presence of coaxial ant input receptacle.

2-R-274B/FRR: Addition of Crystal Ovens to Improve Receiver Frequency Stability

Correction Material: T-1 to NS91661
2-A FA-6 NS981456
None
SERIAL: Equipments used for SSB operation
IDENTITY: Existence of the bracket assembly for the crystal oven on the crystal control unit (T-34) indicates accomplishment.

1-R-390/URR: Elimination of Spurious Radiation Correction Material: Included in NS981194
2-A FA-1 NS0967-063-2060 F5820-078.
5074
SERIAL: All
IDENTITY: Presence of a jumper between pins 2 and 7 of be socket XV603.

2-R-390/URR: Modification of RF and IF Subchassis
Correction Material: Complementary Tech. Manual NS95807 and TM 11-856 (TO-3IRI-2URR-154)

2-C YF-8 NS981746 None

IDENTITY: 39 Kohm resistor across terminals 1 and 2 of T203. Resistor on TB502, R550 is 220 ohms.

1-R-390A/URR: Same as 1-R-390/URR
2-R-390A/URR: Increase of Audio Output Level on Line Output Terminals

Correction Material: T-1 to TM-11-856A
2-A FA-0.5 NS0967-063-2070
None
SERIAL: All Ship Installed
IDENTITY: Presence of two soldered jumper leads on terminal board TB-101.

3-R-390A/URR: Changes Electrical Access from Terminal Strips to 'AN' Type Connectors

Correction Material: T-1 to NS93053.42A, T-1 to NS93053
3-A FA-2 NS0967-063-2080 2N5820-078-
5074
SERIAL: All shipboard installed equipments
IDENTITY: An aluminum connector channel, containing three 'AN' type receptacles J-901, and J-903, covers both TB102 and TB-103 on the rear panel of the receiver. Also, a power cord is no longer used.

4-R-390A/URR: Installation of Diode Load Test Jack
Correction Material: T-4, NS0967-063-2014 to TM, NS0967-063-2010 (formerly NS93053)

2-A FA-I NS0967-063-2140
None SERIAL: All installed aboard ship
IDENTITY: Presence of a green diode load test jack located on the front panel to the right of the PHONES jack.

5-R-390A/URR: Modification of Antenna Input Connections
Correction Material: T-4, NS0967-063-2014 to TM, NS0967-063-2010 (formerly NS93053)

2-A FA-I NS0967-063-2140
None
SERIAL: All installed aboard ship
IDENTITY: Presence of shorting plug connected to J104 on rear panel of receiver.

6-R-390A/URR: Internal Heat Reduction
Correction Material: T-2, NS0967-063-2012 to TM, NS0967-063-2010

1-A FA-2 NS0967-063.2310 2N5820-937-
0141
SERIAL: All shipboard equipment
IDENTITY: (1) The two rectifier tubes 26 Z 5 W have been removed from their sockets; (2) New type heat dissipating tube shields have been installed on all tubes.

7-R-390A/URR: Reduction of Internal Interference
Correction Material: T-3, NS0967-063-2013 to TM, NS0967-063-2010 (NS93053)

1-A FA-3 NS0967-063-2120 2Z5820-089-
SERIAL: Shipboard installed equipments used in Supplemen tary Radio Spaces
IDENTITY: The presence of a $220 \mathrm{~K} 1 / 2$ watt resistor in place of the 56 K resistor R702 in the Variable Frequency Oscillator assembly and a decal 'MODIFIED BY FC 7' affixed to the VFO assembly below the nameplate on the oven cover.

The presence of a decal 'MODIFIED BY FC 7' aftixed to the chassis near the be socket XV207 (5654/6AK5W) on the R.F. Amplifier Subchassis.

8-R-390A/URR: Installam on elapsed Time Indicator
Correction Material: T.S, NS0967-063-2015 to TM, NS0967.063-2010 (formerly NS93053)

1-A FA. 2 NS0967-063-2130 2F5820-056.
1384
SERIAL: Equipments installed aboard the following ships. DD-706, 708, 709, 729, 790, 840, 848, 876;DL-S; DLG-18, 33; MSO-426, 432, 435, 455, 460, 468, 470, 491, 519; SS.425, 522; SSN-596, and 613
IDENTITY: Presence of а а elapsed time indicator ол front panel of Radio Receiver R-390A/URR.

1-R-1051/URR: Strengthening of R-105I/URR Radio Receiver Shock and Vibration Mount MT-3114/UR

Correction Material: None
1-A FA. 0.5 NS981802 None
SERIAL: Al thru A28 and B1 thru (incomplete entry)
IDENTITY: All MT-3114/UR shock and vibration mounts modified per change or corresponding production change may be identifed by the presence of the neoprene reinforcements bands on the lower portion of the cylindrical elastomer columns of all four shock isolators.

2-R-1051/URR: Same as 3-AN/WRC-1
3-R-1051/URR: Same as 4-AN/WRC-1
4-R-1051/URR: Installation of Elapsed Time Indicator
Correction Material: T.4, NS0967-970-9014 to TM, NS0967-970-9010 (formerly NS94841(A))

1-A FA-1 NSO967-970-9080 2N5820-874-
0323
SERIAL: Equipments installed aboard the following ships: DD-706, 708, 709, 729, 790, 840, 848, 876; DL-5; DLG-18, 33; MSO 426, 432, 435, 455, 460, 468, 470, 491, 519; SS-425, 522; SSN-596 and 613
IDENTITY: Presence of an elapsed time indicator behind front panel and in front of support plate of Radio Receiver R1051/URR.

5-R-1051/URR: Same as 9-AN/WRC-1
6-R-1051/URR: Improved Reliability of the Audio Amplifier Q9 and Q10

Correction Material: T-6, NS0967-970-9019 to NS0967-970. 9010

1-A FA-2 NS0967-970-9090 EIC QB38000
SERIAL: All serials (with unmodified IF/AF Amplifier Assembly A2A2 or A2A3)
IDENTITY: Audio Amplifier transistors Q9 and Q10, located on PCB A2 of the IF/AUDIO Amplifier Electronic Assembly, have been changed from 2N1183A to 2N1131.

7-R-1051/URR: Same as 12-AN/WRC-1 except
Correction Material: T-7, NS0967-970-9012 and EIC QB38000

1-R-105113/URR: Same as 9-AN/WRC-1
2-R-10513/URR: Same as 6•R-1051/URR except
EIC QB3A000
3-R-1051Et/URR: Same as 12-AN/WRC-1 except
Correction Material: T-7, NS0967-970-9012 and EIC QB3A000

4-R-1051B/URR: Same as 7-AN/WRC-1B except
EIC QE3ADOO
1-R-1051DI/URR: Same as 6-R-105I/URR except
Correction Material: T-1, NE0967-878-3011 to NE0967-878-3010

EIC QB4NOOO
2-R-1051D/URR: Relocate Audio Line Level Controls to Front Panel

Correction Material: Ch. 1, NE0967-878-3012 to NE0967. 878-3010

I-A IFA-1 NE0967-878-3060 EIC QB4NOOO
SERIAL: All serial numbers
IDENTITY: The front panel phone level control knobs will be replaced by concentric control knobs for line level and phone level.

1-R-1052/FRR: Insulation of Audio Jacks from Ground
Correction Material: T-2, NS0967-970-0012 to TM, NS0967-970-0010 (formerly NS94448A)

2-A FA-1.5 NS0967-970-0060 None
SERIAL: All
IDENTITY: Presence of Bush type insulator.
2-R-1052/FRR: Replacement of Jacks J-2 and J-5 of Receiver R-1052/FR.R with Coaxial Switch DK Part No. 317-030202-6 and Minor Alterations to Receiver Wiring

Correction Material: T-1, NS0967-970-011 to TM, NS0967-970 1010 (formerly NS94448A)

3-A FःA-1 NS981740 2N5820-226.
5717

## SERIAL: All

IDENTITY: Mounting hold for J. 3 empty.
1-R-1053/FRR: Same as I-R-1052/FRR
2-R-1053/FRR: Same as 2-R-1052/FRR

1-R-1738/W/R: Marking of I.F. Module, Receiver.
Correction Material: None Required.
4-A FA-1 NE0967-LP-421.9160 EIC QB1L SERIAL: CPN 792-6377-001/-004 serial nos. PP1 and PP2 and Al thru AS produced under contract no. N00039-70.C. 1507; seriail nos. C1 thru C123 produced under contract N00039-74-C.0152.
IDENTITY': 'R63' ink-stamped on module AS (IF Amplifier)
2-R-1738/W'R: Correction Receiver Cooling Problem. (E1B
982)

4-A FA-1 EIB 982 EIC QB7U
SERIAL: PPI, PP2, A1-A51, BI-Bl2, C1.Cl22, D1-D75, and 150-162.
IDENTITY: Verify that the inlet screen (CPN 620-2301-001) has been removed.

1-R-1842/WSC-5(V): Modification of FM Crystal Offsets in Radio Receiver R-1842/WSC-S(V).

Correction Material: Change 1, NE0967-LP.455-0014, to TM, NE0967-455-0010 dtd 16 Apr 1973.

## 1.A FA. 1 NE0967.LP. 4550060 <br> EIC QPOH

SERIAL: All serial numbers.
IDENTITY: Verify that FC 1-CV-3067/WSC-5(V) is accomplished and that FM voice test for REC9 and RECIO is operational. If FCl-CV-3067/WSC-S(V) is not installed and FCl-R-1842/WSC-5(V) is installed, then voice test for REC9 and RECIO will not operate.
NOTES: Prerequisite Field Change: 1-CV-3067/WSC.S(V)
1-RAK: Not applicable
2-RAK: Replacement of Power Supply Resistors R-202, R-203, R-204

Correction Material: See NS98729
A FA.2 NS98729 None
SERIAL: All
IDENTITY: Resistors R-202, R-203, and R-204 are changed to 2 watt to 4 watt.

3-RAK: Fusing Equipment
Correction Material: See NS98729
A FA-2 NS98729 None

SERIAL: All
IDENTITY: Switch on front of 20131 power unit turns receiver off.

4-RAK: Not applicable
1-RAK-1: Not applicable

2-RAK-1: Same as 2-RAK

3-RAK-1: Same as 3-RAK

4-RAK-1: Not applicable
1-RAK-2: Not applicable

2-RAK-2: Same as 2-RAK

3-RAK-2: Same as 3-RAK

4-RAK-2: Not applicable
1-RAK-3: Not applicable

2-RAK-3: Same as 2-RAK

3-RAK-3: Same as 3-RAK
4.RAK-3: Not applicable

1-RAK-4: Not applicable

2-RAK-4: Same as 2-RAK

3-RAK-4: Same as 3-RAK
4-RAK-4: Not applicable

1-RAK-5: Not applicable

2-RAK-5: Same as 2-RAK

3-RAK-S: Same as 3-RAK
4.RAK-5: Not applicable

1-RAK-6: Provision for Concentric Antenna Jack Correction Material: See NS98729
B YF-3 NS98729 F5820-311.

## SERIAL: All

IDENTITY: Jack installed for use with standard antenna patch cords

2-RAK-6: Same as 2-RAK

3-RAK-6: Same as 3-RAK

4-RAK.6: Modification for Use with NT66097 Loop Antenna Correction Material: None
B YF-8 NS98053 F5820-311.

SERIAL: All aboard subs
IDENTITY: Presence of loop ant. NT6(6)97.

1-RAK-7 thru 2-RAK-7: Not applicable
3-RAK-7: Same as 3-RAK
4-RAK-7: Same as 4-RAK-6

1-RAK-8 thru 2-RAK-8: Not applicable

3-RAK-8: Same as 3.RAK

4-RAK-8: Same as 4-RAK-6
1-RAL: Not applicable
2-RAL: Replacement of Resistors R-202, R-203, R-204 in Power Supply

A FA-2 NS98729 None
SERIAL: All
IDENTITY: Resistors R-202, R-203, and R-204 are changed
from 2 watt to 4 watt.

3-RAL: Fusing Equipment
Correction Material: See NS98729
A FA.2 NS98729

SERIAL: All
IDENTITY: Switch on front of 20131 power unit tums re. ceiver off.

1-RAL-1: Not applicable
2-RAL-1: Same as 2-RAL

3-RAL-1: Same as 3-RAL

1-RAL-2: Not applicable
2-RAL-2: Same as 2-RAL
3-RAL-2: Same as 3-RAL

1-RAL-3: Not applicable

2-RAL-3: Same as 2-RAL
3-RAL-3: Same as 3-RAL
1-RAL-4: Not applicable
2-RAL-4: Same as 2.RAL

3-RAL-4: Same as 3.RAL

1-RAL-5: Not applicable
2-RAL-5: Same as 2-RȦL
3-RAL-5: Same as 3-RAL

1-RAL-6: Provision for Concentric Antenna Jack Correction Material: See NS98729
B YF-3 NS98729
F5820-311.
2552

SERIAL: All
IDENTITY: Jack installed for use with standard antenna patch cords.

2-RAL-6: Same as 2-RAL

3-RAL-6: Same as 3-RAL
1-RAL-7: Not applicable
2-RAL-7: Not Applicable.
3-RAL-7: Same as 3-RAL

1-RAL-8: Not applicable
2-RAL-8: Not Applicable.
3-RAL-8: Same as 3-RAL

1-RAO-9: Provision for HF Oscillator Circuir Outlet Jack Correction Material: T-1 to NS900,356

A FA-2 NS98!93
F5820-501. 2585
SERIAL: All used with rem dual panoramic adapter IDENTITY: Two jacks on rear of chassis.

1-RBA: Installation of NT-49509 Plug Adapter
Correction Material: See NS98730
A FA-2 NS98730 None
SERIAL: All
IDENTITY: Installs right angle connector on audio output cable.

2-RBA: Invert of Power Supply Filter Choke
A FA-I NS98730 None
SERIAL: Receivers with power supplies NT-20130 having serial numbers: 1-2008, 2012-2016, 2018-2021, 2025, 2028-2033, 2038, 2041, 2050-2051, 2058, 2062, 2069, 2071-2075, 2078-2079, 2172, 2213, 2338, 2241, 2245-2246, 2249 2251-2253, 2255-2257, 2261-2263, 2289, 2293, 2295-2296, 2298-2299, 2303-2305, 2307, 2309-2310, 23i3-2314, 2316-2317, 2320-2321, 2323-2326, 23282336, 2340-2341, 2345, 2347-2351, 2353, 2355-2399, 2400-2402, 2404.2416, 2419, 2471, 2473-2499, 2500-2527, 2529-2548, 25502589, 2591-2600
IDENTITY: Filter chokes are mounted upside down.
3-RBA: Rng extension
A FA-12 NS98265 2N5820-311.
SERIAL: All
IDENTITY: $\mathrm{O}_{\mathrm{i}}$ front panel of seceivers, lower center, two new switches are installed. One labeled 'reception': the other labeled "band extension on-off.

1-RBA-1: Same as 1-RBA
2-RBA-1: Same as 2.RBA

3-RBA.1: Same as 3-RBA

1-RBA-2: Same as 1-RBA
2-RBA-2: Same as 2-RBA
3-RBA-2: Same as 3-RBA

1-RBA-3: Same as 1-RBA

2-RBA-3: Same as 2-RBA
3-RBA-3: Same as 3-RBA
1-RBA-5: Same as 1-RBA

2-RBA-5: Same as 2-RBA

3-RBA-5: Same as 3.RBA
1-RBA-6: Same as 1-RBA
2-RBA-6: Same as 2-RBA

## 3-RBA-6: Same as 3-RBA

1-RBA-7: Not applicable
2-RBA-7: Not applicable
3-RBA-7: Same as 3-RBA
1-RBB: Installation of NT-49509 Plug-Adapter
A FA-2 NS98731/98732
F5820-311 2768

## SERIAL: Al!

IDENTITY: R'ight angle connector installed on audio output cable.

2-RBB: Invert of Power Supply Filter Choke
A FA-I NS98731/98732 None
SERIAL: Receivers with power supplies NT-20130 having serial numbers: 1-2008, 2012-2016, 2018-2021, 2025, 2028-2033, 2038, 2041, 2050-2051, 2058, 2062, 2069, 2071-2075, 2078-2079, 2172, 2213, 2338, 2241, 2245-2246, 2249, 2251-2253, 2255-2257, 2261-2263, 2265, 2268-2270, 2272-2274, 2276.2279, 2281, 2286, 2293, 2295-2296, 2298-2299, 2303-2305, 2307, 2309-2310, $2313-$ 2314, 2316-2317, 2320-2321, 2323-2326, 2328-2336, 2340-2341, 2345, 2347-2351, 2353, 2355-2399, 2400-2402, 2404-2416, 2419, 2471, 2473-2499, 2500-2527, 2529-2548, 2550-2589, 2591-2600
IDENTITY: Filter chokes are mounted upside down in power supply.

3-RBB: Band sw, improve
A FA-3 NS98731/98732 None
SERIAL: All
IDENTITY: Stops removed from switch, bandswitching now continuous.

1-RBB-1: Same as 1-RBB

2-RBB-1: Same as 2-RBB

3-RBB-1: Same as 3-RBB
1-RBB-2: Same as 1-RBB
2-RBB-2: Same as 2-RBB

3-RBB-2: Not applicable
1-RBC: Same as 1-RBB

2-RBC: Same as 2-RBB
3-RBC: Same as 3-RBB
1-RBC-1: Same as 1-RBB

2-RBC-1: Same as 2-RBB

3-RBC-1: Same as 3-RBB except
SERIAL: 1-100
1-RBC-2: Same as 1-RBB

2-RBC-2: Same as 2-RBB

3-RBC-2: Not applicable
1-RBC-3 thru 3-RBC-3: Not applicable
1-RBC-4 thru 3-RBC-4: Not applicable

1-RBM: Not applicable
1-RBM-1: Not applicable
1-RBM-2: Not applicable
1-RBM-3: Not applicable
1-RBM-4: Shock-mounting
B YF-6 NS98066
F5820-311-

## SERIAL: All on ships

IDENTITY: Receiver shock-mounted. NT-49120 receptacle for antenna. Type PC3F amphenol receptacle installed in rear of receiver for audio output.

1-RBM-5: Same as 1-RBM-4
1-RBO: Superseded by F.C. No. 3
2-RBO: Replacement of Power Manufacturer and Rectifier Tubes

Correction Material: See NS98049
A FA-2 NS98049 F5820-699-
SERIAL: 1-3799
IDENTITY: 6X5 rectifier is replaced by a 5Y3GT
3-RBO: Balanced Line Speaker Connection
Correction Material: See NS98745
A FA-3 NS98745
2N5820-311. 2537
SERIAL: All
IDENTITY: Check for insulating washer and earphone jack.
1-RBO-1: Superseded by F.C. No. 3

2-RBO-1: Not applicable
3-RBO-1: Same as 3-RBO
1-RBO-2: Superseded by F.C. No. 3
2-RBO-2: Not applicable

3-RBO-2: Same as 3-RBO
1-RBS: Cancelled
1-RCK: Addition of Tuning Set-up System
A FA-2 NS98733
None
SERIAL: All

IDENTITY: R-IIO changed to 47 K . Installation of a toggle switch on the side brace behind front panel and marked 'setting up' and "operating'. Switch is connected to ground and junction of R-109 and R-110 at terminal 14 on TB E-104.

2-RCK: Noise Suppressor Wiring Correction

> A FA-1 NS98733

None
SERIAL: All
IDENTITY: Orange wire from screen of V-209 to the arm of R-240. The black ground wires should go the right outside terminal (looking at the back of R-240 with the lugs down). The orange wire from R-266 should go the left outside terminal of R-240 (when looking at the back of R-240 with the lugs down).

## 3-RCK: Installation of NT-49509 Plug Adapter <br> A FA-2 NS98733 F5820-642. <br> SERIAL: All <br> IDENTITY: NT-49059 plug used for audio lead (3 pin right angle leading plug).

4.RCK: Audio BW Increase for CCL Service

A FA-0.5 NS98733
F5820-318-
3876
SERIAL: All in CCL service
IDENTITY: Replace C-233, 700 mmf , across 2nd det. $\mathrm{V}(206 \mathrm{~A})$ with a $200 \mathrm{mmfd}, 600 \mathrm{v}$, capacitor. $1,000 \mathrm{mmfd} .600 \mathrm{v}$ capacitor added between plate of V-211 and ground.

1-RD-110/U: Installation of Automatic Tape Feed Model AT2

> Correction Material: None

A FA-1 NS98340
F5835-624.
SERIAL: 1-150 charged to supp activity
IDENTITY: Automatic tape feed back of recorder panel.
2-RD-110/U: Modification Tape Recorder to take 8-1/2* Tape A FA-0.5
SERIAL: All
1-RD-219A/U: Conversion of Recorder/Reproducer to Provide 3-3/4 IPS and 15 IPS Fixed Speeds Operation

Correction Material: None
1-A YF-10 NS0965-065-9020 See Note SERIAL: RD-219/U equipments to be used for Subrad operations only. Nameplate saying RD-219w/F.C. 1 installed IDENTITY: Nameplate installed indicating that Field Change Kit No. I has been installed. The two-RD-219A/U recorder/ reproducers are required on board submarines for Subfox and Subrad operations. One Field Change Kit (TID Stock No. SOO00.T4-90450.01) is to be supplied only to those submarines having two RD-219A/U recorder/reproducers aboard. This Kit is required to convert one of the RD-219A/U recorder/ reproducers to the equivalent two speed RD-269/U recorder/ reproducer to be used for Subrad operations only. The remaining RD-219A/U recorder/reproducer should not be converted. In the event that only one RD-219A/U is installed, it is recommended that the conversion not be made.
NOTES: TID-No.: S $0000-$ T4-90450-0I

2-RD-219A/U: Conversion of RD-219A/U to RD-219B/U Correction Material: None required
I-A FA-3 NS0965-101-1030
EIC M70Z000
SERIAL: All
IDENTITY: Presence of two speed control knobs on upper front panel.

1-RD-230/USQ-20(V): Signal Data Recorder/Reproducer (Flexowriter) - Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: Incorporated in revised publication
2-A NA NS0967-975-4020 None SERIAL: 1 through 8
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-RD-231/USQ-20(V): Signal Data Recorder/Reproducer (Paper Tape Unit) - Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: Included in revised publication
2-A NA NS0967.975-4020 None
SERIAL: 1 through 28
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-RD-231/USQ-20(V): Signal Recorder/Reproducer (Paper Tape Unit) - Correction of Marginal Operation of Clutch and Brake Electromagnets

Correction Material: T-2, NS0967-975-4013 to TM, NS0967-975-4010 (formerly NS94085A)

2-A FA-3 NS0967-075-4020
None
SERIAL: 1 through 16 and A1 through A32
IDENTITY: Change number stamped on Field Change Accomplished plate.

3-RD-231/USQ-20(V): Replacement of Ferranti Reader with Digitronics Reader

Correction Material: Included in revised technical manual
I-A FA. 10 NS0967-975.4030 EIC HA23000
SERIAL: Serial numbers as directed by Naval Ship Engineering Center
IDENTITY: A digitronics reader will be mounted in place of the Ferranti reader.

4-RD-231/USQ-20(V): Ground I/O Jacks.
Correction Material: Included in TM.
1-A FA. 2 NS0967-975.4040
EIC HA23,
QMIU
SERIAL: 1 thru 25, Al thru A55, UNIVAC S/N 1 thru 86. IDENTITY: Wiring added to A6J3 and A6J4 terminates at the El Grounding Stud.

1-RD-231A/USQ-20(V): Same as 4-RD-231/USQ-20(V)
1-RD-237/USQ-20(V): Signal Data Recorder/Reproducer (Flexowriter) - Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: Incorporated in revised publication
2.A NA NS0967-975-4020 None SERIAL: 1

IDENTITY: Changed number stamped on the Field Change Accomplished plate.

2-RD-237/USQ-20:V): Signal Data Recorder/Reproducer (Flexowriter) - Logic Chassis Filter Addition

Correction Material: T-2, NS0967-212-9012 to TM. NS0967-212-9010 ( ( ormerly NS94086A)

2-A FA. 4 NS0967-975-4020
None
SERIAL: AI, A2 and \#1 (NObsr-87605)
IDENTITY: Inspection of location A1A2-J24C and determine if capacity assembly 251230.00 is installed in J24C.

1-RD-243/USQ-20(V): Incorporation of Factory Field Service Orders as a Unit Field Change

Correction Material: None
2-A FA-1/4 NS0967-973-8030 None
SERIAL: I through 18
IDENTITY: Change number stamped on Field Change Accomplished plate.

2-RD-243/USQ-20(V). Signal Data Recorder/Reproducer (Magnetic Tape Unit), Overtemperature Alarm Audible Activation Capability

Correction Material: None
2-A FA-2 NS0967-973-8030
None
SERIAL: I through 17 and AI through A50
IDENTITY: Appropriate markings on the Field Change Accomplished plate.

3-RD-243/USQ-20(V): Signal Data Recorder/Reproducer (Magnetic Tape Unit) - Rewind Speed Change before beginning of Tape Stop

Correction Material: T-2, NS0967-973-8012 to TM, NS0967-973-8010 (formerly NS94091A)

2-A FA. 4 NS0967-973-8030 None SERIAL: All
IDENTITY: Operate the tape transport in the rewind mode and observe if a slowdown in tape rewind speed occurs prior to tape reaching the BOT stop. This test must be performed with the upper tape sensor arm riding upon the tape.

4-RD-243/USQ-20(V): Reproducer Noise Susceptibility Change

Correction Material: Incorporated in Change 1 to NS94091(A) (NS0967-973-8010)

2-A FA-2 NS0967-973-8030 None
SERIAL: 1 through 17, A1 through 43 (Incorporated in all other units during production)
IDENTITY: Visual or continuity check between T-B2-C3, J24F-7, and J24G-13 on chassis A2A2A 1 .

5-RD-243/USQ-20(V): Signal Data Recorder-Reproducer (Magnetic Tape Unit) - Reduction of Noise Sensitive Lines

Correction Material: Incorporated in Change 1 to NS94091(A)
2.A FA-2 NS0967-973-8030 None SERIAL: 1 through 17, A1 through A49, A-51, A-52 and A58
IDENTITY: Visual inspection of chassis A2A2A1 (lower right-hand drawer, left chassis) and determine if capacitor as-
sembly (UNIVAC P/N) 700945300 has been installed in J25F.

6-RD-243/USQ-20〔V): Brush Replacement for Vacuum Blower Motors

Correction Material: None required
1-A FA-1 NS0967-973-8040
None
SERIAL: A1-A64, BI-61
IDENTITY: UNIVAC S/N 1-17.
7-RD-243/USQ-20(V): Pinch Roller Solenoid Assembly Replacement

Correction Material: Ch. 1, NS0967-221-7011 to TM, NS0967-22i-7010 (Vol. I)

I-A FA-6 NS0967-973-8050
SERIAL: All
IDENTITY: Visually inspect each pinch roller solenoid assembly and note if a large flat leaf spring extends from the pinch roller to the far end of the solenoid assembly. (Refer to NS94091(B), Vol. 1, Figure 6-8.) This leaf spring is secured at the far end by three socket head (Allen type) screws. If this leaf spring exists, this change has not been accomplished.

8-RD-243/USQ-20(V): Plastic Latch Pawls and Guide Blocks Correction Material: None
1-A FA-2 NSO967-221-8040 EIC HACO00
SERIAL: Magnetic Tape Units, all serial numbers
IDENTITY: Observe that the latch pawls are white plastic.
9-RD-243/USQ-20(V): Cover Door Braces
Correction Material: None required
I-A FA-2 NSO967-221-8050 EIC QK050C0
SERIAL: Navy serials A1 thru A100, B1 thru B33, and UNIVAC serials 1 thru 140
IDENTITY: Visually verify that door braces are installed on each transport dust cover door.

10-RD-243/USQ-20(V): Replace EOT/BOT Lamp Assembly
Correction Material: Ch. 1, NS0967-LP-552-2021 to NS0967-LP-552-2020; Ch. 1, NS0967-LP-552-2031 to NS0967. LP-552-2030

1-A FA-8 NS0967.LP.552-2040 EIC HAC0000 SERIAL: Navy serial numbers Al thru A100, Bl thru B33. UNIVAC serial numbers 1 thru 140
IDENTITY: Visually note the presence of a plastic vice aluminum EOT/BOT assembly at 22A1A5 MP61 and MP58 on tape transport.

1-RD-261/USQ-34(V): Replacement of the Pinch Roller Solenoid Assemblies

Correction Material: Ch. 3, NS0967-476-6023 to NS0967-476-6020

1-A FA-6 NS0967-476-6040 EIC HAB0000 SERIAL: UNIVAC serial numbers 1 through 45, NAVY serial numbers 1 through 14 and A-1 through A-31
IDENTITY: Visually inspect the upper and lower pinch roller drive assemblies of both transports and determine if the pinch rollers are supported by an ' $A$ ' frame that is hinged on the end opposite the pinch roller. If this condition exists on both transports this change has been accomplished. The old style assemblies that are to be removed can be identified as shown in

NS0280-811-4087 (formerly NS94749, Volume II, page 241, Figure 5.3).

2-RD-261/USQ-34(V): Replacement of the EOT/BOT Assemblies

Correction Material: T•1, NS0967-LP-476-6013 to NS0967-LP-476-6010; T-1, NS0967-LP.476-6024 to NS0967-LP.476. 6020

I-A FA-8 NS0967.LP-476-6050 EIC HAB0000 SERIAL: UNIVAC Model 1560 serial numbers 1 thru 45, Navy serial numbers 1 thru 14 and A-I thru A- 31
IDENTITY: Visually note the presence of a plastic vice aluminum EOT/BOT assembly at 66A2ASAS MP42 and MP43 on both transports.

1-RD-270(V)/UYK: Digital Data Recorder/Reproducer (UNIVAC 1240); Incorporation of Factory Field Change Orders (MPLs) as a Unit Field Change. (EIB 743).

Correction Material: Included in revised publication
2-A FA-1 NS0967-059-5150 EIC FR05200
SERIAL: Navy serial numbers AO the A 10 and UNIVAC Serial number 1 thru 73 and 78 thru 89.
IDENTITY: Visual inspection, testing, and/or through records of accomplishment.

2-RD-270(V)/UYK: Add Filter Capacitors to Amplifier Electronic Control -15V Power Supply

Correction Material: T-1, NS0967.059-5021 to TM, NS0967-059-5020

1-A FA.8 NS0967-059-5170 EIC FR05200 SERIAL: Equipment serials A 1 thru A 68
IDENTITY: Presence of two 39 uF capacitors mounted on diode plate assembly. (See figure 13, group assembly parts list for driver electronics diode plate assembly NS0967.059-5020 for location.)

3-RD-270(V)/UYK: Plastic Latch Pawls
Correction Material: None
1-A FA-2 NS0967-059-5190 EIC QL07300
SERIAL: All serial numbers that are under Navy cognizance IDENTITY: Observe that the tape transport cover door latch pawls are made of white plastic.

4-RD-270(V)/UYK: Digital Data Recorder/Reproducer - Removal of Reel Brake Assembly

Correction Material: T-2, NS0967-059-5022 to NS0967-059. 5020
IV.A FA-8 NS0967-059-5420 EIC

SERIAL: All equipments
IDENTITY: Rotating reel hub (tape reel) by hand and feeling that reel hub rotates freely.

5-RD-270(V)/UYK: Correct Marginal Start Logic and Parity Bit Errors

Correction Material: T-1, NS0967-059-5031 to NS0967-0595030

I-A FA. 4 NS0967-059-5390 EIC QK07300 SERIAL: Navy serial numbers A1 thru A68 and Cl thru C3. UNIVAC serial numbers I thru 193

IDENTITY: Open chassis 23A3A! and remove P.C. cards at J 28 F and J22E. Meter continuity between J28F-15 and J22E5. If continuity exists, this change has boen accomplished. Replace removed P.C. cards.

## 6.RD-270(V)/UYK: Correct Parity Bit Errors

Correction Material: T-l, NS0967-317-2021 to NS0967-3172020

I-A FA-4 NS0967-317-2040
EIC QK07300
SERIAL: Navy serial numbers C-4 thru C-7
IDENTITY: Open chassis 23A3AIAI and remove P.C. cards at $J 28 \mathrm{~F}$ and J 22 E . Meter continuity between $J 28 \mathrm{~F}-15$ and J22E-5. If continuity exists, this change has been accomplished. Replace removed P.C. cards.

1-RD.281(V)/UYK: Printer Circuit Card Polarized Capacitor Replacement

Correction Material: None
1-A FA-1* NS0967-273-0040 EIC QK01000
SERIAL: Equipments A1 thru A16, Bl thru B6 and Cl
IDENTITY: Refer to figures 1 and 2 of this field change and verify that capacitors are mounted as shown after rework.
NOTES: *Per Card.
2-RD-281(V)/UYK: Add Sleeving to Elapsed Time Meter Terminals

Correction Material: None
1-A FA. $1 \quad$ NS0967.273-0050
EIC QKO6000
SERIAL: All serial numbers of RD-281(V)/UYK and RD-281(XN-2)/UYK.
IDENTITY: Observing the elapsed time meter and verifying that heat shrink sleeving is installed over meter terminals.

3-RD-281(V)/UYK: Power Supply Fuse Replacement
Correction Material: T-1, NS0967-273-0016 to NS0967-273. 010
i.A FA-0.5 NS0967-273-0060 EIC QK06000

SERIAL: Equipment serials AI thru A10 (all other serials were corrected by a production change)
IDENTITY: Decals are installed on Maintenance Panel showing new amperage for fuses.

4-RD-281(V)/UYK: Disk Drive Assembly MX-8058 UYK Slide Release Catches

Correction Materia!: None
1-A FA. 2 NS0967-273-0070 EIC QK06000
SERIAL: Equipment serials A1, A2, A4, A7, A9, and A10
IDENTITY: Verify that filler plugs are installed on the front edge of the slide release catches for the disk drive assembly MX-8058/UYK.

5-RD-281(V)/UYK: Recorder/Reproducer Magnetic Disk; Fuse Replacement. (EIB 782)

Correction Material: Include in revised TM, NS 0967-273. 0010.

> 2-A FA-1 NS0967-273.0100 EIC
> QMOR000

SERIAL: Equipments A1 thru Al6 and Bit thru B6 IDENTITY: Noting that the $\cdot 3 \mathrm{~V}$ fuse ( 01 B 1 F 1 ), the 6 V fuse (01B1F3) and spare (01B1F12) are slow blow type fuses.

6-RD-281(V)/UYK: Install Mylar Tape

Correction Material: None
1-A FA-2 NS0967-273-0090 EIC QK06000
SERIAL: All serial numbers of RD-281(V)/UYK and RD-281(XN-1)/UYK
IDENTITY: Observe that mylar tape has been installed to neoprene pad on card covers in logic tray and neoprene pad under half board assemble on disk drive.
7.RD-281(V)/UYK: Incorporation of International Business Machines Corporation (IBM) Engineering Change Number 590019 as a Field Change. (EIB 786)

Correction Material: None Required.
2-C YF-1 NS0967-273-0110
SERIAL: RD-28!(V): serial no. AI. RD-281(XN-2): serial nos. 4 and 5.
IDENTITY: Verify installation of card type 5800369 in board OIC-D2 at locations B7, L6, and H7.

8-RD-281(V)/UYK: Incorporation of International Business Machines Corporation (IBM) Field Memo I as a Field Change. (EIB 786)

Correction Material: None required
2-C FA-11 NS0967-273-0110 EIC
QMOR003
SERIAL: Serial numbers AI, A4, and A7
IDENTITY: Noting that capacitors mounted on logic cards $5800369,5800370,5901054$, and 5801102 have an epoxy coating applied to and around the capacitors and over the printed circuit conductors.

9-RD-281(V)/UYK: Incorporation of International Business Machines Corporation (IBM) Engineering Change Number 590028 as a Navy Field Change. (EIB 791)

Correction Material: None Required.
2-C YF-1 NS0967-273-0120
SERIAL: RD-281(V): serial nos. AI thru A5. RD-28!(XN-2): serial nos. 4 and 5 .
IDENTITY: On the interrupt indicator area on panel OIC-B5, verify that the second indicator from the left on the top row is labeled 'R/W COMPL.' If the indicator is labeled 'SPR', this field change has not been accomplished.
NOTES: Prerequisite Field Changes: 7-RD-281(V)/UYK or 2-RD-281(XN-2)/UYK.

10-RD-281(V)/UYK: Incorporation of International Business Machines Corporation (IBM) Engineering Change Number 590600 as a Navy Field Change. (EIB 797 and 804).

Correction Material: None Required.
2.C YF-5 NS0967-273-0130

SERIAL: RD-281(V): serial nos. Al thru A4 and A6 thru A16. RD-281(XN-2): serial nos. 4 and 5.
IDENTIYY: Verify that a wire is connected from M2B07 to L2B12 (net number A BIIIGR4) on board OIC-Bi.
NOTES: Prerequisite Field Change: 9-RD-281(V)/UYK for serial nos. AI thru A4 only or 3-RD-281(XN-2)/UYK.

11-RD-281(V)/UYK: Installation of Test Points
Correction Material: T-1, NS0967-273-0021 to NS0967-2730020. dtd I Mar 71.

I-A FA-I NS0967-273-0140
EIC
QMOROOO
SERIAL: Al thru A16, Bl thiu B12, Cl, Dl, El, Fi, Gl thru G8, HI and H 2 , J 1
IDENTITY: Two test points mounted on the inside edge of the power control assembly (OIA3), (OID3), (OIE3) and (01G3).

12-RD-281(V)/UYK: Provide 32 Bit Capability
Correction Material: Ch. 3, NS0967-LP-273-0013 to NS0967-LP-273-0010; Ch. 3, NS0967-LP-273-0024 to NS0967-LP-273-0020; Ch. 3, NS0967-LP-273-0033 to NS0967-LP-2730030

1-C YF-8 NS0967-LP-273-0150 EIC
QMOROOO
SERIAL: Equipment serials Al thru Al6, Bl thru Bi2, Cl, Di, E1, $\mathrm{Fl}, \mathrm{HI}$, and H 2
IDENTITY: Observe that the word size selection switch on the operators control panel (C5) has 32 bit interface capability.

13-RD-281(V)/UYK: Eliminate Noise on Photo Sensing Lines Correction Material: To be supplied
1-C YF-3 NS0967-LP-273-0160 EIC HC86000 SERIAL: Al thru A16, B1 thru B12, G1 thru G9, H3, and J2 IDENTITY: Observe that a .68 uf capacitor is instalied between the following points in the logic tray area OIC. A3L6BIO to A3L6-D08; A3L7-B05 to A3L7-D08; A3L7-B09 to A3M7-D08; A3H6-D06 to A3H7-D08; D3C4-B05 to D3C4D08; D3C5-B08 to D3C4-D08 D3C4-B10 to D3D4-D08; D3C4-D06 to D3B4-D08; D3C4-B08 to D3E4-D08; D3G4B09 to D3E4-D08; D3D5-D06 to D3D5-D08; D3E4-B05 to D3D5-D08.

14-RD-281(V)/UYK: Increase Range of 3 V and 6 V Power Supplies

Correction Material: To be supplied
i-C YF-3 NS0967-LP-273-0170
EIC HC86000
SERIAL: AI thru A16, Bi thru Bl2, Cl, D1, El, Fl, Gl thru G13, G15, HI, H2, J1, J2 and K1
IDENTITY: Verify that a $I K$ ohm resistor is installed between terminals 2 and 4 (area OIF/B) of the 3VDC power supply and between tenninals 3 and 4 (area OIF/D) of the 6VDC power supply.

## 1-RD-281(XN-1)/UYK: Same as 6-RD-281(V)/UYK

1-RD-281(XN-2)/UYK: Same as 2-RD-281(V)/UYK
2-RD-281(XN-2)/UYK: Same as 7-RD-28i(V)/UYK.
3-RD-281(XN-2)/UYK: Same as 9-RD-281(V)/UYK
4-RD-281(XN-2)/UYK: Same as IO-RD-281(V)/UYK.
1-RD-293/UYK-5(V): Card-Reader-Punch-Interpreter (UNIVAC 1549); Incorporation of Factory Field Change Orders (MPLs) as a Unit Field Change. (EIB 743).

Correction Material: Ch. I, NS0967-059-5081 to TM, NS0967.059-5080, Ch I, NS0967-059-5091 to TM, NS0967. 059-5090

2-A FA-I NS0967-059-5150 EIC FR05300

SERIAL: Serial numbers A0 thru A45
IDENTITY: Visual inspection, testing, and/or through records of accomplishment.

2-RD-293/UYK-5(V): Converts RD-293/UYK-5(V) to RD. 293B/UYK-5(V)

Correction Material: Included in new technical manual
I-C FA. 420 NS0967-059-5180 EIC FR05300
SERIAL: Equipments A0 thru A67 and other serials specifically designated by NAVSEC where this requirement may arise
IDENTITY: Observing the RPI subassembly (42A2) and verifying that the interpreter (42A2A6) has been deleted.

1-RD-293B/UYK-5(V): 14 Volt Regulator Resistor Replacement

Correction Material: T-1, NS0967-313-2011 to NS0967.313. 2010

1-A FA-1 NS0967-313-2030 EIC QK07400 SERIAL: Equipment serial numbers A0 thru A67
IDENTITY: Accomplishment of this change can be identified by the presence of two 10 ohm 20 watt resistors at 42A2AlR25 and 42A2A1-R26.

2-RD-293B_UYK-5(V): Strobing Feed Delay
Correction Material: T-1, NS0967-313-2021 to NS0967-313. 2020
l-A FA-3 NS0967-313-2040 ElC QK07400
IDENTITY: Presence of a 7003590 PC card at 43A4AI-B36.
3-RD-293B/UYK-5(V): Eliminate Noise in RPI Clear Circuit
Correction Material: Ch. I, NS0967-313-2011 to NS0967. 313-2010; Ch. I, NS0967-313-2021 to NS0967-313-2020

I-A FA. 3 NS0967-313-2050 EIC QK07400
SERIAL: Serial numbers A0 thru A67
IDENTITY: Visually observing the presence of two diodes on the back side of 42 A 4 Ai . One diode is connected at card location from C1t pin 11 to Cll pin I; the other diode is connected from Cll pin 10 to Cll pin 1.

4-RD-293B/UYK-5(V): Inhibit Memory During Phase Step
Correction Material: Ch. I, NS0967-313-2011 to NS0967. 313-2010; Ch. I, NS0967-313-2021 to NS0967-313-2020

I-A FA-2 NS0967-313-2060 EIC QK07400 SERIAL: Serial numbers A0 thru A67 IDENTITY: Visually noting the presence of a 470 ohm resistor connected at card location 42A4A2J14B. The resistor is connected between pins 4 and 7 of that card location.

1-RD-293C/UYK-5(V): Replace Stacker Door Spring
Correction Material: None required
I-A FA-I NS0967-317-3040 EIC QK07400
SERIAL: Serial numbers Cl thru C15 (UNIVAC 75 thru 92) IDENTITY: Visually observing that the stacker door spring is wound in a clockwise direction.

2-RD-293CתYK-5(V): Prevent O.D.R. from Dropping too Soon

Correction Material: Ch. I, NS0967-317-3021 to NS0967. 317-3020

I-A FA-5 NS0967-317-3050 EIC QK07400

SERIAL: Serial numbers Cl thru C24 (RD-293C/UYK-5(V) and 74 thru 100 (UNIVAC))
IDENTITY: Visually observe the presence of a P.C. card (P/ N 7002060) at location AI9, and a P.C. card (P/N 7002070) at location A20 in chassis A4A1A6.

3-RD-293C:/UYK-5(V): Interrupt IF Track Jam before Read Station 1

Correction Material: Ch. 1, NS0967-317-3021 to NS0967-317-3020 ('Supplied with FC 2-RD-293C/UYK-5(V))

I-A IFA-3 NS0967-317-3060 EIC QK07000 SERIAL: Serial numbers CI thru C24 (UNIVAC serials 74 thru 100)
IDENTITY: Make a continuity check of ' 0 ' ohms betweeen J45B-06 and J2SA-11.

## 4-RD-293C/UYK-5(V): Card Feed Delay

Correction Material: None
1-A FA-8 NS0967-LP-317-3070 EIC QK07000
SERIAL: Navy serials Cl thru C35, UNIVAC serials 73 thru 112
IDENTITY: P.C. card (P/N 7002830) is in location J08A of chassis A4A1A6, and P.C. card (P/N 7003590) is in location J09A of chassis A4AIA6.

1-RD-294(V)/UYK: Magnetic Tape Unit (UNIVAC 1540/ 1540A; Incorporation of Factory Field Change Orders (MPLs) as a Unit Field Change. (ElB 732).

Correction Material: Included in revised publication
2-A FiA-I NS0967-059-5150
SERIAL: Navy serial numbers Al thru A8 and UNIVAC serial numbers 1 thru 78.
IDENTITY: Certify the MPLs have been incorporated by either visual inspection, testing, and/or through records of accomplishme:nt.

2-RD-294(V)/UYK: Replacement of Metal Latch Pawls with Plastic Latch Pawls

## Correction Material: None

I-A FA-I NS0967.059-5500
SERIAL: All RD-294(V)/UYK equipments that are under Navy cognizance
IDENTITY: Observe that the tape transport cover door latch pawls are made of white plastic.

3-RD-294(V)/UYK: Replacement of Fuse. (EIB 801). Correction Material: Included in Technical Manual 2-A FA. 1 NS0967-059-5310 EIC QM3H000
SERIAL: Serials (UNIV AC) 1 thru 83; Navy serials A-1 thru A-9; and ADD-ON UNITS serials (UNIVAC) I thru 25; Navy serials Al thru A-12
IDENTITY: Inspection of F-3 of the tape transport electronic chassis to determine if this fuse is of the slowblow type.

4-RD-294(V)/UYK: Recorder/Reproducer, Digital Data (Mag. netic Tape Unit) - Addition of Logic Test Point. (EIB 802). Correction Material: None required.
2-A FA-2 NS0967-059-5320 EIC

SERIAL: UNIVAC serial numbers 1 thru 83; Navy serial numbers A-I thru A-9, A-29 and A-30
IDENTITY: Noting that continuity exist between the following points on chassis 22A12A2; TB2-G33 and J24G-09; TB2FL2 and J15E-10; TB2-E12 and J16G-14; P2-BO1 and J1SE10.

5-RD-294(V)/UYK: Recorder/Reproducer, Digital Data (Magnetic Tape Unit) - Correction of Test Point Wiring. (EIB 802). Correction Material: None
2-A FA-1 NS0967-059-5330 EIC QM3H000
SERIAL: UNIVAC serials 1 thru 96; Navy serials A-1 thru A-9, A-11 thru A-14, A-23 thru A-34; and add-on unit (UNIVAC) seriais I thru 38, 40 thru 42; Navy serials A-1 thru A- 25
IDENTITY: Verify continuity between TBI-G3 and J20A-15 on chassis 22A1A17 and/or chassis 22A2A17.

6-RD-294(V)/UYK: Reduce Heat Sensitivity in the Servo Amplifier Card Assemblies

Correction Material: T-1, NS0967-441-6031 to NS0967-4416030 (Potter S365-84 or UNIVAC PX-3873-0-2)

1-A FA-1 NS0967-059-5340
EIC
QK0D000
SERIAL: All under Navy cognizance
IDENTITY: Installation of $22 \mathrm{uF}, 35 \mathrm{v}$ capacitor (C623), 15 k ohm, 1/4w resistor (R625), and type $1 N 270$ diode (CR622) in Servo Amplifier card assemblies.

7-RD-294(V)/UYK: Correction of Wiring Errors. (EIB 812).
Correction Material: T-1, NS0967-441-6021 to NS0967-4416020

2-A FA-1 NS0967-059-5350 EIC
QM3H000
SERIAL: All Navy and UNIVAC serial numbers.
IDENTITY: Check for continuity between the following terminals: J20E-15 to J24G-05; J27D-07 to J20E-10; No continuity from J27D. 06 to J24G-05.
NOTES: Prerequisite Field Change: 1-RD-294(V)/UYK.
8-RD-294(V)/UYK: Repiacement of Overtemperature Warming Horn (EIB 816).

Correction Material: Incladed in NS0967-441-6010 and NS0967-441-6020

2-A FA-1 NS0967-059-5360 EIC QM3H000
SERIAL: UNIVAC serial numbers 76 thru 97, Navy serials A9, A11, A13, A14, A27, A28, and A30 thru A35
IDENTITY: Visually inspect chassis A1A2 to determine if the overtemp hom (A2LS-1) is of square construction. Refer to NAVSHIPS 0967-441-6010 (PX-3334-1-4) figure 5-18, page 539, or PX3334-1-3, figure 5-14, page 21 for location. This horn is physically located directly above the EC- 120 chassis, left side of the upper tape transport, slightly to the right and below the run time meters.

9-RD-294(V)/UYK: Addition of Spiral Cable Shields. (EIB 816).

Correction Material: None required.

2-A FA-2 NS0967-059-5370
SERIAL: RD-294(V), UYK, UNIVAC serials 1 thru 72, Navy serials A1 thru A8, and Add-on Units UNIVAC serials 1 thru 13
IDENTITY: Inspect the cabling to chassis A17 and determine if the cabie to A17Jl and A17JS are grouped and wrapped in a spiral sleeving of fiexible plastic and that A17J4 and AI7J6 are grouped and wrapped in a like manner. Spiral sloeving must also be on cables A17J3 and A17J2. Extend the power supply chassis PS-1, noting if the cable of A10P1 is covered with the spiral sleeving. If all the above is verinied, proceed to routing instructions, as this change has been accomplished.

10-RD-294(V)/UYK: Replace Resistor (R1) in the Electronic Drive Assembly

Correction Material: T-2, NS0967-441-6032 to NS0967-4416030

1-A FA-6 NS0967.441-5380 EIC
QK0D000
SERIAL: All serial numbers that are under Navy cognizance IDENTITY: Open the tape transport door and the transport assembly exposing the control chassis (EC-120). Remove the two upper corner holddowns, the cross bar and the cover screws. Lift the cover and with the aid of a light source and inspection mirror, determine if a flat $1 \mathrm{ohm}, 40 \mathrm{w}$, resistor is mounted on the left side, front, behind the fuse plate assembly, above the transformer.

## 11-RD-294(V)/UYK: Add Test Point to Logic. (EIB 831).

Correction Material: T-2, NS0967-441-6022 to NS0967-4416020

2-A FA-I NS0967-441-6040
EIC HCE0000
SERIAL: UNIVAC serials 1 thra 161, 163 (less 77, 78, 82, 103, 104, and 105 Navy serials A1 thru A11, A13 thru A36, A38 thru A45 and A50
IDENTITY: With power removed from the basic unit, extend chassis A12A1 and test for continuity from circuit location J20E-15 to TB2-G22. If continuity exists, this change has been accomplished.

12-RD-294(V)/UYK: Correction of Wiring Error. (EIB 833).
Correction Material: None required
4-A FA-1 NS0967-441-6050 EIC
QM3H000
SERIAL: UNIVAC serials 1 thru 75, Navy serials A1 thru A8, A29; add-on unit serials 1 thru 19 and Navy serial A 12 IDENTITY: With power applied to the basic unit, on chassis A4, short TB4-7 to TB4-8. This should sound the overtemperature warning hotm in the basic unit. With power applied to the basic unit and add-on unit short TB4-7 to TB3-8 in chassis A-4 of the add-on unit. The overtemperature warning horn should sound in the basic unit.

13-RD-294(V)/UYK: Install Holddowns on P13 and P14 on Chassis A17

Correction Material: None
1-A FA-2 NS0967-059-5410
E1C
QM3H000
SERIAL: Navy serials A1 thru A29; UNIVAC serials 1 thru 75

IDENTITY: Extend chassis 22A1A17 and inspect the connectors on P13 and P14, to determine if these connectors may be removed without unfastening holddowns. If holddowns are installed, this change is accomplished.

14-RD.294(V)/UYK: Improvement of Response Time.
Correction Material: To be provided 0967-LP.441-6010, 6020, 6030 require change.

> 1.A FA-1 NS0967.LP-441-6060

EIC QU38 SERIAL: Al thru A88, UNIVAC 1 thru 264.
IDENTITY: In chass is A12AI, check that capacitors Cl and C 2 are . OOluf. ( Cl is connected between J31E-1 and J33E-5; C 2 is connected between J32E-1 and J31E-6).

15-RD-294(V)/UYK: Replace Fuses with Circuit Breaker.
Correction Material: To be provided. 0967-LP-441-6010, 6020, 6030 require change.

1-A FA-1 NS0967-LP-441-6070 EIC QU38 SERIAL: RD-294(V)/UYK equipments with 400 Hz vacuum motors.
IDENTITY: Open the top transport and locate control box assembly A3A3 below the electronic chassis. The 6 amp fuses F1. F2, and F3 have been replaced by a 3 phase circuit breaker if this field change is accomplished.

16-RD-294(V)/UYK: Electronically De-Skew Longitudinal Parity when Writing.

Correction Material: To be provided. 0967-LP-441-6010, 6020, 6030 require change.

1-A FA-32 NS0967-LP-441-6080 EIC QU38
SERIAL: AI thru A74, A80 thru A84, UNIVAC I thru 220.
IDENTITY: PC card $\mathrm{p} / \mathrm{n} 7002070$ installed in location J16A of chassis Al3A2.

17-RD-294(V)/UYK: Remove Shock Hazards. (EIB 991)
Correction Matcrial: None required.
2-A FA-1 EIB 991 EIC QU38
SERIAL: All RD-294(V)/UYK Signal Data Recorder-Reproducers having $400-\mathrm{Hz}$ vacuum motors.
IDENTITY: Verify continuity (zero ohms) between the vacuum motor shell and the equipment cabinet.

1-RD-312/TSQ-18: Improved Drive Coupler
Correction Material: T-1, NS0967-266-6051 to NS0967-266. 6050

1-A FA-3 NS0967-266-6130
SERIAL: All Navy owned equipment serial numbers A-1 thru A-50
IDENTITY: Removal of original drive coupling (retainer, coupling and coupling supply) and the installation of a new type of drive coupling.

1-RD.396(V)/U: Installation of Modified Power Line Filter. Correction Material: To be provided.
1-A FA-2 NE0967-LP-614-5020 EIC QC93
SERIAL: All Serial numbers.
IDENTITY: Verify that the power line filter (IFLI)is $\mathrm{p} / \mathrm{n}$ 74E2N910 vice 74E2N275.

2-RD-396(V)/U: Same as 4-ON-143(V)3/USQ

1-RD-397/U: Installation of Power Supply Modification Kit for RD-397/U.

Correction Material: T-I to Interim TM NAFI TP 914.
1-A FA-4 NE0967-LP-614-6020 EIC QP33 SERIAL: Serial numbers 1 thru 79.
IDENTITY: Verify installation of a large capacitor (C6), mounted on a bracket on the outside of the back of the Power Supply Assembly chassis. The capacitor is approximately three inches long and should be below PSIJl.

2-RD-397/U: Installation of Modified Switch Actuator.
Correction Material: None required.
1-A FA-I NE0967-LP-614-6030
EIC
QP33,QP48,QP49
SERIAL: RD-397: 0001-0128. RD-397A(V)I: A006-A027 and
A031-A049. RD-397A(V)2: A001-A005.
IDENTITY: The SPDT switch in the read head assembly will have a modified actuator. The modified actuator has white paint on the end of one side (non-contacting side) which is visible through the head, when open.

1-RD-397A(V)1/U: Same as 2-RD-397/U.
1-RD-397A(V)2/U: Same as 2-RD-397/U.
1-RDO: Replacement of 28 V Input Receptacle J-305
Correction Material: See NS98736
A FA-1 NS98736
F5820-6426916

## SERIAL: All

IDENTITY: New receptacle is 2 contact, male, polarized
2-RDO: Insertion of Preamplifier Stage
Correction Material: None
A FA-6 NS98140 F5820-696.
SERIAL: All
IDENTITY: A 6AK5 and a 6J6 installed with associated components on a $3^{*} \times 3^{*}$ frame mounted above and to the right of $P$ 102 and above E-101.

3-RDO: Pulse Stretcher to Improve Audio Signal
Correction Material: See NS98134
A FA-3 NS98134 F5820.310-
SERIAL: All
IDENTITY: V-208 is changed from 6AB7 to 6SN7GT.
4-RDO: Installation of FM detector assembly
Correction Material: T-1 to NS900,527
A FA-6 NS98213 F5820.642.
SERIAL: All
IDENTITY: AM-FM switch installed.
1-RDR: Replacement of Shockmount
Correction Material: See NS98735
B YF-1 NS98735
F5840.3112412 Cl
SERIAL: All w/NT-10508 shockmounts
IDENTITY: Presence of 4 barry type C-2060 shockmounts.

2-RDR: Addition of Dynamotor Noise Suppressor
A FA-4 IB38464 F5820-311-

SERIAL: A!l
3-RDR: Elimination of Danger in Electronic Noise Suppressor Correction Material: None
2-A FA-0.5 NS98224
F5820-340.

SERIAL: All MAR/RDR's w/CTD- 53518
IDENTITY: Presence of R-1701 across terminals 15 and 16 on Z-1701.

1-RDZ: Removal of C-149
Correction Material: See NS98737
A FA-0.5 NS98737 None
SERIAL: 1-896
IDENTITY: C-149, 5 mmfd capacitor connected between grid and cathode pins 4 and 5 of oscillator tube $V-101$, is removed.

2-RDZ: Tuning Inductance, Ad justment
Correction Material: See NS98737
A FA-2 NS98737 F5820-3109349 Cl

## SERIAL: 1-500

IDENTITY: A . $010^{\circ}$ sheet brass silver plated plate is clipped over the tuning vane enclosed within L-606.

3-RDZ: Auto-tune Unit Bonding
Correction Material: See NS98737
A FA-0.5 w/kit F5845-311. 2408 Cl
SERIAL: 1-2348
IDENTITY: Spring steel grounding clips (for pressure contact with cover).

4-RDZ: IF Amplifier Modification to Improve Stability Correction Material: See NS98737
A FA-1/3 NS98737
F5845-311-
2461

## SERIAL: All

IDENTITY: Dummy load plugged into scanning jack behind revr and metal shield over first I-F amp R-C strip inside, bottom, rear.

5-RDZ: Cancelled
6-RDZ: Improved Alignment and Sensitivity Procedure Correction Material: See NS98204
B YF-2 NS98204
F5820-346.
SERIAL: All
IDENTITY: The link connecting plus and minus screws of S203 is removed and discarded and wording 'Diode current' is relabeled (0) AVC ( - ) voltage.

> 7-RDZ: Replacement of IF Transformer
> Correction Matesial: None
> A FA-4 NS 98275

F5820-3112837 Cl

IDENTITY: The narrow-wide band pass selector knob and shaft is removed.

1-RDZ-1: Same as 1-RDZ except
SERIAL: (None stated)
2-RDZ-1: Same as 2-RDZ except
SERIAL: (None stated)
3-RDZ-1: Same as 3-RDZ except
SERIAL: 1-1100

4-RDZ-1: Same as 4-RDZ
5-RDZ-1: Cancelled

6-RDZ-1: Same as 6-RDZ
7-RDZ-1: Same as 7-RDZ
1-REA: Receiver Output Line Connection
A FA-2 NS98738
None
SERIAL: All
IDENTITY: The lines to the receiver outputs are connected to the terminals G1 and G2 for channel A and to terminals G3 and G4 for channel B on Terminal panel 17 near bottom of second bay.

## 2-REA: AVC Circuit Modification

A FA-2 NS98738
None
SERIAL: All
IDENTITY: Resistor R22 and R23 two meg each replaced by one half meg; capacitors C7 and C8 four microfarads each by 16 microfarads.

1-REA-1: Same as 1-REA
2-REA-1: Same as 2-REA

1-REK: Installation of Automatic Record Player
Correction Material: See NS98739
B YF-40 NS98739 F5820-699.
1366C2
SERIAL: All
IDENTITY: 1 of the single manual-change record player units replaced with automatic-change player.

1-RL.-215/UG: Installation of Automatic Switch to Increase Reliability of Motor

Correction Material: None
2-A FA-4 NS
SERIAL: All
IDENTITY: Presence of an automatic switch installed on the base of the paper reeling machine.

1-RO-91/SSN: Replacement of Chart Drive Gear and Stud (Shaft) MP10 and MP13

Correction Material: Ch. 1 to NS93264
1-A FA-1 NS981128
None
SERIAL: All

IDENTITY: Stud, shaft MP13A with groove on shoulder installed.

2-RO-91/SSN: Addition of Ground Connection E-502A
1-A FA-1/4 NS981137
None
SERIAL: 4 through 29; 501, 502
IDENTITY: Ground lead between cover assembly and main frame.

1-RO-280(XN-1)/UYK: Reduce Drive to Ribbon Drive Motors Correction Material: Ch. 2, NS0967-076-8001 to NS0967. 076-8000

I-A FA-1 NS0967-076.8010 EIC QM06000
SERIAL: Serials A1 and A2
IDENTITY: Remove PC cards in chassis A7 (lefthand chassis) at card location A 106 and A78. Check for continuity of zero (0) ohms from card jack A106 pin 23 to card jack A 78 pin 26 and from card jack AI06 pin 21 to card jack A 78 pin 27. If continuity exists, change has been accomplished.

1-RO-280(XN-2)/UYK: Same as 1-RO-280(XN-1)/UYK except SERIAL: Al thru A8
IDENTITY: Remove cards in chassis A7 (Iefthand chassis) at card location A115, A91, and A120. Check for continuity of zero (0) ohms from card jack All5 pin 23 to card jack A 91 pin 14 and from card jack All5 pin 21 to card jack A 120 pin 29. If continuity exists, change has been accomplished.

1-RO-280/UYK: Line Printer, Data Processing - Offline Interface Compatibility for MTU

Correction Material: None required
II-C FA-16 NS0967-303-9920
EIC QK06000
SERIAL: A1, B10, C1, C2, C3, D1, E1, E2, E5, E6, E7, E9, E10, E11, F-1 thru F-7
IDENTITY: Observe the RO-280/UYK operator panel (A8A2) and verifying that a MTU fault indicator and a MTU on-switch are instailed in the upper left comer of the operator panel.

1-RO-302/UYK-5(V): Data Processing Line Printer (UNIVAC 1569); Incorporation of Factory Field Change Orders (MPL's) as a Unit Field Change. (EIB 743).

Correction Material: Ch. 1, NS0967-059-5061 to TM, NS0967-059-5060

2-A FA-I NS0967.059-5150
EIC FR05400 SERIAL: Serial numbers A1 thru A67.
IDENTITY: Visual inspection, testing, and/or through records of accomplishment.

2-RO-302 JYYK-5(V): Eliminate Motor Relay Noise
Correction Material: T-1, NS0967-059-5062 to NS0967-0595060

1-A FA-4 NS0967-059-5160 EIC FR05400
SERIAL: Equipment serials A1 thru A68
IDENTITY: Presence of capacitors 43 A 3 Cl and C2 mounted on relay assembly 43A3. (See figure 7-27, NS0967-059-5061 for focations.)

3-RO-302/UYK-5(V): Plastic Latch Pawls
Correction Material: None
1-A FA-3 NS0967.059-5200

ElC QK07500

SERIAL: All serial numbers under Navy cognizance IDENTITY: Observe that the six cabinet door latch pawls are made of white plastic.

4-RO-302/UYK-5(V): Replacement of Power ON-OFF switch. Correction Material: T-2, NS0967-LP-059-5063, to NS0967-LP-059-5060.

1-A FA-2 NS0967-LP-059-5510
SERIAL: A0 thru A67.
IDENTITY: With Page Printer in the power on mode, remove power from unit by securing the bulkhead Main Power Switch. When the Main Power Switch is energized the unit will not automatically go through the power-on cycle unless the Power-On Switch is depressed twice.

1-RO-302A/UYK-5(V): Replacement of Metal Latch Pawls with Plastic Latch Pawls

Correction Material: None required
1-A FA-3 NS0967-317-4030 EIC
QM3L000
SERIAL: Navy seiial numbers C-1 through C-8
IDENTITY: Open the three equipment access doors (one is located on top, over the page printer; two are on the front of the unit). Note that the two latch pawls that are located on each of these access covers are fabricated from a white plastic. If this condition exists, this change has been accomplished.

## 2-RO-302A/UYK-5(V): Replacement of Power ON-OFF

 Switch.Correction Material: T-1, NS0967-LP-317-4011, to NS0967-317-4010.

## 1-A FA-2 NS0967-LP-317-4040

SERIAL: Cl thru C7 and C27
IDENTITY: With the Page Printer in the power on mode, remove power from unit by securing the bulkhead Main Power Switch. When the Main Power Switch is energized the unit wiil not automatically go through the power-on cycle unless the Power On Switch is depressed twice.

1-RO-312/G: Modification of Card Punch, High Speed RO$312 / \mathrm{G}$ to Add Automatic Motor Stop Feature.

Correction Material: Chg. 1 to TM, NS0967-324-0030 (Army TM 11-7440-217-15).

3-A FA-3 NS0967-324-0180
SERIAL: All equipment, except unserviceable equipment in depot stock.
IDENTITY: Verify installation of the motor stop assembly ( $\mathrm{p} / \mathrm{n}$ A57605-001) mounted behind the left door of the cabinet. The motor stop assembly contains a MOTOR CONTROL switch with two positions (AUTOMATIC STOP and CONTINUOUS RUN) and an elapsed time meter.

2-RO-312/G: Modification of Card Punch, High Speed RO312/G to Install Terminal Board and Protective Covers.

Correction Material: Chg. 4, NS0967.324-0034, to TM, NS0967-324-0030 (Army TM 11-7440-217-15).

1-A FA-1 NS0967-324.0280
SERIAL: All equipment, except unserviceable equipment in depot stock.
IDENTITY: Verify installation of three protective shields: One over TB1 and one over TB2 of power supply PSi, and
the third over FLI on the rear wall of the enclosure (left side, as viewed from the front of the enclosure).

3-RO-312/G: Modification of Card Punch, High Speed RO312/G to Install Noise Reduction Front Panel and Punch Cover.

Correction Matesial: Chg. 4, NS0967-324-0034, to TM, NS0967-324-0030 (Aimy TM 11-7440-217-15).

1-A FA-6 NS0967-324-0330
SERIAL: All equipment, except unserviceable equipment in depot stock.
IDENTITY: Verify installation of two noise-reduction cover assemblies. One ( $\mathrm{p} / \mathrm{n}$ ATE-D-0755) covers only the punch head assembly and is secured with three one-quarter-tum fasteners. The second ( $\mathrm{p} / \mathrm{n}$ ATE-D-0748) is the front panel cover assembly which is mounted over the first one and is serviced with ten one-quarter-turn fasteners.

4-RO-312/G: Modification of Card Punch, High Speed RO312/G to Convert to Federal Standard FIPS-14 Card Code.

Correction Material: Chg. 5, to TM NS0967-324-0030 (Army TM 11-7440-217-15).

2-A FA-3 NS0967-LP-324-0340
SERIAL: All equipment.
IDENTITY: Check continuity (zero ohms) between the following points on the logic assembly Al backplane: XA10-C to XA8-21, XA10-D to XA8-L, XA10-N to XA8-D, XA10-M to XA8-22, XA10-V to XA9-8, XA10-Y to XA9-6, XA10-2 to XA9-M, XA10-6 to XA8-7, XA10-7 to XA8-8, XA10-8 to XA9-4, XA10-9 to XA9-U, XA10-16 to XA9-7, XA10-21 to XA9-21, XA11-L to XA8-11, XA11-M to XA9-D, XA11-P to XA9-11, XAll-Z to XA8-18, XAll-6 to XA9-AA, XA11-7 to XA8-6.

5-RO-312/G: Modification of Card Punch, High Speed RO312/G to Install Vacuum and Pressure Gauges.

Correction Material: Chg. 7, NE0967-324-0037, to TM, NE0967-LP-324-0030.

2-A FA-I NE0967-LP-324-0350 EIC QHOD SERIAL: All equimpent.
IDENTITY: Verify installation of two NPT tee fittings on rear of assembly A2 for connection of vacuum/pressure gauges. One tee is in line with the vacuum selief opening on the chassis and the vacuum relief valve; the second tee is in line with nozzle mixer on the chassis and the air filter. Each tee will have a $1 / 4$-inch NPT plug installed where the gauges are to be connected for testing.

1-RO-313/G: Modification of Card Punch, Low Speed RO313/G, to Add Automatic Motor Stop Feature.

Correction Material: Chg 4 to TM, NE0967-324-0040.
1-A FA-8 NE0967-324-0200 EIC QHOE SERIAL: All RO-313/G card punches used with AN/FYA71(V)1 thru AN/FYA-71(V)6 Digital Subscriber Terminals. IDENTITY: Verify that the DSTE Motor Stop Assembly is General Dynamics p/n 00-001563-1 or p/n 00-001563-3. Venify installation of relay assembly A6 mounted on the right side within the cabinet, behind Power Supply Assy.

1-RO-367(XN-1)/UYK: Incorporation of Manufacturess'

Changes as a Unit Field Change
Correction Material: T- to NS0967-LP-315-8010 and -8020 IV-A FA-2 EIB 903
SERIAL: Equipment serial numbers AI thru A10 and Bl thru B8
IDENTITY: See field change. The purpose of this field change is to identify 32 manufacturers' changes.

1-RP-161/UYK: Modify Extemal Intersupt Enable (EIE) Correction Material: T-2 to NS0967-238-6010
2-A FA-0.5 NS0967-238-6012 EIC QK06000
SERIAL: Those card readers which interface with the CV-2036/USQ-20(V) (KCMX) or with computers that do not generate an EIE (i.e., CP-642A/USQ-20(V) and CP-642B/USQ20(V))
IDENTITY: Jumper wire from pin 8 A2A177 (21E4A) to ground.

2-RP-161/UYK: Stacker Sensing Assembly
Correction Material: Ch. I, NS0967-LP-238-6013 to NS0967-LP-238-6010

1-A FA-2 NS0967-LP-238-6030
SERIAL: Serial numbers AI thru A26
IDENTITY: Assembly 398-13781-1, stacker sensor, replaces light block assembly 398-12716-1 (A8MP46) and sensor guide assembly 398-12751-1 (A8MP47). Stacker sensor assemblies have been supplied to all equipments except serial numbers A9, A10, and A14, and all equipments should be checked.

3-RP-161/UYK: AC Lost - Automatic Shutdown
Correction Material: Ch. 1, NS0967-238-6013 to NS0967-238-6010

I-A FA-1.5 NS0967-LP-238-6040
SERIAL: Serial numbers A1 thru A26
IDENTITY: View the AS electronic power assembly from the front, the primary equipment circuit (CB2) breaker is a three-pole unit on the left of the location indicated in figure 56 in TM 0967-238-6010.

4-RP-161/UYK: Off-Line Timing Error Overside
Correction Material: Ch. 1, NS0967-LP-238-6013 to NS0967-LP-238-6010

I-A FA-1.5 NS0967-LP-238-6050
SERIAL: Serial numbers A1 thru A26
IDENTITY: Two wires will have been added to the wiring side of the A2 electronic logic assembly between A2A259 to A2A237 and between A2A237-03 to A2A226-21.

5-RP-161/UYK: Strobe Disc Protection
Correction Material: Ch. 1, NS0967-238-6013 to NS0967. LP-238-6010

I-A FA-1.5 NS0967-LP-238-6060
SERIAL: Serial numbers A1 thru A26
IDENTITY: View the prismatic drum shaft in the top plate area of the card reader mechanism, the emulsion or down side of the strobe disc will be shiny from the coating.
6.RP-161/UYK: Automatic Reader Motor Off

Correction Material: Ch. 1, NS0967-LP-238-6013 to NS0967-LP-238-6010

I-A FA-1 NS0967-LP-238-6070

SERIAL: Serial numbers Al thru A26
IDENTITY: Four wires will have been added to the wiring side of the A2 electronic logic assembly between A2A226-26, between A2A216.02 to A2A227.06, between A2A238.13 to A2A216.16, and between A2A216.17 to A2A259-11.

7-RP-161/UYK: RP-161 Modification (Interface)
Correction Material: Ch. 1, NS0967-LP-238-6013 to NS0967-LP-238-6010

I-A FA-1 NS0967-LP.238-6080
SERIAL: Serial numbers Al thru A26
IDENTITY: Module assembly part number 398-7386-2023 or equivalent will be in position A254 in the controller assembly A2 and wires (one each) will have been added between A2A177-10 to A2A186-10 and A2A186-8 to A2A254-6.

8-RP-161/UYK: External Interrupt Enable, Switched
Correction Material: Ch. $i$, NS0967-LP-238-6013 to NS0967-LP.238-6010

I-A FA-1 NS0967-LP-238-6090
SERIAL: Serial numbers Al thru A26
IDENTITY: Viewing the A2 logic electronics assembly, the switch (A2SI) will be found mounted at the upper right hand side with a label identifying the function 'Central Processor Without External Interrupt Enable' abbreviated CPW/OEIE.

## 9.RP-161/UYK: Replace Thumbscrew Assembly

Correction Material: Ch. l, NS0967-LP-238-6013 to NS0967-LP-238-6010

## I-A FA-2 NS0967-LP-238-6110

SERIAL: Serial numbers A4 thru A26
IDENTITY: Visually inspect the A 2 logic electronic assembly and observe that the three (3) thumbscrews will be self-retained as shown in figure 1A for serial numbers A4 and upwards. Serial A3 was fitted with two (2) such assemblies located as shown in figure lB in field change bulletin.

10-RP-161/UYK: Incorporation of Manufacturers' Changes as a Unit Field Change

Correction Material: None required
4-A FA-1 EIB 903
SERIAL: Equipment serial numbers Al thru A26
IDENTITY: See field change bulletin. The purpose of this field change is to identify 6 manufacturers' changes.

1-RT-728/APX-64V): Modification for Shipboard Use
Correction Material: Addendum to NAVAIR 16-30APX64-3

1-A FA-12 NS0967-245-5010
SERIAL: Those equipments designated for shipboard installation and use
IDENTITY: Ascertaining that Receiver-Transmitter Case CY-6225/APX-64\{ $V$ ) has been installed in the equipment rack to house the receiver-transmitter.

1-RT-8590/APX: Transponder--Removal of Elapsed Time Meter

Correction Material: T-1, NS0967-217-4022 to NS0967-2174020, T-1, NS0967-217-4033 to NS0967-217-4030

2-A FA-2 NS0967-392.4050

IDENTITY: Substitute a plate in place of the elapsed time meter on the front of the equipment.

2-RT-8590/APX: Mode A Interface Modification
Correction Material: Ch. 1, NS0967-217-4031 io NS0967. 217-4030

1-A FA-10 NS0967-392-4040 ElC P603000 SERIAL: All units without Mode 4 capability, serjal numbers DCN 0001 thru Q 549 under Contract N00019-70-C-0370; and serial numbers $8 P A 000$ ! thru 10,877 under Contract NOW-660637
IDENTITY: After modification, units will be identified as RT-859A/APX-72. Addition of the flat pack micro-circuit on back of decoder (A2) and rewired card cage to accommodate redesigned proces.sor (Al) and Mode 4 (A3) are evidence of accomplishment.

1-S-100: Modification for Improvement of Installation Maintenance Operation and Safety Features

Correction Material: T-2 to NS93127
1-A FA. 64 NS981033(A)
F5895-724.
9679

## SERIAL: All

IDENTITY: JAN type plugs and receptacles on all interchassis cabling.

2-S-100. Modification of the Eldico S-100 for Operation with Antenna Tuning Group AN/SRA-25

$$
\text { YF.4 NS981\}52 F5820-665. }
$$

0379
SERIAL: All
3-S-100: Replacement of Resistor R-16
Correction Material: T-4 to NS93127
2-A FA-1/4 NS981161
SERIAL: Ail
IDENTITY: R-16 in R-100 chassis is 5 watt rating.
1-SA-121B: Same as 8-MX-1627/URN
1-SA-420/URN-3: Replacement of Spacer
Correction Material: None
1-A FA-1 NS981040 2N5820-543. 1669
SERIAL: All
IDENTITY: Washer on CP6101 and DC6101 are brown bakelite.

1-SA-544/GRA.34: Replacement of Spacer
Correction Material: None
1-A FA-1 NS981040 2N5820-5431669
SERIAL: All
IDENTITY: Washers on CP6101 and DC6101 are brown ba. kelite.

1-SA-734/SG: Modification for Operation in Low-Level Teletype Systems

Correction Material: T-2, NS0967-100-7012 to NS0967-100. 7010

2-A FA-2 NS0967-100-7020
SERIAL: All serials used in low-level teletype systems
IDENTITY: Absence of jumpers on jacks J-4 and J-5

1-SA-1070/SRA-34( $\mathbf{V}$ ), Interface with AN/GRM-16(XG-1)
Correction Material: Ch. 1, NS0967-304-3013 to NS0967-304-3010

3-C YF-20 NS0967-304-3150
SERIAL: Only those units installed with the AN/SRM-16(XG-1)
IDENTITY: Right-angle diode mounting bracket (with four IN3189 diodes) attached to the plate which secures the row control solenoids (labeled L26-L30). This bracket is visible on the right side when the unit is viewed from the bottom.

## 2-SA-1070/SRA-34(V): Dummy Stiletzo Installation

Correction Material: T-3, NS0967-304-3015 to NS0967-3043010

1-A FA-1 NS0967-304-3180 EIC Q94L000 SERIAL: AN/SRA-34A(V) Antenna Coupler Group Serial Al thru A 45
IDENTITY: Adhesive backed markers adhered to the cover of the SA-1070/SRA-34(V) quarter section RF switching unit.

3-SA-1070/SRA-34(V): Replace Switch Card Assemblies that have Defective Switch Springs. (EIB 854, 865, 918)

Correction Material: Will be done by installing team after completion of modifications

1-A FA-2 NS0967-LP-304-3200 EIC Q94L000 SERIAL: All equipments built under contract NObsr 95244. IDENTITY: Refer to Collins Factory Modification. \#40. Remove SA-1070/SRA-34(V) from cabinet. Manually push in the switch rods (STILETTOS) and observe that one of the switch contacts are open and the other contacts are closed. Check for improper switch operation when the switch rods are moved inward and outward. If improper switch operation is noted, this field change is not completed.

4-SA-1070/SRA-34(V): Pull Handle Installation
Correction Material: Reflected in revised technical manual for AN/SRA-34A(V) dated 27 March 1973

1-A FA-I NS0967-304-3190
SERIAL: All serial numbers
IDENTITY: Open the door on the front of CY-4033/SRA34(V) cabinet. Observe that a pull handle has been installed at each end of the SA-1070/SRA-34(V) stiletto drive unit.

1-SA-1596/F: RF1 Modification
Correction Material: Ch. 3, NE0967-265-8044 to NE0967-
265-8040; Ch. 3, NE0967-265-8053 to NE0967-265-8050; Ch. 3, NE0967-265-8063 to NE0967-265-8060

I-A YF. 4 NS0967-265-8130
SERIAL: All serial numbers
IDENTITY: Attachment of Field Change 1-SA-1596/F identification tag under nameplate on front of unit.

## 1-SA-1695/UYK: Addition of Bleeder Resistor

Correction Material: T-1, NS0967-312-0021 to NS0967-3120020

2-A FA-1.5 NS0967-312-0130 EIC (see note)

SERIAL: A!l SA-1695/UYK units fumished with CP-967(V)/ UYK Computers
IDENTITY: This field change can be identified by removing the upper and lower covers from the switching unit and verifying that a resistor of approximately $5.1 \mathrm{~K}, 7$ watts has been connected across the terminals of capacitor Cl .
NOTES: EIC QK0I000, QK06000, QK07000
2-SA-1695/LYK: Switching Unit - Resistor Replacement
Correction Material: T-S, NS0967-312.0025 to NS0967-3120020

I1-A FA-1 NS0967-312-0160
EIC QKOPOOO
IDENTITY: Note that the single resistor 2AIAIRI on terminal board 2A1A1 has been replaced by two 47-ohm, 3-watt resistors 2AIAIR1A and 2AIAIRIB.

1-SA-2000/WSC-1(V): Automatic LOS/SATCOM Switching for Switching Unit SA-2000/WSC-1(V).

Correction Material: Chg. 3, NE0967-LP-467-9013, to TM, NE0967-LP-467-9010

1-A FA-4 NE0967-LP-467-9090 EIC QP30
SERIAL: All serial numbers.
IDENTITY: Verify installation of relays IASKS and IASK7.
NOTES: Prerequisite Field Changes: 3-C-9597/WSC-I(V).
2-SA-2000/WSC-1(V): Auxiliary receive Output Port.
Correction Material: Chg. to TM, NE0967-LP-467-9010
3-A FA-I NE0967-LP-467-9100 EIC QP30
SERIAL: All serial numbers. (Accomplishment on an asneeded bases.)
IDENTITY: Verify that a directional coupler (IASDCI) has been installed at the input of relay IASK3.
NOTES: Preremisite Field Change: 1-SA-2000/WSC-1(V), 3-C-9597/WSC-1(V), and 3-AS-3018/WSC-1(V).

1-SA-2000A/WSC-1(V): Removal of EMI Filter in Switching Unit SA-2000A/WSC-1(V).

Correction Material: Chg. to TM, NE0967-LP-614-0010.
1-A FA-1 NE0967-LP-614-0060 EIC QP45 SERIAL: All serial numbers.
IDENTITY: Verify that the power cable goes directly to 112 without going through fiter.

2-SA-2000A/WSC-1(V): Auxiliary Receive Output Port. Correction Material: Chg. to TM, NE0967-LP-614-0010
3-A FA-1 NE0967-LP-614-0070 EIC QP45
SERIAL: All serial numbers. (Accomplishment on an asneeded basis.)
IDENTITY: Verify that a directional coupler (1A5DCI) has been installed at the input of relay IA 5 K 3 .

1-SB-83/SRT: Installation of Knob Locking Device Correction Material: See NS98370

> A FA-2 NS98370 2N5930.316- 9389
SERIAL: Vert mtd equip.
IDENTITY: The knobs come in five colors, having locking bars mounted behind knobs.

2-SB-83/SRT: Installation of Knob Locking Device

A FA-2 NS98398 F5840-568. 7816
SERIAL: Hor mid equip.
IDENTITY: The knobs come in five colors, have locking bars mounted behind knobs.

## 3-SB-83/SRT: Cancelled

1-SB-315/U: Modification to Provide Key Adjustment 'Speed Key" Jack and Lamp Replacement

Correction Material: T-1 to NS92038
2-A FA-4 NS98983 None SERIAL: All
IDENTITY: Control panel with key assembly having gap and tension adjustments. Addition of key jack; incandescent type bulb assembly.

1-SB-315A/U: Same as 1-SB-315/U
1-SB-I203/UG: Replacement of Calibration Resistor R-101 and Improvement of Meter Accuracy

Correction Material: T•1, NS0967-116-9011
2-A FA. 2 NS0967-116-9020 None SERIAL: All - but not SB-1203A/UG and SB-1210A/UGO IDENTITY: Ohmmeter measurement of the resistance of meter calibration resistor $R-101$ in SB-1203/UG and SB1210A/USQ, R-102 in TT-23/SG through TT-23E/SG and R100 in TT-23F/SG.

1-SB-1210/UGQ: Same as 1-SB-1203/UG
1-SB-1299/USQ-20(V): Prevention of Overtravel of the Switch Handles on the Interconnecting Panels

## Correction Material: None

2-A FA-1.5 NS0967-224-4020 None SERIAL: 1 thru 9
IDENTITY: Presence of physical stops installed behind and below all ten switch handies on the interconnecting panel.

2-SB-1299/USQ-20(V): Replacement of 68 Pole Switches with 80 Pole Switches for WDS-MKII System Compatibility

Correction Material: None
2-A FA-8 NS0967-224-4020 None
SERIAL: Interconnecting Panels SB\#2 on DLG 28, -29, -30, -31, -32, -33, -34, and DLG(N)-35
IDENTITY: Noting the use of an 80 pole switch in lieu of a 60 pole switch in the locations specified in step I of this procedure.

3-SB-1299/USQ-20(V): Provision of Additional Switch Locations

Correction Material: T-1, NS0967-224-4012 to NS0967-2244010 (formerly NS94088)

1-A FA-6 NS0967-224-4030
SERIAL: Equipments as designated by the Naval Ship Engineering Center, where a need for additional switching capability exists.
IDENTITY: Accomplishment is readily apparent by the provision for or installation of, fifteen switch units in the SB-1299/USQ-20(V).

4-SB-1299/USQ-20(V): Gang Adjacent Switch Units for Simultaneous Switching

Correction Material: None required
1-A FA.1 NSO967-224 4040
SERIAL: Serial numbers as designated by the Naval Ship Engineering Center
IDENTITY: Presence of a bar ganging two adjacent switch units.

5-SB-1299/USQ-20(V): Insure Positive Switching and Prevent Stop Override

Correction Material: None
1-A FA-8 NS0967-224-4050
SERIAL: All equipments
IDENTITY: If the stop plate is wider above the securing screws than below, this field change has been accomplished.

1-SB-1299A/USQ-20(V): Same as 3-SB-1299/USQ-20(V)
2-SB-1299ANSQ-20(V): Same as 4-SB-1299/USQ-20(V)
3-SB-1299A/USQ-20(V): Same as 5-SB-1299/USQ-20(V)
4-SB-1299A, USQ-20(V): Provide Third Active Position to 80 Pole Switches

Correction Material: T-2, NS0967-224-4013 to NS0967-2244010
2.C YF-120 NS0967-224-4060 EIC QM17000

SERIAL: Equipments as directed by NAVSEC
IDENTITY: Observing that four (4) 90 pin connectors are on each switch module.

1-SB-1299B/USQ-20(V): Same as 3-SB-I299/USQ-20(V)
2-SB-1299B/USQ-20(V): Same as 4-SB-1299/USQ-20(V)
3-SB-1299B/USQ-20(V): Same as 5-SB-1299/USQ-20(V)

4-SB-1299B/USQ-20(V): Same as 4-SB-1299A/USQ-20(V) except

EIC QM30000
1-SB-1510/FRR: (S)
1-SB-1622/SYA-4(V): Communications Patching Panel of a Factory Field Bulletin as a Unit Field Change

Correction Material: Incorporated in revised publication
2-A NA NS0967-213-5020 None SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

1-SB-1623/SYA-4(V): Radar Signal Distribution Switchboard Incorporation of a Factory Field Bulletin as a Unit Field Change

Correction Material: Incorporated in revised Technical Manual

2-A NA NS0967-2I3-5020 None SERIAL: All

IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-SB-1623/SYA-4(V): Power Supply Regulator Modification Correction Material: T- to NS94640(A)
2-A FA-2 NS
SERIAL: A1 thru A47 and Bl thru B5 all subsequent serial numbers of aff ected equipments have been factory modified. IDENTITY: By checking for the presence of capacitor C16 above contracts 7 thru 11 on the power supply regulator card HAC P/N 1507119 in each of the two power supply units of Radar Distribution Switchboard.

3-SB-1623/SYA-4(V): Modification to lmprove Operation of 580707 Card

Correction Material: T-6, NS0967-183-4029 to NS0967-1834020

1-A FA-68 NS0967-963-3050
SERIAL: All serial numbers
IDENTITY: Noting the following component removals and replacements: Removals ( $\mathrm{Cl}, \mathrm{C} 2, \mathrm{C} 6, \mathrm{R} 4$, and R 7 ); Replacements: (Q1 and Q3 are now 2N2369 transistors. CR4 is a iN995 diode, R6 is a 680 ohm resistor.)
NOTES: FCB, dtd 22 Mar 71 supersedes FCB dtd 22 Apr 70.
1-SB-1881(XN-1)/USQ-20(ク): Same as 2-OA-3069/SYA-1(V)
2-SB-1881(XN-1)/USQ-20(V): Incorporation of Factory Field Bulletin as a Unit Field Change

Correction Material: None
2-A FA-0.5 NS0967-213-5020
None
SERIAL: Al thru AIO
IDENTITY: Change number stamped on the Field Change Accomplished plate.

3-SB-1881(XN-1)/USQ-20(V): Correction Wiring Error
Correction Material: None
2-A FA-1 NS0967-213-5020 None
SERIAL: Al thru A 10
IDENTITY: Indicators A4DS63A (FCS 1 Ready) and A40S60A (FCS 2 Ready) light up when the equipment is set up in both the 'End Around Test' mode and the 'Casualty' mode, and the respective pushbuttons A4A83S1 (FCS 1 Destruct) and A4A8SI (FCS 2 Destruct) are depressed.

4-SB-1881(XN-1)/USQ-20(V): Incorporation of UNIVAC Field Change Orders

Correction Material: Included in F.C. Kit Supplied by BSTR

2-A FA-8 NS0967-057-6100 None
SER1AL: A 1 thru A8
IDENTITY: Proper recording of Field Change number on Field Change Accomplished plate.

5-SB-1881(XN-1)/USQ-20(V): Interchange Lamp Filters
2-A FA-1/10 NS0967-057-6070 None
SERIAL: Al thru Alo
IDENTITY: Amber filter in the ' $Y$ SAFE' position and a green filter in the ' $Y$ READY' position.
6.SB-1881(XN-1)/USQ-20\{V): Weapons Control Panel Changes

Correction Material: T-1, NS0967-057-3690
2-A FA-2 NS0967-057-6070
None SERIAL: All
IDENTITY: By checking that the FCS Ready Lamp will illuminate when the NORMAL/CASUUALTY Switch is in normal position.

7-SB-1881(XN-1)/USQ-20(V): FCS-1/DIRECTOR 1, FCS-2/ DIRECTOR 2 and FCS-1/DIRECTOR-2, FCS-2/DIRECTOR 1 Split Indicator Lamps, Wiring Correction

Correction Material: T-2 to NS95777(A) (NS0967-0576012)

2-A FA-0.5 NS0967-057-6120 None SERIAL: All DIRECTOR 1, FCS-2/DIRECTOR 2, and FCS-1/DIRECTOR 2, DIRECTOR 2, FCS-2/DIRECTOR I split indicator lamps light correctly from signals originating in the fire control system, DIRECTOR 1, FCS-2/DIRECTOR 2, and FCS-1/DIRECTOR 2, FCS-2/DIRECTOR 1 split indicator lamps light correctly from signals originating in the fire control system.

8-SB-1881(XN-1)/USQ-20(V): Deletion of Launch Delay Synchro

Correction Material: T-3, NS0967-057-6013 to TM, NS0967-057-6010

3-A FA-0.5 NS0967-057-6!30 None
SERIAL: Al!
IDENTITY: Presence of a metal cover over the Launch
Delay Synchro ring on the bullnose of the Weapons Control Panel.

1-SB-1881/USQ-20iV): Same as 2-OA-3069/SYA-1(V)
2-SB-1881/USQ-20(V): Same as 2-SB-1881(XN-1)/USQ-20(V)
3-SB-1881/USQ-20(V): Same as 3-SB-188?(XN-1)/USQ-20(V) except
SERIAL: 1

4-SB-1881/USQ-20(V): Same as 4-SB-1881(XN-1)/USQ-20(V)
5-SB-1881/USQ-20(V): Same as 5-SB-1881(XN-1)/USQ-20(V) except
SERIAL: Al thru A 10
6-SB-1881/USQ-20(V): Same as 6-SB-1881(XN-1)/USQ-20(V)
7-SB-1881/USQ-20(V): Same as 7-SB-1881(XN-1)/USQ-20(V)
8-SB-1881/USQ-20(V): Same as 8-SB-1881(XN-1)/USQ-20(V)
9-SB-1881/USQ-20(V): Weapons Control Panel Pushbution Legend Change

Correction Material: T-4, NS0967-057-6015 to TM, NS0967.057-6010 (formerly NS95777(A))

1-A FA-1.0 NS0967-057-6140
SERIAL: Al thru Alo
IDENTITY: For all serials except A-9, pushbutton legend changed from FCS5 Track/FCS1 Guide, FCS5 Track/FCS2 Guide, and 2 DIR SURF to FCS1 HT (R) SURF, FCS2 HT (R) SURF, and HT (R) SURF respectively. Addition of HT
(R) $/ 2$ DIR to the OFF indicator located in the FCS posituon. For Serial A-9 (DLG(N) 35) FCS1 Track/FCS4 Guide, FCSI Track/FCS5 Guide will read FCS4 HT (R) SURF, FCSS HT (R) SURF respectively. 2 DIR SURF will read HT (R) SURF and HT (R)/2 DIR added to the OFF indicator.

10-SB-1881/USQ-20(V): WCP SB-1881/USQ-20(V) Safety Cover for 'Assign UB' Pushbution

Correction Material: T-S, NS0967-057-6016 to TM, NS0967-057-6010 (Vol. I), T-1, NS0967.057-6022 to TM, NS0967.057-6020 (Vol. II)

1-A FA.1.0 NS0967.057-6150
SERIAL: Al thru Alo
IDENTITY: Safety cover present over 'ASSIGN UB' pushbutton.

## 11-SB-1881/USQ-20(V): Weapons Control Panel and Wiring Change

Correction Material: T-6, NS0967-057-6017 to TM, NS0967.057-6010 (Vol. 1), T-2, NS0967-057-6023 to TM, NS0967-057-6020 (Vol. II)

1-A FA-1.0 NS0967-057-6160
SERIAL: Al (XN-1) AI thru A10
IDENTITY: Label on switch 41A25-SI reads ' $Y$ ' back-up fuse disable vice ' $Y$ ' back-up fuse enable.

12-SB-1881/USQ-20(V): Install Indicator Standby Switch
Correction Material: T-7, NS0967-057-6018 to NS0967-057. 6010; T-3, NS0967.057-6024 to NS0967.057-6020; T-1, NS0967.057-6051 to NS0967-057-6050

1-A FA-3 NS0967.057-6170 EIC QK05000
SERIAL: All series and serial numbers
IDENTITY: A two position toggle switch is located in the upper right hand comer of the console's upper panel.

13-SB-1881/USQ-20(V): Casualty Mode Master Clear
Correction Material: T-4, NS0967-057-6025 to NS0967-0576020

1-A FA. 8 NS0967-057-6180 EIC QK05000
SERIAL: AI (XN-1) and A1 thru A 10 .
IDENTITY: Logic cards present, and jacks wired in locations 21J29C, 21J27C, and 21J28C.

14-SB-1881/USQ-20(V): DFCS/ASMD Modification
Correction Material: Revised Technical Manual
I-C YF-400 NS0967-LP-057-6190 EIC QM31000
SERIAL: AI (XN-1), A! thru A10
IDENTITY: A 36 button matsix added to upper left corner of control-indicator panel (52A4).

15-SB-1881/USQ-20(V): System Ready and P.A.T. Mode Reversion to Automatic Addition to

Correction Material: Included in Technical Manual
I-A FA-8 NS0967.LP-057-6200
SERIAL: Serials AI (XN-i), and Al thru A10
IDENTITY: Classified
16-SB-1881/USQ-20(V): Wiring Change to UB Release Launcher Relay

Correction Material: Included in Technical Manual
II-A FA.

SERIAL: All serial numbers
IDENTITY: Test point 32TB4 1-6 is at ground ('O‘V) when the control signal 'UB Release Launcher' is not set. (Use Multimeter AN/PSM- 4 or equivalent.)

17-SB-1881/USQ-20(V): Rail 'A' Inventory, Decrementation
Correction Material: T-5, NS0967-LP-057-6026, to TM, NS0967-LP.057-6020 dtd 21 Feb 75.

1-A FA-2 NS0967-LP.057-6210 EIC QM31 SERIAL: AI(XN-1), Al thru AIO
IDENTITY: Continuity from $32 \mathrm{~J} 21 \mathrm{C}-13$ to $32 \mathrm{~J} 14 \mathrm{C}-12$ and from 32J14C-15 to 32F21C-7.
NOTES: Prerequisite Field Change: 15 -SB-1881/USQ-20(V)
18-SB-1881/USQ-20(V): Mode Standardization.

## Correction Material: To be provided.

1-A FA-32 NS0967-LP-057-6220
EIC QKOS
SERIAL: All serial numbers.
IDENTITY: Verify that PC card in location 31JISB is a 250080 type.

1-SB-2622/USQ-20(V): Status Indication and Logic Drawer Wiring Modifications. (EIB 730, 816)

Correction Material: T.4, NS0967-051-5035 to NS0967-0515030 (TM for OA-7781/USQ-20(V))

4-A FA-3 NS0967-051-5220
SERIAL: This field change applies to all SB-2622/USQ-20(V) serials assigned to DLG-16 Class (Conv.) only.
IDENTITY: Noting that wires have been removed from pin 5 and added to pin 1 of the following relays: K140, K141, K137. K138, K134, K135, K131, and K132. No direct wire connections exist between: (a) A3A2J20C - pin 13 and A2A2J14F. pin II (b) A3TB04-B25 and A3A2J20C - pin 13.
NOTES: FCB dtd May 1974 supersedes FCB dtd Jul 1969.
2-SB-2622/USQ-20(V): Incorporation of UNIVAC Factory Change Orders (MPLs) as a Unit Field Change. (EIB 740, 745).

Correction Material: Corrections to the technical manual are contained within each MPL and will be reflected in revised publications

2-A FA-1 NS0967-05:-5220 EIC FR04G00 SERIAL: AI thru A 10
IDENTITY: UNIVAC Factory Change Orders (MPL's) 482, 483, and 512 are required to determine the installation of this field change.

3-SB-2622/USQ-20(V): Launcher Systems Module Pushbution and Wiring Change

Correction Material: T-2, NS0967.051-5013, to TM, NS0967-051-5010; and T-2, NS0967-051-5033, to TM, NS0967-051-5030

1-A FA-1.0 NS0967.051-5170 EIC FR04G00
SERIAL: AI thru A8
IDENTITY: Label on switch A19 Sl reads ' $Y$ ' back-up fuse disable vice ' $Y$ ' back-up fuse enable.

4-SB-2622/USQ-20(V): Status Group and Inventory Indicator Legend Change

Correction Material: T-S, NS0967-051-5016 to TM, NS0967-051-5010; T-3, NS0967-051-5034 to NS0967-051-5030

1-A FA-I NS0967-051-5210
EIC FR04G00 SERIAL: AI thru A20
IDENTITY: Status group indicators and inventory readout indicate $\mathbf{X}(S M-1)$ vice $\mathbf{X}(B T)$.

5-SB-2622/USQ-20KV: Fire Control System Indication Correction

Correction Material: None
1-A FA-1 NS0967-051-5240 EIC FR04G00
SERIAL: Equipments on board DLG-6 Class ships only IDENTITY: Assign Fire Control Push Button Indicators Read 'Assign FCS-2' and 'Assign FCS-3'.

6-SB-2622/USQ-20(V): 'Y' Override Curcuitry Correction
Correction Material: T-5, NS0967-051-5036 to NS0967-0515030

1-A FA-2 NS0967-051-5260 EIC FR04G00
SERIAL: Equipment serials AI thru A 21
IDENTITY: ' $Y$ ' override light does not illuminate during ' $Y$ ' ready condition.

7-SB-2622/USQ-20(V): Code Warning Logic Change
Correction Material: T-6, NS0967-051-5037 to NS0967-0515030

1-A FA-12 NS0967-051-5300
EIC QK05096
SERIAL: All serials assigned DLG 16 Class ships
IDENTITY: Logic Card locations A3A2J17C and A3A2J18C are not used.

8-SB-2622/USQ-20(V): Status Indication and Logic Drawer Wiring Modification. (EIB 817, 924)

Correction Material: T-7, NS0967-051-5038 to NS0967-0515030
4.A FA-3 NS0967-051-5330 EIC QK05096

SERIAL: Equipment serials onboard DLG-6 class ships
IDENTITY: Wires have been removed from pin 5 and added to pin 1 of the following relays: K108, K109, K110, K112, K121, K125, and K129. No direct wire connection exists between A3A2J20C pin 13 and A3A2J14F pin II; A3TB04-B-25 and A3A2J20C pin 13.
NOTES: EIB 924 corrects this FCB

9-SB-2622/USQ-20(V): Range Source Selection Priority
Correction Material: Included in new technical manual
1-A FA-200 NS0967-051-5420
EIC QK05000
SERIAL: All serials assigned DLG 6 Class (Conv.) and DLG 16 Class (Conv.)
IDENTITY: New logic cards in A22 thru A35.

10-SB-2622 USQ-20(V): Incorporation of Continuous Wave Acquisition and Track (CWAT) Functions for DLG 6 Class

Correction Material: T-9, NS0967-051-5701 to NS0967-0515030

1-A FA-24 NS0967-051-5430 EIC QK05000 SERIAL: All serials assigned DLG 6 Class (Conv.) IDENTITY: Status group labels such as: Pulse Master, Doppler Master, SM-1 illum RDY, HT illum RDY, Guid RDY, System Ready and TGT Engage are installed.

11-SB-2622/USQ-20(V): Incorporation of Continuous Wave

Acquisition and Track (CWAT) Functions for DLG 16 Class Correction Material: T-10, NS0967-051-5702 to NS0967-051-5030

1-A FA-24 NS0967-051-5440
EIC QK05000
SERIAL: All serials assigned DLG 16 Class (Conv.)
IDENTITY: Status group labels such as: Pulse Master, Doppler Master, SM-1 Illum RDY, HT Illum RDY, Guid RDY, System Ready and TGT Engage are installed.

## 12-SB-2622/USQ-20(V): Classified

 Correction Material: Included in Technical Manual 1-A FA-40 NS0967-LP-051-5480SERIAL: All serial numbers
IDENTITY: Logic cards of the following types in locations as follows: A3A2 J4B $=7002060 ;$ A3A2 J21B $=7002060$; A3A2 J22B $=7002930 ;$ A3A2 J23B $=7002030 ;$ A3A2 J24B $=7002060 ; \mathrm{A} 3 \mathrm{~A} 2 \mathrm{~J} 25 \mathrm{~B}=7002070 ; \mathrm{A} 3 \mathrm{~A} 2 \mathrm{~J} 26 \mathrm{~B}=7002060$; $\mathrm{A} 3 \mathrm{~A} 2 \mathrm{~J} 27 \mathrm{~B}=7002930 ; \mathrm{A} 3 \mathrm{~A} 2 \mathrm{~J} 28 \mathrm{~B}=7002030 ; \mathrm{A} 3 \mathrm{~A} 2 \mathrm{~J} 29 \mathrm{~B}$ $=7002060 ;$ A3A2 J30B $=7002060$.

13-SB-2622/USQ-20W): Correction to Automatic Cancelling Launcher Assignment Logic

Correction Material: New TM, NAVSEA 0967-LP-0515030 Rev. 1, dtd Jun 1975

1-A FA-3 NS0967-LP-051-5490
SERIAL: All serials assigned DDG 37 Class through DDG 46.

IDENTITY: Classified.

1-SB-2624/USQ-20(V): Fire Control System Module Coast Alert Lens Change

Correction Material: None
1-A FA-1 NS0967-051-5070
SERIAL: 2 thru 6
IDENTITY: The SB-2624/USQ-20(V) indicates a 'Coast Alert' instead of 'Coast'.

2-SB-2624/USQ-20〔V): Status Indication and Test Point Modifications (EIB 730, 816).

Correction Material: T-4, NS0967-051-5035 to NS0967-0515030 (TM for OA-7781/USQ-20(V))

4-A FA-5 NS0967-051-5220
SERIAL: This field change applies to all SB-2624/USQ-20(V) serials assigned to DLG-16 Class (Conv.) only.
IDENTITY: Noting that wires from pins 4 and 5 have been removed and relocated to pins 8 and I , respectively on relays K20, K22, K40, K42, K60, K62, K80, and K82. No direct wire connection exists between A3TB1-C16 and A3A1J21D pin 15, but a direct connection does exist between A 3TBI-Cl6 and A3A1J21D pin 13
NOTES: FCB dtd May 1974 supersedes FCB dtd Jul 1969.

3-SB-2624/USQ-20(V): Fire Control System Module - Destruct Circuitry Modifications

Correction Material: T-1, NS0967-051-5011 to TM, NS0967-051-5010; T-1, NS0967-051-5031 to TM, NS0967-0515030

1-A FA-3 NS0967-051-5080
ElC FR04H00
SERIAL: Serial A-4 (CG-10 ONLY)
IDENTITY: On chassis A3A2A1, Components R1, R2, R3, and R 4 are $5.6 \mathrm{~K}, 2 \mathrm{~W}$ resistors vice $15 \mathrm{~K}, 2 \mathrm{~W}$ resistors.

4-SB-2624/USQ-20(V): Replacement of Engraved Lenses and Colors on Fire Control Systems Module (FCSM)

Correction Material: UNIVAC Document U-8260 Rev 1 dtd 20 Nov 67

1-A FA-3 NS0967-051-5090 EIC FR04H00 SERIAL: A. 4 ONLY
IDENTITY: Fire Control Systems Module shows status for eight (8) Fire Control Systems instead of four (4)

5-SB-2624/USQ-20(V): Incorporation of UNIVAC Factory Field Change Orders (MPLs) as a Unit Field Change (EIB 740, 745).

Correction Material: Corrections to the technical manual are contained with each MPL and will be reflected in revised publications

2-A FA-I NS0967-051-5220 EIC FR04H00 SERIAL: 1 thru 6
IDENTITY: UNIVAC Field Change Orders (MPL's) 480, 481 , and 511 are required to determine the installation of this field change.

6-SB-2624/USQ-20(V): Addition of Status Groups 3 and 4 Indication Signals

Correction Material: T-3, NS0967-051-5014 to TM, NS0967-051-5010

1-A FA-2 NS0967-051-5180 EIC FR04H00
SERIAL: All equipments assigned to DLG 6, 7, 14 and 15 (Modernization).
IDENTITY: Relays A3A2K84, K85, K86, K88, K89, and K90 are 26 -volt relays vice 48 -volt relays.

7-SB-2624/USQ-20(VI: Status Indicator Lens Legend and Color Change

Correction Material: T-4, NS0967-051-5015 to NS0967-0515010

1-A FA-I NS0967-051-5190 EIC FR04H00
SERIAL: AI thru A6
IDENTITY: 37AIMP44E lens is amber.

8-SB-2624/USQ-20(V): Status Group and Inventory Indicator Legend Change

Correction Material: T-5, NS0967-051-5016 to TM, NS0967-051-5010; T-3, NS0967-05 1-5034 to TM, NS0967-0515030

1-A FA-I NS0967-051-5230 EIC FR04H00
SERIAL: AI, A2, A3, and AS thru AIO
IDENTITY: Status group 1 lights indicate (X(SM-1) vice X(BT).

9-SB-2624/USQ-20(V): Addition of Alternate Air Target Select Order

Correction Material: T-6, NS0967-051-5017 to NS0967-0515010

1-A FA-48 NS0967-051-5250 EIC FR04H00
SERIAL: All serial numbers.
IDENTITY: A 4 button matrix is added to the lower right comer of bullnose.

10-SB-2624/USQ-20(V): (MPL-816) Wiring Correction (EIB 817).

Correction Material: None required

4-A FA-1 NS0967-051-5340
EIC QK05097
SERIAL: Equipments A1 thru A 16
IDENTITY: Noting that there is no direct wire connection between A3AI, J23F-12 and A3A1J1A-12.

11-SB-2624/USQ-20(V): Status Indicator Illumination (EIB817).

Correction Material: T-8, NS0967-051-5039, to TM, NS0967-051-5030.

4-A FA-1 NS0967.051.5340 EIC QK05097
SERIAL: Equipment serials assigned to DLG-6 (CONV) Class ships
IDENTITY: Wires from pins 4 and 5 have been removed and relocated to pins 8 and 1 respectively on relays $\mathrm{K} 16, \mathrm{~K} 17$, K36, and K37. No direct wire connection exists between A3TBI-CI6 and A3AIJ21D pin 15, but a direct connection does exist between A3TBI-C16 and A3A1J21D pin 13.

12-SB-2624/USQ-20KV: Incorporation of Continuous Wave Acquisition and Track (CWAT) Functions for DLG 6 Class

Correction Material: T-11, NS0967-051-5703 to NS0967-051-5030

1-A FA-24 NS0967.051-5450 EIC QK05000 SERIAL: All serial numbers assigned DLG 6 Class (Conv.) IDENTITY: Status group labels such as: Pulse Master, Doppler Master, SM-1 Illum RDY, HT Illum RDY, Guid RDY, System Ready, TGT Engage, Shore, Surface, LSASGD and CBT are installed.

13-SB-2624/USQ-20(V): Incorporation of Continuous Wave Acquisition and Track (CWAT) Functions for DLG 16 Class

Correction Material: T-12, NS0967-051-5704 to NS0967-051-5030

I-A FA-24 NS0967-051-5460 EIC QK05000 SERIAL: All serial numbers assigned DLG-16 Class (Conv.) IDENTITY: Status group labels such as: Pulse Master, Doppler Master, SM-i illum RDY, HT Illum RDY, Guid RDY, System Ready, TGT Engage, Shore, Surface, LSASGD and CBT installed.

14-SB-2624/USQ-20(V): CBT Surface Select
Correction Material: T-7, NS0967-LP-051-5018 to NS0967-LP-051-5010

1-A FA-1 NS0967-LP-051-5470 EIC QK05000
SERIAL: All serials DLG-6 and 16 Class Ships
IDENTITY: FCSM keyboard will have only CBT and surface select engraved on the pushbutton lens.

15-SB-2624/USQ-20(V): Removal of LSM-2 Indication on DDG-37 Class Ships (Formerly DLG-6 Class), (EIB 918).

Correction Material: EIB 918
4-A FA-I EIB 918 EIC QM34
SERIAL: All SB-2624/USQ-20(V) (FCSMS) installed in DDG-37 class ships.
IDENTITY: Observing that 'LSM-2 Off Line' is extinguished.
16-SB-2624/USQ-20(V): Incorporation of ASMD Functions.
Correction Material: T-8, NS0967-LP-051-5019, to TM, NS0967-LP-051-5010.

1-A FA. 8 NS0967-LP-051-5500
EIC QM34
SERIAL: Serial number A4 only.

## IDENTITY: Confidential

17-SB-2624/USQ-20(V): FSCM Keyset Label Change.
Correction Material: T-1, NS0967-LP-051-5011, to TM, NS0967-LP-05!-5010 dtd Oct 75

1-A FA-1 NS0967-LP-051-55I0
EIC QK05
SERIAL: SB-2624/USQ-20(V) serial numbers A8 and Al4, only.
IDENTITY: FSCM Keyboard will have pushbuttons 12, 13, and IS thru 20 blank. Button 14 will have 'Warfare Mode/ CANTCO* engraved on it.

1-SB-2780/UYA-4(V): Etch Change to the Data Muitiplexer Card 1537758-I00

Correction Material: None required
4-A FA-1 NS0967-238-7320
EIC FU09000
SERIAL: AI thru A5, B1, B2, C2, C3 and C7
IDENTITY: Checking to see if the etch has been removed be tween R129 and the positive side of C36 on the Sweep Data Multiplexer Card

2-SB-2780/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group I, as a Unit Field Change

Correction Material: Included in applicable maintenance bulletins

4-A
EIC FU09000
SERIAL: Equipments as shown in Table I of the field change IDENTITY: Observing this field change number on the Field Change Record plate

3-SB-2780/UYA-4(V): Prevent Loss of Switch Board Data
Correction Material: T-2, NS0967-238-7012 to NS0967-2387010; T-1, NS0967-238-7062 to NS0967-238-7060; T-5, NS0967-238-7105 to NS0967-238-7100; T-1, NS0967-238-7111 to NS0967-238-7110; T-3, NS0967-238-7133 to NS0967-2387130

## 1-A FA-72 NS0967-238-7400 <br> EIC QM0600

SERIAL: A! thru A5, B1, B2, Cl thru C60, and Gl thru Gl2 IDENTITY: New diodes CR18, 19, and 20 are installed on each sweep data multiplexer card (1537758). The cards are located in slots $\mathrm{J} 1, \mathrm{~J} 2, \mathrm{~J} 3, \mathrm{~J} 4, \mathrm{~J} 18, \mathrm{~J} 19, \mathrm{~J} 20$, and J 21 of area A5.

4-SB-2780/UYA-4(V): Correct Teimination Labe]
Correction Material: None required
III-A FA-0.2 NS0967-238-7580
EIC P83H000
SERIAL: A1 thru A5, B1, B2, C1 thru C60, G1 thru G12 and H1 thru H8. All other units are to be corrected by an identical production change
IDENTITY: Noting the following in the rear exterior area of the SB-2780/UYA-4(V) switchboard: Facing the back of the switchboard, locate hinged coaxial connector panel A32 in the lower iight hand quadrant. The termination label directly above the top row of coaxial connectors should read as follows: TERMINATE UNUSED COAX CONNECTORS I!13 THROUGH 152 WITH PLAIN DUST COVERS (711204-1). TERMINATE UNUSED COAX CONNECTORS J153 THROUGH J311 WITH 75 OHM TERMINATION CAPS (712260-24).

5-SB-2780/UYA-4(V): RDDSB Spare Fuse<br>Correction Material: None requis red

1-A FA-0.5 NS0967-LP-562-6160
EIC QM06000
SERIAL: Serial numbers AI, A2, A5, B1, B2, Cl thru C60, D2, E1, E3, E4, Gl thru G12, H1 thru H33, [1, J1, J2, Ll thru LS, and K1
IDENTITY: Open right cabinet door of switchboard and observe a spare fuse clip marked ' 20 A ' installed at either the right side of the bracket at top rear of control panel Al5 or the inside of cabinet door approximately two feet from bottom and one foot from the left edge.
6.SB-2780/UYA-4(V): Under Development. (02-73).

7-SB-2780/UYA-4(V): Under Development. (07-75).

8-SB-2780/UYA-4(V): Under Development. (03-76).

9-SB-2780/UYA-4(V): Provide -15V Unregulated Overload Protection.

Correction Material: To be provided.
1-A FA-8 NS0967-LP-562-6620 EIC QM06
SERIAL: A1,A2,A5,B1,B2,Cl-C60,G1-G12,H!-
H33,I1,JI,J2,K1-K60,L1-L 8,M1-M19,N1-N20,P1-P3,R1-R24,
and HAC 259-286.
IDENTITY: Verify installation of fuse blocks A14TB1 and Al4TB2.

1-SB-3266/U: Retaining Bar
Correction Material: None required
1-A FA.3 NS09674440020
SERIAL: All serial numbers
IDENTITY: Loosen two retaining screws at top of door. Pull door forward and visually inspect for steel retaining bar across bottom of connector, plugs 1P1 through 1P4.

1-SG-1016/U: Improvement of Frequency Range and Pulse Modulation, and Installation of Ruggedized Panel Meter and Chassis Braces.

Correction Material: Revised TM, NE 0967-LP-163-8010, did 26 Sep 75.

1-A FA-8 NE0969-LP-163-8020 EIC ND00 SERIAL: 100 thru 209, 211, 213, and 223 thru 234. (All other units were modified by an identical production change).
IDENTITY: Panel meter 1MI secured to front panel with two 6-32 binding-head screws through front panel into meter.

1-SM-319/SYA-4(V): Video Signals Simulator - Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: None
2-A NA NS0967-213-4030 None SERIAL: All
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-SM-319/SYA-4(V): Reduction in Loading of Signal W80
Correction Material: T-1, NS0967-213-4011 to TM, NS0967-213-4010 (formerly NS94641)

2-A FA-2 NS0967-213-4030 None SERIAL: Al thru A3
IDENTITY: Removing lower access panels on the front and rear of the simulator and checking for the presence or wiring changes as specified in field change
3.SM-319/SYA.4(V): Video Signals Simulator Gate Unloading Correction Material: T-1, NS0967-213-4011 to TM, NS0967-213-4010 (formerly NS94641)

2-A FA-1.5 NS0967-213-4030
None
SERIAL: AI thru A3
IDENTITY: Checking for incorporation of wiring changes as specified in procedures of field change.

4-SM-319/SYA-4(V): Simulation of 1.5 Degree Band Width Correction Material: T-1, NS0967-213-4011 to TM, NS0967-213-4010 (formerly NS94641) 2-A FA-4 NS0967.213-4030 None
SERIAL: AI thru A3
IDENTITY: Presence of 8 jumpers between pins on connector J. 142.

## 5-SM-319/SYA.4(V): Cancelled

6-SM-319/SYA-4(V): Range Counter Modification
Correction Material: None
2-A FA-2 NS0967-213-4040 None
SERIAL: Al thru A3
IDENTITY: Checking for presence of 580722 Card Mode and wiring changes as specified in this field change.

7-SM-319/SYA-4(V): Modification to Allow Proper Operation with AN/SPS 48 Radar

Correction Material: T-5, NS0967-213-4015 to NS0967-213. 4010 and T-2, NS0967-213-4022 to NS0967-213-4020 (formerly NS94641, Volumes I and II)

4-A FA-1 NS0967-213-4060
SERIAL: All
IDENTITY: Checking for a jumper wire between J149, pins $A$ and $B$, and the wiring changes specified in the Procedure.

1-SM-319A/SY A-4(V): Same as 2-SM-319/SYA-4(V) except SERIAL: Al thru A 13

2-SM-319A/SYA-4(V): Same as 3-SM-319/SYA-4(V) except SERIAL: 1 thru 7

3-SM-319A/SYA-4(V): Same as 4-SM-319/SYA-4(V) except SERIAL: A1 thru A23

4-SM-319A/SYA.4(V): Cancelled
5-SM-319A/SYA-4(V): Same as 6.SM-3I9/SYA-4(V) except SERIAL: AI thru A20

6-S.W-319A/SYA-4(V): Same as 7-SM-319/SYA-4(V)
7-SM-319A/SYA-4(V): Same as 3-CV-1320/SYA-4(V) except SERIAL: A1 thru A24, B1 and B2

8-SM-319A/SYA-4(V): Same as 4-CV-1320/SYA-4(V)
1-A FA. 3 NS0967-959-3040 EIC DQ02000
SERIAL: A1 thru A24, Bl and B2
9-SM-319A/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except
SERIAL: A1 thru A24 and EIC P804LOO

10-SM-319A/SYA-4(V): Delete Sine/Cosine Potentiometer. (EIB 945)

Correction Material: EIB 945
4-A FA-1 EIB 945
EIC P804
SERIAL: AI thru A27, B1 thru B3, and Ci thru C5
IDENTITY: In the Synchro Assembly Unit (581347-100) in area A-10, potentiometer R1 should be removed or disengaged from motor B 2 .

1-SM-425/UYA-1(V): Reduction in Loading Signal W0080
Correction Material: Ch. I, NS0967-078-7161 (Vol. I) TM; Ch. I, NS0967.0967.078.7171 (Vol. II) TM

2-A FA-1.5 NS0967.078-7220
None

## SERIAL: All serial numbers

IDENTITY: By removing the access panels on the front and rear of the simulator and checking for wiring changes as specified in this field change.

1-SM-441(V)2/UYA.4(V): Same as 4.AM.4534/UYA.4(V) except
SERIAL: A! thru A33, Bl thru B9, CI-C5, D1
2-SM-441(V)2/UYA-4(V): Same as 5-AM-4534/UYA-4(V) except
SERIAL: A! thru A33, Bl thru B9, Cl thra C5
IDENTITY: Verify the new value of R1: R29, and R57 on the isolator logic gate card 1537552-100. The new value of this resistor is 3.9 K . Location for this card in the equipment is Areas A3, J4, or J 19 .
3.SM-441(V)2/UYA.4(V): Same as 8-AM-4534/UYA.4(V) except
SERIAL: AI thru A9
4-SM-441(V)2/UYA-4(V): Noise Generator Improvement
Correction Mateital: T-S, NS0967-238-7125 it NS0967-2387120

IV-A FA-0.5 NS0967-318-2030
EIC QM06000
SERIAL: Serial numbers AI thru A33 and Bl thru B9
IDENTITY: Remove the noise generator card from slot A5J21 and note that capacitors C-I and C17 are installed with their positive ends adjacent to potentiometers R4 and R76 respectively.

5-SM-441(V)2/UYA-4(V): Delay Mode Tags
Correction Material: T. to NS0967-238-7120 and NS0967. 318-2010

II-A FA-2 EIB 876 EIC QM06000
SERIAL: SM.441(V)2/UYA.4(V) - Serial numbers AI thru A33, B1 thru B9, Cl thruC5, D1, El thru E2
IDENTITY: Check for zero ohms between area 6-J14-5, 16,
75 and $7-$ J20.8, 10, 9 respectively.

## 6-SM.441(V)2/UYA.4(V): VSS Connector Change

Correction Material: None
1-A FA-0.5 NS0967.238-7900 EIC QM06000 SERIAL: Serial numbers A! thru A33, B! thru B9, Cl thru $\mathrm{C}, \mathrm{Di}, \mathrm{El}$ and E 2
IDENTITY: Determination of external connector A26J96 is mated with internal connector A26P96 or inspecting for the
presence of contact sockets (vice contact pins) stowed within the unused internal connector A26J96.

7-SM-441(V)2/UYA-4(V): Same as 4-SM-441/UYA-4(V) except
SERIAL: Al thru A33 and Bl thru B9

8-SM-441(V)2/UYA-4(V): Addition of a Card Connector and Associated Wiring

Correction Material: None
I-A FA-11 NS0967-312-2020 EIC QM06000
SERIAL: Serial numbers A2 thru A9
IDENTITY: Inspect the wired frame assembly for the presence of an 86 pin card connector in area 7, slot 4. Also check for a Field Bulletin decal indicating this change adjacent to the top assembly number located on the inside of the right hand cabinet wa!l.

9-SM-441(V)2/UY A-4(V): Same as 19.CV-2095(V)/UYA-4() except
SERIAL: Al thru A33, Bl thru B9, Cl thru Cs, D1, El, E2, Gl thru G3, HI
10.SM-441(V)2/UYA-4(V): AIMS Diplexing Compatibility Modif reation

I-A FA-I NS0967-LP-318-2050 EIC P806000 SERIAI : As selected by NAVSEA
IDENTITY: Observe installation of a mode tags generator card, PN 1625291-100 in A6J17. Also observe that the card location chart lists this card at A6.117.

1-SM-441(V)3/UYA-4(V): Same as 5-AM-4534/UYA-4(V)

2-SM.441(V)3/UYA-4(V): Same as 5.SM-441(V)2/UYA-4(V) except
SERIAL: A1, Sl-B8

3-SM-441(V)3/UYA-4(V): Same as 6-SM-441(V)2/UYA-4(V) except
SERIAL: B1 and B2

4-SM-441(V)3/UYA-4(V): Same as 10-SM-441(V)2/UYA.4(V)
5-SM-441(V)3/UYA-4(V): Same as 19-CV-2095(V)/UYA-4(V) except
SER1AL: Al, Bl thru B30, C1, D1 thru D3

6-SM-441(V)3/UY A.4(V): Under Development (03-78)
1-SM.441(V)4/UYA-4(V): Same as 4-AM-4534/UYA-4(V) except
SERIAL: Al thru A6, B!

2-SM-441(V)4/UYA-4(V): Same as s-AM-4534/UYA-4(V) except
SERIAL: Al thru A6, Bl
IDENTITY: Verify the new value of RI, R29, and R57 on the isolator logic gate card 1537552-100. The new value of this resistor is 3.9 K . Location for this card in the equipment is Areas A3, J4, or J19.

3-SM-441(V)4/UYA.4(V): Same as 5-SM-441(V)2/UYA-4(V) except
SERIAL: Al thru A6, Bl
4SM-441(V)4/UYA-4(V): Same as 6.SM.441(V)2/UYA.4(V) except
SERIAL: Al thru A6, Bl

5-SM-441(V)4/UYA-4(V): Same as 4-SM-441/UYA-4(V)
except
SERIAL: Al thr A6
6.SM-441(V)4/UYA-4V): SPS.52 Simulation Module

Correction Material: To be provided
I-C FA-80 NS0967-LP-318-2060
SERIAL: Serial numbers designated by NAVSEA
IDENIMY: Installation of a Synchro-to-Digital Converter, PN 361138.011, in A7J2
NOTES: This field change is to be installed concurrently with Field Change 22-OA-7980A/UYA-AK).

7-SM-441(V)/UYA-4(V): Same as 10.SM-441(V)2/UYA-4(V)
8-SM-441(V)4/UYA-4(V): Under Development (01-75)
9-SM-441(V)4/UYA-4(V): Same as 19.CV-2095(V)/UYA.4(V) except
SERIAL: Al thru A6, B1, B2, Cl thru C3, Di thro D3, HAC S/N 15
10.SM-441(V)4/UYA-4(V): Same as 7-AM.6382/UYA.4(V)

1-SM-441/UYA-\&V): Incorporation of HAC Maintenance Bulletins, Group l, as a Unit Field Change

Correction Material: Delineated in the applicable Maintenance Bulletins

4-A NS0967-238-7400 EIC FU09000
SERIAL: All equipments
IDENTITY: Observing this change number on the Field Change Record Plate.

2-SM-441/UYA-AV): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: None
11-A FA-I. 5 NS0967-238-7810
EIC P83P000
SERIAL: Al through A4
IDENTITY: Check identification features as follows: G85-Resistance between points A3J3-69 to A2J11 and A2Jll-70 to A2J2.57 reads zero ohms. H1-C6 on the 1537627 card in slot A2J26 is 560 picofarads.
3.SM-441/UYA-4V): Same as 5-AM-4534/UYA-4(V) except SERIAL: Al thru A4, Cl
IDENTITY: Verify the new value of R, R29, and R57 on the isolator logic gate card 1537552-100. The new value of this resistor is 3.9 K . Location for this card in the equipment is Areas A2, J1, or J1I.

4-SM-441/UYA-4(V): Modification to Unload Range Marks
Correction Material: T-1, NS0967-238-7082 to NS0967-2387080

2-A FA-2 NS0967-318-2040 EIC QM06000
SERIAL: Equipment serials A1 thru A4 and Cl
IDENTITY: Remove the Trigger Generator and converter PC card (1537762), and note that R49 (240 ohms) resistor is removed and R54 ( 75 ohms) resistor has been replaced by a jumper wire. Card location is A3J3 and A.3J26.

5-SM-441/UYA-4(V): Same as 19-CV-2095(V)/UYA-4(V) except
SERIAL: A1, A2, A4

1-SSB-1: Modification to Enable Operation from Standard Naval Radio Remote System

Correction Material: T-1 to NS92917
2-A FA-24 NS98982
None
SERIAL: All
IDENTITY: 'Local-remote' cont sw added to front panel, additional offrs for power supply (lower chassis).

2-SSB-1: Modification for Operation with Antenna Tuning Group AN/SRA-20

Correction Material: T-2 to NS92917
2-A YF-8 NS981008 None
SERIAL: Numbers 5601 and above U/N AN/SRA-20
IDENTITY: Plate current meter on front panel. AN/SRA-20 installed.

3-SSB-1: Addition of AGC Circuit
Correction Material: T-3 to NS92917
2-A FA-16 NS981009 None
SERIAL: All
IDENTITY: Addition of front panel sw marked 'On-Off' Automatic Gain Control.

4-SSB-1: Modification to Provide Safety Features to Equip which Present Hazards to Personnel

Correction Material: T. 4 to NS92917
2-A FA-48 NS981019 None
SERIAL: All
IDENTITY: Plastic safety shields installed over transistor coils, plate caps on P.A. tubes.

5-SSB-1: Addition of Plate Current Meter in Submarine Installation

Correction Material: T-5 to NS92917
2-A FA-2 NS981088
None
SERIAL: All installed on submarines
IDENTITY: Plate current meter on front panel.
6-SSB-1: Addition of Shorting Wafers to Switch
Correction Material: T-6 to NS92917
2-A FA. 8 NS981304
None
SERIAL: All below 5700
1-TA-182 U: Installation of Ringing Circuit to Facilitate Troubleshooting

Correction Material: Included in NE0967-457.4020
2-A FA-1 NE0967-457-4020
SERIAL: All equipment used in shipboard installations with Radio Set AN/GRC-10

IDENTITY: Presence of momentary action push switch in lower center of front panel and labelled 'TEST SWITCH'.

1-TAB-6: Provision for 600 Ohm Balanced Line with TN-199/ FRT

Correction Material: Supplement to TM for TAB-6, -7; NS900,379-1

B YF. 40 NS98919 F5820-536. 2019
SERIAL: When CAY-52273 is available
IDENTITY: Output of trans connects into a 2 wire transmission line which feeds a remote ant tuner.
1.TAB-7: Modification of 600 Ohm Balanced Line Output CKT w/Remote Antenna Tuning Unit

Correction Material: See NS98348
B YF-40 NS98248 F5805-3019162
SERIAL: All
IDENTITY: Remote antenna tuning unit, add
2-TAB-7: Provision for 600 Ohm Balanced Line with TN. 199A/FRT

B YF. 40 NS98919 F5820-536.
SERIAL: When CAY-52273 is available
IDENTITY: Output of trans connects into a 2 wire transmission line which feads a remote antenna tuner.

1-TAJ-2: Not applicable
1-TAJ-3: Not applicable

1-TAJ-4: Not applicable
1-TAJ-5: Addition of Protective Cover for 3-1/2' Plate Meter
A FA-1 NS981 104 None
SERIAL: All
IDENTITY: Presence of protective cover
1-TAJ-6: Same as 1.TAJ.5

1-TAJ.8: Same as 1-TAJ.5

1-TAJ-9: Same as 1-TAJ-5

1-TAJ-10: Same as 1-TAJ-5
1-TAJ-14: Same as 1-TAJ-s

1-TAJ-15: Same as 1-TAJ-s

1-TAJ-18: Same as 1-TAJ-5
1-TAJ-19: Same as 1-TAJ-5
1-TAQ-5: Addition of Protective Cover for 3-1/2‘ Plate Meter
A FA-1 NS981104 None
SERIAL: All
IDENTITY: Presence of protective cover.

1-TAQ-6: Same as 1-TAQ-5
1-TAQ-9: Same as 1-TAQ-5
1-TAQ-10: Same as 1-TAQ-5
1-TBA thru 3-TBA: Not applicable
4-TBA: Modification of 0-5/FR Exciter Unit Correction Material: See NS98740
A FA-2 NS98740
None
SERIAL: All w/0-5/FR-units
IDENTITY: FSK unit is used.
1-TBA-1 thru 3-TBA-1: Not applicable
4-TBA-1: Same as 4-TBA

1-TBA-2: Not applicable
2-TBA-2: Not applicable
3-TBA-2: High-speed Keying
Correction Material: See NS98740
A FA-3 NS98740 None
IDENTITY: TBA-2, an adjustable 22.5 volt keying line is brought in to pin 1 of 6SL7/GT through a 2.5 mh choke. TBA-6, former ground is removed from junction of R-125 and another resistor, 2000 hm , and a capacitor .001 mfd is added from junction to ground.

4-TBA-2: Same as 4.TBA
1-TBA-3: Not applicable
2-TBA-3: Balanced Output Operation
Correction Material: See NS98i40
A FA-5 NS98740
None
SERIAL: All w/dbl end ant.
IDENTITY: C-105, C-143, and M-110 are removed. Antenna coupling unit, NT50118 is added.

3-TBA-3: Not applicable
4-TBA-3: Same as 4-TBA
1-TBA-4: Not applicable
2-TBA-4: Not applicable
3-TBA-4: Not applicable
4-TBA-4: Same as 4.TBA
1-TBA-5 thru 3-TBA-5: Not applicable
4-TBA-5: Same as 4-TBA
1-TBA-6: Modification of M-111 By-pass Circuit Correction Material: See NS98740
A FA-1 NS98740 None

SERIAL: All
IDENTITY: The low side of $\mathrm{C}-149$ from the junction of M I11 and R-145 is grounded at che junction of C-148, C-151, M 109, and M-111.

2-TBA-6: Same as 2-TBA-3
3-TBA-6: Same as 3-TBA-2 except
SERIAL: All using HI speed keying.
4-TBA-6: Same as 4-TBA
1-TBA-7 thru 3-TBA-7: Not applicable

4-TBA-7: Same as 4-TBA
I-TBA-8 thru 3-TBA-8: Not applicable
4-TBA-8: Same as 4-TBA
1-TBA-9 thru 3-TBA-9: Not applicable
4-TBA-9: Same as 4-TBA
1-TBA-10: Same as 1-TBA-6
2-TBA-10: Same as 2-TBA-3
3-TBA-10: Not applicable

4-TBA-10: Same as 4-TBA
1-TBA-11: Same as 1-TBA-6
2-TBA-11 thru 3-TRA-11: Not applicable
4-TBA-11: Same as 4-TBA

1-TBA-12 thru 3-TBA-12: Not applicable
4-TBA-12: Same as 4-TBA
1-TBA-13 thru 3-TBA-13: Not applicable
4-TBA-13: Same as 4-TBA

1-TBK: Not applicable
2-TBK: Paralleled High-Speed Keying
Correction Material: See NS98741
A FA-3 NS98741
None
SERIAL: All w/HI speed keying
IDENTITY: A keyer unit is mounted on lowermost shelf, left side, directly below M.O. unit.

3-TBK: Modification of 0-5/FR Exciter Unit Correction Material: See NS98741
A FA-2 NS98741
None
SERIAL: All w/0-5/FR units
IDENTITY: Presence of $0.5 / F R$ exciter unit.

ORIGINAL

COMMUNICATIONS

4-TBK: Not applicable
1-TBK-1: Not applicable
2-TBK-1: Same as 2-TBK.
3-TBK-1: Same as 3-TBK
4.TBK-1: Not applicable

1-TBK-2: Not applicable
2-TBK-2: Same as 2-TBK
3-TBK-2: Same as 3-TBK
4-TBK-2: Not applicable
1-TBK-3: Not applicable
2-TBK-3: Same as 2-TBK
3-TBK-3: Same as 3-TBK
4-TBK-3: Not applicable
1-TBK-4: Not applicable
2-TBK-4: Same as 2-TBK

3-TBK-4: Same as 3-TBK
4-TBK-4: Not applicable
1-TBK-5: Not applicable
2-TBK-5: Same as 2-TBK
3.TBK-5: Same as 3-TBK
4.TBK-5: Not applicable

1-TBK-6: Not applicable
2-TBK-6: Same as 2-TBK
3-TBK-6: Same as 3-TBK
4-TBK-6: Not applicable
1-TBK-7: Not applicable
2-TBK-7: Same as 2-TBK
3-TBK-7: Same as 3-TBK
4.TBK-7: Not applicable

1-TBK-8: Not applicable
2-TBK-8: Same as 2-TBK

3-TBK-8: Same as 3-TBK-8
4-TBK-8: Addition of Protective Cover for $3-1 / 2^{`}$ Meter A FA. 1 NS981104

None
IDENTITY: Presence of protective cover.
1-TBK-9: Not applicable
2-TBK-9: Same as 2-TBK
3-TBK-9: Same as 3-TBK
4-TBK-9: Same as 4-TBK-8
1-TBK-10: Not applicabie
2-TBK-10: Same as 2-TBK
3-TBK-10: Same as 3-TBK
4-TBK-10: Same as 4-TBK-8
5-TBK-10: Installation of Radio Set Group (SSB) AN/WRA-1 2-A FA-20 NS98124I None

6-TBK-10: Canceiled
1-TBK-11: Not applicabse
2-TBK-11: Same as 2-TBK

3-TBK-11: Same as 3-TBK except
SERIAL: All

4-TBK-11: Same as 4-TBK-8
1-TBK-12: Not applicable
2-TBK-12: Same as 2-TBK
3-TBK-12: Same as 3-TBK except
SERIAL: All
4-TBK-12: Not applicable
5-TBK-12: Same as 5-TBK-10
1-TBK-13: Not applicable
2-TBK-13: Same as 2-TBK
3-TBK-13: Same as 3-TBK except
SERIAL: All
4-TBK-13: Same as 4-TBK-8
5-TBK-13: Modification for Operation with Antenna Tuning Group AN/SRA-18

Correction Material: T-1 to NS900,388; T-5 to NS92540(A) 1-B YF-20 NS981034 None SERIAL: All

| IDENTITY: Coaxial receptacle installed; cabling to control unit C-1360 ( )/SRT. | 3-TBK-18: Same as 3-TBK except SERIAL: All |
| :---: | :---: |
| 6.TBK-13: Same as 5-TBK-10 | 4-TBK-18: Same as 4-TBK-8 except SERIAL: All |
| 1-TBK-14: Not applicable |  |
|  | 5-TBK-18: Same as 5-TBK-13 |
| 2-TBK-14: Same as 2-TBK |  |
|  | 6.TBK-18: Same as 5-TBK-10 |
| 3-TBK-14: Same as 3-TBK except |  |
| SERIAL: All | 1-TBK-19: Same as 1-TBK-19 |
| 4-TBK-14: Not applicable | 2-TBK-19: Same as 2-TBK |
| 5-TBK-14: Same as 5-TBK-10 | 3-TBK-19: Same as 3-TBK except SERIAL: All |
| 1-IBK-15: Not applicable |  |
|  | 4.TBK-19: Same as 4-TBK-8 except |
| 2-TBK-15: Same as 2-TBK | SERIAL: All |
| 3-TBK-15: Same as 3-TBK except | 5-TBK-19: Same as 5-TBK-10 |
| SERIAL: All |  |
|  | 1-TBK-20: Same as 1-TBK-17 |
| 4-TBK-15: Same as 4-TBK-8 except |  |
| SERIAL: All | 2-TBK-20: Same as 2-TBK |
| 1-TBK-16: Not applicable | 3-TBK-20: Same as 3-TBK except |
|  | SERIAL: All |
| 2-TBK-16: Same as 2-TBK |  |
|  | 4-TBK-20: Same as 4-TBK-8 except |
| 3-TBK-16: Same as 3-TBK except | SERIAL: All |
| SERIAL: All |  |
|  | 5-TBK-20: Same as 5-TBK-13 |
| 4-TBK-16: Same as 4-TBK-8 except |  |
| SERIAL: All | 6-TBK-20: Same as 5-TBK-10 |
| 5-TBK-16: Same as 5-TBK-10 | 1-TBL thru 2-TBL: Not applicable |
| 6-TBK-16: Cancelled | 3-TBL: Installation of CU-1281/U Antenna Control Correction Material: None |
| 1-TBK-17: Meter M-107 Erroneous Label Correction Material: See NS98741 | B FA.0.5 NS98387 $\begin{array}{rr}\text { F5820-302- } \\ \\ 1206\end{array}$ |
| A FA-1 NS98741 None | SERIAL: All aboard subs |
| SERIAL: All under cont, NXSS 28616 | IDENTITY: Installation of C-1281/U on top transmitter. |
| IDENTITY: Meter M-107 is relabeled 'power ampl. plate current' replacing 'first ampl. plate current.' | 4-TBL. Cancelled |
| 2-TBK-17: Same as 2-TBK | 1-TBL-1 thru 2-TBL-1: Cancelled |
| 3-TBK-17: Same as 3-TBK except SERIAL: All | 3-TBL-1: Same as 3-TBL |
|  |  |
|  | 4-TBL-1: Keying and Output Circuit Mod to Operate Antenna |
| 4-TBK-17: Same as 4-TBK-8 except | Control C-1670/UR |
| SERIAL: All | Correction Material: TM for C-1670/U, NS92566 |
|  | B YF-7 NS98632 F5820-325. |
| 5-TBK-17: Same as 5-TBK-10 | 6347 |
|  | SERIAL: All |
| 1-TBK-18: Same as 1-TBK-17 | IDENTITY: Installation of C-1670/U on top transmitter. |
| 2-TBK-18: Same as 2-TBK | 5.TBL.1: Canceiled |

1-TBL-2 thru 2-TBL-2: Not applicable
3-TBL-2: Same as 3-TBL
4-1BL-2: Same as 4.TBL-1
5-TBL-2: Cancelled
1-TBL-3 thru 2-TBL-3: Not applicable
3-TBL.-3: Same as 3-TBL
4-TBL-3: Same as 4-TBL-1
5-TBL-3: Cancelled
1-TBL-4 thru 2-TBL-4: Not applicable
3-TBL-4: Addition of Frequency Shift Coupling Adapter Correction Material: See NS98341
A FA.4 NS98341 N5820-665. 3553
SERIAL: All
IDENTITY: Presence of MX-1262/URT.
4-TBL-4: Addition of Protective Meter Cover
A FA-I NS981104
None

SERIAL: A!1
IDENTITY: Presence of protective cover.
5-TBL-4: SSB Adapter Kit
1-C YF-20 NS981043
N5820-543.

## 1764

## SERIAL: All <br> 1DENTITY: Installation of AN/WRA-SSB-Kit.

6-TBL-4: Modification to Permit Operation with Antenna
Tuning Group AN/SRA-18 or AN/SRA-18A
Correction Material: T-1 to NS900,373
2.A FA-8 NS981200 None

SERIAL: Radio Transmitters CRV-52180, 52181, 52178, and 52179
IDENT1TY: Antenna Tuning Group AN/SRA-18 or AN/
SRA-18A is installed and used with transmitter.
1-TBL-5: Not applicable
2-TBL-5: Not applicable
3-TBL-5: Same as 3-TBL-4
4-TBL-5: Same as 3-TBL
5-TBL-5: Same as 4-TBL-1
6-TBL-5: Same as 5-TBL-4
7-TBL-5: Modification to Permit Operation with Antenna Tuning Group AN/SRA-18, AN/BRA-3 or AN/BRA-S

Correction Material: T- 2 to NS900,381; T-6 to NS92540(A)
2-A FA-8 NS981060 None

SERIAL: Equip where use of an AN antenna tuner is desired or required
IDENTITY: Coaxial receptacle installed; cabling to control unit C.1360( )/SRT.

## 8-TBL-5: Cancelled

1-TBL-6: Modification of Band Change Switch Labeling
Correction Material: See NS98742
A FA-0.5 NS98742 None
2-TBL-6: Pot applicable
3-TBL-6: Siame as 3-TBL-4
4-TBL-6: Same as 3-TBL
5-TBL-6: Same as 4-TBL-1
6-TBL-6: Siame as 5-TBL-4

7-TBL-6: Same as 7-TBL-5
8-TBL-6: Cancelled
1-TBL-7: Same as 1-TBL-6
2-TBL.7: Not applicable
3-TBL-7: Siame as 3-TBL-4

4-TBL-7: Siame as 3-TBL

5-TBL-7: Siame as 4-TBL- 1
6-TBL-7: Siame as 5-TBL-4
7-TBL-7: Siame as 7-TBL-5
8-TBL-7: Cancelled
1-TBL-8: iNot applicable
2-TBL-8: Audio Output JIOI, Correct Wiring
Correction Material: See NS98742
A IFA. 1 NS98742 None
SERIAL: All
IDENTITY: If wires connected to top and bottom contacts,
F.C., is not applicable.

3-TBL-8: Same as 3-TBL-4
4-TBL-8: Same as 4-TBL-4
5.TBL-8: Same as 5-TBL-4

6-TBL-8: Same as 6-TBL-4
1-TBL-9. Not applicable
2-TBL-9: Same as 2-TBL-8

3-TBL-9: Same as 3-TBL-4
4-TBL-9: Same as 4-TBL-4
5-TBL-9. Sarne as 5-TBL-4
6-TBL-9: Same as 6-TBL-4
1-TBL-10 thru 2-TBL-10: Not applicable
3.TBL-10. Same as 3-TBL-4
4.TBL-10: Same as 3.TBL
5.TBL-10: Sarne as 4-TBL.]

6-TBL-10: Sarne as 5-TBL-4
1-TBL-11 tbru 2-TBL-11: Not applicable
3-TBL-11: Same as 3.TBL-4
4-TBL-11: Same as 3-TBL
5.TBL-11: Sarne as 4.TBL-1
6.TBL-11: Same as 5.TBL-4

1-TBL-12 thru 2-TBL-12: Not applicable
3-TBL-12: Sarne as 3-TBL-4
4-TBL-12: Sarne as 3-TBL
5-TBL-12: Same as 4-TBL-1
6.TBL-12: Same as 5-TBL-4

7-TBL-12: Same as 7.TBL-S
8-TBL-12: Correcting safety hazard which exists in Power Supply PP-1211/U when connected to Radio Telegraph Transmitting Equipment TBL-12 and TBL-13

2-A FA-8 NS981198 None
SERIAL: Combinations of Power Supply PP+1211/U and Radio Telegraph Transmitting Equipment TBL-12 and TBL13.

IDENTITY: Terminal board TB-10t has the word 'SWITCH' in place of 115 VAC .

9-TBL-12: Cancelled
1-TBL-13 then 2-TBL-13: Not applicable
3-TBL-13: Same as 3-TBL-4
4-TBL-13: Same as 3-TBL
5-TBL-13: Sarne as 4-TBL-1
6.TBL-13: Same as 5-TBL-4

7-TBL-13: Same as 7.TBL-5
8-TBL-13: Same as 8-TBL-12
9-TBL-13: Cancelled
1-TBM: Not applicable
2-TBM: Paralleled High-Speed Keying
Correction Material: See NS 98748
A FA-3 NS98743
None
SERIAL: All w/parallel and HI speed keying
IDENTITY: Electronic keying unit added below the M.O. unit.

3-TBM: Modification of 0.5/FR Exciter Unit Correction Material: See NS98748
A FA-2 NS98743 None
SERIAL: All w/0-s/FR units
IDENTITY: FSK installed
1-TBM-1: Not applicable
2-TBM-1: Same as 2-TBM
3-TBM-1: Sarne as 3-TBM
1-TBM-2: Not applicable
2-TBM-2: Same as 2-TBM
3-TBM-2: Same as 3-TBM
1-TBM-3: Not applicable
2-TBM-3: Same as 2-TBM
3-TBM-3: Sarne as 3-TBM
1-TBM.4: Installation of Thyrite Peak Limiting Units Correction Material: See NS98748
A FA-3 NS98743
F5820-311. 2733
SERIAL: All
IDENTITY: Installation of peak limiting thyrite units
2.TBM-4: Same as 2-TBM

3-TBM-4: Same as 3-TBM
1-TBM-5: Same as 1-TBM-4
2-TBM-5: Same as 2-TBM
3-TBM-5: Same as 3-TBM
4-TbM-5: Addition of Protective Meter Cover
A FA. 1 NS981104 None
SERIAL: All
IDENTITY: Presence of protective cover.

| 5-TBM-5: Modification for Operation with Antenna Tuning | 2-TBM-11: Same as 2.TBM |  |
| :---: | :---: | :---: |
| roup AN/SRA-18 |  |  |
| Correction Material: T-1 to NS900,388; T-5 to NS92540(A) | 3-TBM-11: Same as 3-TBM |  |
| 1-B YF-20 NS981034 None |  |  |
| SERIAL: All 4 -TBM-11: Same as 4-TBM-5 | 4-TBM-11: Same as 4-TBM-5 |  |
| IDENTITY: Coaxial receptacle installed; cabling to control unit C-1360()/SRT. | 5-TBM-11: Same as 5-TBM-5 |  |
| 1-TBM-6: Same as 1-TBM-4 | 1-TBM-12: Not applicable |  |
| 2-TBM-6: Same as 2-TBM | 2-TBM-12: Same as 2-TBM |  |
| 3-TBM-6: Same as 3-TBM | 3-TBM-12: Same as 3-TBM |  |
| 4-TBM-6: Same as 4-TBM-5 | 4-TBM-12: Sarne as 4-TBM-5 |  |
| 1-TBM-7: Same as 1-TBM-4 | 1-TBS: Providing Standby Circuit Correction Material: None |  |
| 2-TBM-7: Same as 2-TBM | 1-A FA-2 NS98744 SERIAL: All |  |
| 3-TBM-7: Same as 3-TBM |  |  |
|  | 2-TBS: Install Transmission Line Filter CHW-53155 Correction Material: None |  |
| 4-TBM-7: Same as 4-TBM-5 |  |  |
| 5-TBM-7: Same as 5-TBM-5 | YF-3 NS98744 | None |
|  | SERIAL: All |  |
| 6.TBM-7: Installation of Radio Set Group (SSB) AN/WRA-1 |  |  |
| 2-A FA NS981241 None | 3-TBS: Improve Reliability of Relay K-101 Corectio- m al: |  |
| 1-TBM-8: Same as 1-TBM-4 | SERIAL: All |  |
| 2-TBM-8: Same as 2-TBM | 1-TBS-2: Same as 1-TBS |  |
| 3-TBM-8: Same as 3-TBM | 2-TBS-2: Same as 2-TBS |  |
| 4.TBM-8: Same as 4-TBM-5 | 3-TBS-2: Same as 3-THS |  |
| 1-TBM-9: Same as 1-TBM-4 | 1-TBS-3: Same as 1-TBS |  |
| 2-TBM-9: Same as 2-TBM | 2-TBS-3: Same as 2-TBS |  |
| 3-TBM-9: Same as 3-TBM | 3-TBS-3: Same as 3-TBS |  |
| 4-TBM-9: Same as 4-TBM-5 | 1-TBS-4: Same as 1-TBS |  |
| 5-TBM-9: Same as 5-TBM-5 | 2-TBS-4: Same as 2-TBS |  |
| 6-TBM-9: Same as 6-TBM-7 | 3-TBS-4: Same as 3-TBS |  |
| 1-TBM-10: Same as 4-TBM-4 | 1-TBS-5: Same as 1-TBS |  |
| 2-TBM-10: Same as 2-TBM | 2-TBS-5: Same as 2-TBS |  |
| 3-TBM-10: Same as 3-TBM | 3-TBS-5: Same as 3-TBS |  |
| 4-TBM-10: Same as 4-TBM-5 | 1-TBS-6: Same as 1-TBS |  |
| 5.TBM-10: Cancelled | 2-TBS-6: Same as 2-TBS |  |
| 1-TBM-11: Same as 1-TBM-4 | 3-TBS-6: Same as 3-TBS |  |

1-TBS-7: Same as 1-TBS
2-TBS-7: Same as 2-TBS
3-TBS-7: Same as 3-TBS
1-TCK: Brush Replacement Kit
Correction Material: See NS98764
A FA-0.5 NS98764 None
SERIAL: All
IDENTITY: Replace brushes on 12 V M/G set when wom.
2-TCK: Not applicable
1-TCK-1: Same as 1-TCK
2-TCK-1 thru 3-TCK-1: Not applicable
1-TCK-2: Same as 1-TCK
2-TCK-2 thri 3-TCK-2: Not applicable
1-TCK-3: Same as 1.TCK
2-TCK-3: Not applicable
3-TCK-3: Addition of Protective Meter Cover
2-A FA-1 NS981104
None
SERIAL: All before 6-24.44
IDENTITY: Presence of protective cover.
1-TCK-4: Same as 1-TCK
2-TCK-4: Replacement of Filament Transformer
Correction Material: See NS98764
A FA-4 NS98764 None
SERIAL: All before 6-24-7i4
IDENTITY: Filament transformer, T-303, NT CG-301111 replaced.

3-TCK-4: Not applicable
1-TCK-5: Same as 1-TCK

2-TCK-5: Not applicable
3-TCK-5: Same as 3-TCK-3
1-TCK-6: Not applicable
2-TCK-6: Same as 2-TCK-4
3-TCK-6: Not applicable
1-TCK-7: Same as 1-TCK
2-TCK-7: Not applicable
3-TCK-7: Same as 3-TCK-3
J-TCS: Modification of Relay Circuit

Correction Material: See NS98761
A FA-1 NS98761 None

## SERIAL: All

IDENTITY: A jumper is connected across two outside bottom contacts of K-10I.

2-TCS: Modification of Tap Switch
Correction Material: See NS98761
A FA-2 NS98761 None
SERIAL: Al!
IDENTITY: Plugs are placed in blank holes in wafers on switches S-101, S-102, S-103, and S-104.

3-TCS: Modification of Loading Coils
Correction Material: See NS98761
A FA-1 NS98761 None
SERIAL: All
IDENTITY: Drop of solder placed at each end of roller coil.
4TCS: Not applicable
5.TCS: Superseded by F.C. 9
6.TCS: Noise Limiter, Type-50159

Correction Material: See NS98761
B YF-3 NS98761 None
SERIAL: All
IDENTITY: Coupling unit (noise limiter) added in 2 nd det. stage in place of 12SQ7. Function sw. with 'NL' position, and nameplate added in place of recvr 'on-off switch.

7-TCS: Cancelled
8.TCS: Replacement of R-303 and R-304

Correction Material: See NS98761
SERIAL: All
IDENTITY: R-303 and R-304 are changed from 12.5K, 12 watt to $12 \mathrm{~K}, 40$ watt resistors.

9-TCS: Installation of Radio Interference Elimination Kit
A FA-3 NS F5820.301-

## SERIAL: All

IDENTITY: FILTER, CAYH-10597, is installed in 12 V DC power line to dynamotor power supply.
10.TCS: Substitution of Aluminum Cabinet for Steel Correction Material: See NS98524
A FA-2 NS98524
F5820-302.

SERIAL: As directed by BUSHIPS
IDENTITY: Aluminum cabinets installed

1-TCS-1: Same as 1-TCS

2-TCS-1: Same as 2-TCS
3-TCS.1: Same as 3-TCS
4-TCS-1: Not applicable

COMMUNICATIONS

5-TCS-1: Superseded by F.C. 9
6-TCS-1: Same as 6-TCS
7.TCS-1: Cancelled

8-TCS-1: Same as 8-TCS

9-TCS-1: Same as 9-TCS
10-TCS-1: Same as 10-TCS

1-TCS-2: Same as 1-TCS

2-TCS-2: Same as 2-TCS
3-TCS-2: Same as 3-TCS
4-TCS-2: Not applicable
5-TCS-2: Superseded by F.C. 9
6-TCS-2: Same as 6.TCS

7-TCS-2: Cancelled

8-TCS-2: Same as 8-TCS
9-TCS-2: Same as 9-TCS
10-TCS-2: Same as 10-TCS

1-TCS-3: Same as 1-TCS

2-TCS-3: Same as 2-TCS
3-TCS-3: Same as 3.TCS
4-TCS-3: Not applicable
5-TCS-3: Superseded by F.C. 9
6-TCS-3: Same as 6-TCS

7-TCS-3: Cancelled
8-TCS-3: Same as 8-TCS
9-TCS-3: Same as 9-TCS
10-TCS-3: Same as 10-TCS

1-TCS-4: Same as 1-TCS
2-TCS-4: Same as 2.TCS
3-TCS-4: Same as 3-TCS
4.TCS-4: Not applicable

5-TCS-4: Superseded by F.C. 9

FCIG

6-TCS-4: Same as 6-TCS

7-TCS-4: Cancelled
8-TCS-4: Same as 8-TCS
9.TCS-4: Same as 9-TCS

10-TCS-4: Same as 10-TCS

1-TCS-5: Same as 1-TCS
2-TCS-5: Same as 2-TCS
3-TCS-5: Same as 3-TCS
4-TCS-5: Not applicable

5-TCS-5: Superseded by F.C. 9
6-TCS-5: Same as 6-TCS
7-TCS-5: Cancelled
8-TCS-5: Same as 8-TCS

9-TCS-5: Same as 9-TCS

10-TCS-5: Same as 10-TCS
1-TCS-6: Same as 1-TCS
2-TCS-6: Same as 2-TCS

3-TCS-6: Same as 3-TCS

4-TCS-6: Not applicable
5-TCS-6: Superseded by F.C. 9
6.TCS-6: Same as 6.TCS

7-TCS-6: Cancelled

8-TCS-6: Same as 8-TCS
9-TCS-6: Same as 9-TCS
10-TCS-6: Same as 10 -TCS

1-TCS-7: Same as 1-TCS

2-TCS-7: Same as 2-TCS
3-TCS-7: Same as 3-TCS
4-TCS-7: Not applicable
5-TCS-7: Superseded by F.C. 9

6-TCS-7: Same as 6-TCS
7.TCS-7: Cancelled

8-TCS-7: Same as 8-TCS
9-TCS-7: Same as 9-TCS
10-TCS.7: Same as 10 -TCS

1-TCS-8: Same as 1-TCS

2-TCS-8: Same as 2-TCS
3-TCS-8: Same as 3-TCS
4-TCS-8: Not applicable
5-TCS-8: Superseded by F.C. 9
6.TCS-8: Same as 6.TCS

7-TCS-8: Cancelled

8-TCS-8: Same as 8-TCS
9-TCS-8: Same as 9-TCS
10-TCS-8: Same as 10 -TCS
1-TCS-9: Same as 1 -TCS

2-TCS.9. Same as 2-TCS

3-TCS-9: Same as 3-TCS
4-TCS-9: Cancelled
5.TCS.9: Superseded by F.C. 9

6-TCS-9: Same as 6-TCS

7-TCS.9: Cancelled
8-TCS-9: Same as 8-TCS
9-TCS-9: Same as 9-TCS
10-TCS-9: Same as 10-TCS
1-TCS-10: Same as 1-TCS
2-TCS-10: Same as 2-TCS
3-TCS-10: Same as 3-TCS
4.TCS.10: Cancelled

5-TCS-10: Superseded by F.C. 9
6-TCS-10: Same as 6-TCS
7-TCS-10: Cancelled

8-TCS-10: Same as 8-TCS

9-TCS-10: Same as 9-TCS
10-TCS-10: Same as 10-TCS

1-TCS-11: Same as 1-TCS

2-TCS-11: Same as 2-TCS

3-TCS-11: Same as 3-TCS

4-TCS-11: Cancelled

5-TCS-11: Superseded by F.C. 9

6-TCS-11: Same as 6.TCS
7.TCS-11: Cancelled

8-TCS-11: Same as 8-TCS

9-TCS-11: Same as 9-TCS

10-TCS-11: Same as 10-TCS

1-TCS-12: Not applicable
2-TCS-12: Same as 2-TCS
3.TCS-12: Same as 3-TCS

4-TCS-12: Replacement of Motors and Generaior A FA-3 NS9876!

None
SERIAL: 2632-2766, 3497.351ई, 3912.431\}, 5504-5703, 6554. 6853
IDENTITY: High voltage generator, motors mfg type 230 000100 and 230000200 are replaced

5-TCS-12: Superseded by F.C. 9
6.TCS-12: Same as 6-TCS

7-TCS-12: Cancelled

8-TCS-12: Same as 8-TCS

9-TCS-12: Same as 9-TCS

10-TCS-12: Same as 10-TCS

1-TCS-13: Not applicable

2-TCS-13: Same as 2-TCS

3-TCS-13: Same as 3-TCS

4-TCS-13: Not applicable

5-TCS-13: Superseded by F.C. 9
6.TCS-13: Same as 6-TCS

7-TCS-13: Cancelled

8-TCS-13: Same as 8-TCS

9-TCS-13: Same as 9-TCS

10-TCS-13: Same as 10-TCS
1-TCS-14: Not applicable
2-TCS-14: Same as 2-TCS

3-TCS-14: Same as 3-TCS

4-TCS-14: Cancelled
5-TCS-14: Superseded by F.C. 9
6.TCS-14: Same as 6-TCS

7-TCS-14: Not applicable
8-TCS-14: Same as 8-TCS

9-TCS-14: Same as 9-TCS
10-TCS-14: Same as 10-TCS
1-TCS-15: Not applicable

2-TCS-15: Same as 2-TCS

3-TCS-15: Same as 3-TCS

4-TCS-15: Nui applicabie
5-TCS-15: Superseded by F.C. 9

6-TCS-15: Same as 6-TCS

7-TCS-15: Cancelled

8-TCS-15: Same as 8-TCS

9-TCS-15: Same as 9-TCS
10-TCS-15: Same as $10-\mathrm{TCS}$

1-TCS-16: Not applicable

2-TCS-16: Same as 2-TCS

3-TCS-16: Same as 3-TCS
4-TCS-16: Not applicable
5-TCS-16: Superseded by F.C. 9

6-TCS-16: Same as 6-TCS

7-TCS-16: Cancelled
8-TCS-16: Same as 8-TCS
9.TCS-16: Same as 9-TCS

10-TCS-16: Same as $10-T C S$

1-TCZ: Replacement of 28 Volt Generator Brushes Correction Material: None
A FA-0.5 NS98765 F5820-310. 9353C2
SERIAL: All w/21101 AC pwr units
IDENTITY: New brushes are stamped 113 into the side of the metal spring tab.

2-TCZ: Removal of Ground on Remote Control Col-23410
Correction Material: None
A FA-0.5 NS98765
None
SERIAL: All u/w std Navy rcurs
IDENTITY: Removal of the ground from the input transformer in the remote control unit.

1-TCZ-1: Same as 1-TCZ except
SERIAL: All

2-TCZ-1: Same as 2-TCZ

1-TCZ-2: Not applicable
2-TCZ-2: Same as 2-TCZ
1-TD-855/WLR-6(V): Wiring Change to Power Input Ground
Correction Material: T.l, NE0967-LP-207-3271 to NE0967-207-3270

4-A FA.1 NE0967-LP-207-3710 EIC N8iW000 SERIAL: All
IDENTITY: This field change may be identified by pin $B$ on the power input connector (P504) being the ground pin.

1-TD-901/U: Wiring Change to Provide One MPPS Output During Switchover to Standby Oscillator

Correction Material: T- to NS0969-249-6010
4-A FA-1 EIB 869
SERIAL: All serial numbers
IDENTITY: Presence of a wire connected to pin A6 of AlAIO2.

2-TD-901/U: Addition 1PPM Output Driver Circuit Card
Correction Material: Supplement 2, NE0969-246-5012 to NE0969-246-5010

1-A FA-4 NS0969-246.5030
SERIAL: Only those equipments to be used with AN/GGC15(V) Data Preparation Data
IDENTITY: The 1PPM output driver circuit card will be installed in the spare card socket previously utilized to store printed circuit card extender (2119-40113-61).
1.TD-1066(XG-1)/SYQ-6(V): Data Accumulation and Distribution System (TD-1066) Power Contrel Panel Assembly and

Temperature Alarin Subassembly Indicator Change.
Correction Material: Chg 1, NS0967-LP-434-4591, to TM, NS0967-LP-434-4590 dtd Apr 76.

1-A FA-3 NE0967-LP.434.4650 ElC QU13
SERIAL: Four equipments: one aboard CVN-68, one aboard CVN-69, one at FCDSSA, San Diego, and one planned for CVN-70.
IDENTITY: Verify that new lamp assemblies (1A1A4XDS] thru S3, S 13 thru S17, and IAIA5XDS1) contain bayonnettype lamps versus screw-in type.

1-TD.1097/WSC.5(V): Addition of R16 and R17 to Eliminate Oscillations in the 100 kHz Divider.

Correction Material: T.3, NE0967-LP.455-0013, to TM, NE0967-455-0010.

## 2-A FA-1 NE0967-LP-455-0040 <br> EIC QPOD

SERIAL: Serial number N053 and subsequent.
IDENTITY: Installation of a 100 ohm resistor (R16) between the emitzer and base of $A 4 Q 1$, and a 68 -ohm resistor (R17) between the emitter and base of A 4 Q 2 .

1-TDE: Mike Modification Kit
B FA-2 F5820-311.

2585 Cl
SERIAL: 1-256, 393-441, 448-611, 612-880, 993-1124, 1183. 1248, 1250, 1293-1471, 1475
IDENTITY: Local microphone jack is instalted in front panel.
2-TDE: Installation of Filament Warm-Up Circuit B FA-3 NS98766

None
SERIAL: All
IDENTITY: Warm-up circuit indicated by switch and filament power on indicating light on front panel of power supply section.

3-TDE: Installation of Improved Switch S-370B
A FA-2 NS98766 2N5820-311. 2547
SERIAL: All
IDENTITY: Section 'B' of switch S-307 (HFPA range selector switch) is replaced with section of newer type, section ' $A$ ' of same switch.

4-TDE: Modification to Permit Operation with Antenna Tuning Group AN/SRA-18

2-A FA.8 NS981154 None
SERIAL: Radio xmtrs 52267, 52267A
IDENTITY: Antenna tuning group is installed and connected to xmtr.

1-TDE-1: Not applicable
2-TDE-1: Same as 2-TDE
3-TDE-1: Same as 3-TDE
4-TDE-1: Same as 4-TDE

1-TDE-2: Not applicable
2-IDE-2: Same as 2-TDE

3-TDE-2: Same as 3-TDE except
SERIAL: 1-340, 372, 835, 1046-1351

4-TDE-2: Same as 4-TDE

1-TDE-3: Not applicable
2-TDE-3: Same as 2-TDE
3-TDE-3: Not applicable
4-TDE-3: Same as 4-TDE

1-TDH: Transfer of Oscillator Assembly
Correction Material: Soe NS98181
A FA-3 NS98181
F5820-3 10-
9263
SERIAL: All
IDENTITY: Master oscillator replaced with one having 700 series component part nos.

2-TDH: Modification of Switch S11!
Correction Material: None
2-A FA-2 NS981193
None
SERIAL: All
IDENTITY: Presence of spiral springs on contact fingers in the output network unit.

1-TDH-2: Same as 2-TDH
1-TDH-3: Same as 2-TDH
1.TDH-4: Same as 2.TDH

1-TDN: Not applicable
2-TDN: Safety Conversion
A FA-1 NS900709
F5820-642-
SERIAL: All
3-TDN: Not applicable
1-TDN-1: Not applicable
2-TDN-1: Same as 2-TDN
3.TDN-1: Not applicable

1-TDN-2: Frequency Shift Keying Conversion
A FA-10 NS900709
F5820.642.
6350
SERIAL: 1-20
2-TDN-2: Same as 2-TDN
3-TDN-2: Conversion to TDN-4
A FA. 40 NS900709
F5820.642.

SERIAL: 1-20

```
1-TDN-3: Same as l-TDN-2 except
SERIAL: 1-15
2-TDN-3: Same as 2-TDN
3-TDN-3: Not applicable
1-TDN-4: Same as 1-TDN-2
2-TDN-4: Same as 2-TDN
3-TDN-4: Not applicable
1-TDO: Transfer of Oscillator Assembly
    Correction Material: See NS98181
    A FA-3 NS98181 F5820-310*
```

                                    9263
    SERIAL: All

IDENTITY: New master oscillator. Collins 520273400 or 520 273800.

1-TDQ: Change of Overload Relay K-303
Correction Material: None

## A FA-1

None
SERIAL: All
IDENTITY: The mounting holes in the bakelite base of K-303 are elongated to permit repositioning.

2-TDQ: Installation of Model TDQ Mission Line Filter Type CRV-53232

Correction Material: None
A FA-2
None
SERIAL: 1-2281
IDENTITY: Transmission line filter 53232 is installed in antenna output line and is mounted in top center of transmitter.

5-1 QQ: Instaliation of Caution Nameplates for TDQ Transmitter

Correction Material: None
A FA-1/3
2N5820-311-

SERIAL: All
IDENTITY: Presence of caution plate.
4-TDQ: Provision for Extended Audio Range Communication Control Link Service

> A FA-I

None
SERIAL: Anywhere necessary
IDENTITY: Capacitors C-216, C-217, and C-218 disconnected from circuit but are left mounted in position. Equipment is then designated 'TDQ-A".

1-TDT: Addition of Send-Receive Relay
A FA-6 NS98768 None
SERIAL: All
IDENTITY: Ant relay added on top of wire 36 or term X-4.
2-TDT: Reduction of Voltage Surges on Rectifier Tubes
A FA-2 NS98768 None
SERIAL: All
IDENTITY: Wire no. 36 on X-4 term having wire no. 20

3-TDT: Replacement of Resistors R-10, R-11 and R-13
A FA-1 NS98768 F5820-334.
SERIAL: All
IDENTITY: R10 8K, 40W; RII 10K, 50W; R13, 10K, 90W
4-TDT: Installation of Blower Motor Reactor
A FA-1 NS98768 None
SERIAL: All
IDENTITY: 50 -ohm reactor installed in series with motor TN-Fr43R

1-TDT-1: Same as 1-TDT
2.TDT-I: Same as 2-TDT

3-TDT-1: Same as 3-TDT

4-TDT-1: Same as 4-TDT
1-TDT-2: Same as 1-TDT
2-TDT-2: Same as 2-TDT
3.TDT-2: Same as 3-TDT
4.TDT-2: Same as 4-TDT

1-TDT-3: Same as 1-TDT
2-IDT-3: Same as 2-TDT

3-TDT-3: Same as 3.TDT

4-TDT-3: Same as 4-TDT

1-TDY: Addition of Stop-Start Resistor
FA-1 NS
None
SERIAL: All
2-TDY: Cancelled
3-TDY: Cancelled
4-TDY: Modernization Kit

YF-12
SERIAL: All
5.TDY: Conversion of TDY to TDYa and TDY-1 to TDY-1a

YF-112 NS98911
SERIAL: As directed by BUSHIPS
6-TDY: Simplication of Monitor System
FA-6
7-TDY: Tube Injector Modification

## FA. 4 <br> SERIAL: All

8-TDY: Replacement of Reflectors in Antenna System
YF-116
SERIAL: All
9-TDY thru II-TDY: Cancelled
12-TDY: Addition of Second Magnetron Seal Blower
YF-5 NS98911
SERIAL: l-150 (using 35ABL oscillators)

## 13-TDY tbru 14-TDY: Cancelled

15-IDY: Not applicable
16-IDY: Improved Conversion of TDY to TDY-a and TDY-1 toTDY-la

> YF-112 NS98911

SERIAL: As directed by BUSHIPS
17-IDY: Cancelled
1-TDY-1 thru 4-TDY-1: Not applicable
5-TDY-1: Same as 5-TDY
6-TDY-1: Same as 6-TDY
7-TDY-1: Same as 7-TDY
8-TDY.1: Same as 8.TDY
9-TDY-1 thru 11-TDY-1: Cancelled
12-TDY-1: Same as 12-TDY
13-TDY-1 thru 14-TDY-1: Cancelled
15-IDY-1: Replacement of Pump Seal Assembly
YF-2 NS98911
SERIAL: 1-134
16-TDY-1: Same as 16-TDY
17-TDY-1: Cancelled
1-TDZ: Auto Tuning and Drawer Mechanism Modification Correction Material: Ch. 1 to NS 900,809
B YF-60 NS98167 F5840-311. 2490
SERIAL: 1-100, 107-109, 111, 113-124, 128-134, 136-137, 140 IDENTITY: Neoprene snubbers added at rear of drawers. Adds extra springs to contacts at rear of drawers.

2-TDZ: Allowance of Tender Spare Parts Modification

Correction Material: Ch. 1 to NS900,809
B YF. I NS 98168
Noле
SERIAL: 1T, 2T-4T, and 10 T
IDENTITY: Snubber neoprene 2428-S added to tender spares.
3-IDZ: Installation of Protective Guard on Telephone Type Dial

Correction Material: None
A FA. 1 NS98169
F5840.311
SERIAL: 1-1000
IDENTITY: Guard is installed
4-TDZ: Drawer Fasteners to Equipment Spare Parts Addition
A FA-YF-1 NS98170 F5840-311-
2495
SERIAL: 1-1000
IDENTITY: Drawer fasteners are in spares.
5-TDZ: Provision for Dial Cranks
Correction Material: Soe NS 98100
A FA
NS98100
F5820.311.

SERIAL: 1.3540
IDENTITY: Crank to place over tuning knobs as aid in fast tuning.

6-TDZ: Provision for Noise Reduction Filter
Correction Material: NS98180
A FA-YF-3 NS 98180
F5820-310. 9379
SERIAL: All
IDENTITY: New filler unit mounted on underside relay bathtub located in right rear comer of lower chassis, consists of $4^{*}$ square board on which various resistors are mounted.

7-TDZ: Modification for Automatic Operation of Antenna Coupler CU-255/URR

Correction Material: T-2 to NS900,809
2-B YF. 4 NS98321
SERIAL: All
IDENTITY: Coupler is usually mounted adjacent to TDZ, bulkhead mounted.

8-TDZ: Dial Lock for B and C Controls
Correction Material: T-3 to NS 900,809
A FA NS98377 F5820-311-
SERIAL: Als
IDENTITY: Toggle dial lock will be installed on B and C controls.

1-TEB: Replacement of IPA Band Change

$$
\text { A FA. } 2
$$

None
SERIAL: All
IDENTITY: IPA sw bears stk no. N16-S.14010-2
1-TEC: Change of 3 KV Plate Contactor K-1122
Correction Material: None
A FA-2 NS98770
None
SERIAL: All

ORIGINAL

IDENTITY: JAN type 29678 contacts on relay K-1122

1-TED: Same as 1-AN/URT-7 except
SERIAL: All, except those equipments on which field changes 5 and 7-TED are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors ( $\mathrm{P}-\mathrm{J} 10$ and P-111) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 7-TED with the exception that 7-TED does not include the blower motor connectors ( $\mathrm{P}-110$ and $\mathrm{P}-111$ ). Field change 5-TED replaced the original blower motor with one of extended life. If 5-TED is installed, then 7-TED should be accomplished instead of 1 TED.

2-TED. Same as 2-AN/URT-7 except
SERIAL: All, except those equipments on which field change 5 -TED is installed.
IDENTITY: Installation of high voltage warning decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air fitter and check the brushes of the blower motor.
NOTES: This field change is identical to 6-TED except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 6TED is deleted.

3-TED: Cooling Improvement
Correction Material: Included with EFCB.

## 1-B YF-8 NS98930 F5820-536-

2413
SERIAL: Only to shore-installed TED equipment used as part of AN/URN-12
IDENTITY: Original blower motor and fan ( $\mathrm{B}-101$ ) and air filter removed from RF chassis, and an air duct and air flow switch S-111 (Rotron Model 2A) is mounted in their place. Cooling is now ducted into the RF chassis from an externally mounted blower.

4-TED: Improved Cooling and Adaptation for Use as Part of AN/FRN-24

## 1-B YF-16 NS981020 None

SERIAL: Only to shore-installed TED equipment used as part of AN/FRN-24
IDENTITY: Original blower motor and fan (B-101) and air filter removed foom RF chassis, and an air duct and air flow switch S-111 (Rotron Model 2A) is mounted in their place. Cooling is now ducted into the RF chassis from an externally mounted centrifugal fan HD-326/U.

## 5-TED: Same as 3-AN/URT-7 except

Correction Material: Ch. 3 to NS 91357
IDENTITY: The phenolic retaining plates securing the plate caps of the high voltage rectifiers (V-Ill and V-112) are replaced with aluminum retaining plates.

## 6-TED: Same as 4-AN/URT-7 except

SERIAL: All equipments on which field change 5-TED is installed and field change 2-TED is not installed.

IDENTITY: Installation of high voltage warring decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-TED except for the maintenance precautions nameplate: in field change 2 TED, the nameplate instructs personnel to check the brushes of the blower motor in addition io cleaning the air iilter.

## 7-TED: Same as 5-AN/URT-7 except

SERIAL: All equipments on which field change 5-TED is accomplished and field change l-TED is not accomplished.
NOTES: This field change is identical to l-TED with the exception that this field change does not include connectors $P$ 110 and P.111. These connectors are not required if 5-TED is installed. See, also, 'notes' of 1-TED.

## 8-TED: Cancelled

9-TED: Provide TED-0 Transmitter in AN/FRN-24 Configuration with ATIS Capability.

Correction Material: TED: Chg. 4, NE0967-LP-114-7014, to TM, NS91357. TED-1: Chg. 3, NE0967-LP-114-9013, to TM, NS0967-114-9010(formerly NS91475). TED-2: Chg. 3, NE0967-LP-987-9013, to TM, NS0967-987-9010(fortnerly NS9!585A). TED-3: Chg. 3, NE0967-LP-987-8013, to TM, NS0967-987-8010(formerly NS9;796A). TED-4: Chg. 3, NE0967-LP-987-7013, to TM, NS0967-987-7010(formerly NS921 18). TED-6: Chg. 3, NE0967-LP-987-3013, to TM, NS0967-987-3010(formerly NS92320). TED-7: Chg. 1, NE0967-LP-987-5011, to TM, NS92701. TED-8: Chg. 2, NE0967-LP-084-8012, to TM, NS0967-084-8010(formerly NS92703). TED-9: Chg. 3, NE0967-LP-085-0013, to TM, NS0967-085-0010(formerly NS92312).

## I-A FA-4 NE0967-I P-085-00)40

SER1AL: All TED, TED-1,-2,-3,-4,-6,-7,-8,-9 Transmitters used in AN/FRN-24 for ATIS. (Shore installations only).
IDENTITY: Verify installation of a 5100 ohm resistor connected to the MCW Level Adjust pot (R141) and a jumper wire across K106-D in the Modulator unit.
NOTES: Prerequisite Field Change: 4-TED. (Field Change 4 TED should be accomplished on TED-1,-2,-3,-4,-6,-7,-8,-9 as well as TED.)

1-TED-1: Same as 1-AN/URT-7 except
SERIAL: All, except those equipments on which field changes 3 and 5-TED-1 are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors (P-110 and P.111) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-TED-1 with the exception that 5-TED-1 does not include the blower motor connectors ( $\mathrm{P}-110$ and $\mathrm{P}-111$ ). Field change 3-TED-1 replaced the original blower motor with one of extended life. If 3-TED-1 is installed, then 5-TED-1 should be accomplished instead of 1-TED-1.

2-TED-1: Same as 2-AN/URT-7 except

SERIAL: All, except those equipments on which field change 3-TED-1 is installed.
IDENTITY: Installation of high voltage warning decals on C139 and $C$-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-TED-i except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 4 -TED-1 is deleted.

## 3-TED-1: Same as 3-AN/URT-7 except

Correction Material: Ch. I to NS91475
IDENTITY: The phenolic retaining plates securing the plate caps of the high voltage rectifiers ( $V$-11I and $V-112$ ) are replaced with aluminum retaining plates.

4-TED-1: Same as 4-AN/URT-7 except
SERIAL: All equipments on which field change 3-TED-! is installed and field change 2-TED-! is not insialled.
IDENTITY: Installation of high voltage waming decals on C139 and C-187, and instaliation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-TED-1 except for the maintenance precautions nameplate: in field change 2
TED-l, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filler.

5-TED-1: Same as 5-AN/URT-7 except
Correction Material: T-1 to NS91475
SERIAL: All equipments on which field change 3-TED-1 is accomplished and field change I-TED-1 is not accomplished. NOTES: This field change is identical to 1-TED-1 with the exception that this field change does not include cômuectoz̆s P110 and P-111. These connectors are not required if 3-TED-1 is installed. See, also, 'notes' of 1-TED-1

## 6-TED-1: Cancelled

7-1ED-1: Same as 9-TED

1-TED-2: Same as 1-AN/URT-7 except
SERIAL: All, except those equipments on which field changes 3 and 5-TED-2 are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors ( $\mathrm{P}-110$ and P-111) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-TED-2 with the exception that 5-TED-2 does not include the blower motor connectors ( $\mathrm{P}-110$ and $\mathrm{P}-111$ ). Field change 3-TED-2 replaced the osiginal blower motor with one of extended life. If 3-TED-2 is installed, then 5-TED-2 should be accomplished insted of 1-TED-2.

2-TED-2: Same as 2-AN/URT-7 except
SERIAL: All, except those equipments on which field change 3-TED-3 is installed.

IDENTITY: Installation of high voltage warning decals on C 139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-TED-2 except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 4 TED-2 is deleted.

3-TED-2: Same as 3-AN/URT-7 except
Correction Material: Ch. 2 to NS91585(A)
IDENTITY: The phenolic retaining plates securing the plate caps of the high voltage rectifiers (V-111 and V-112) are replaced with aluminum retaining plates.

## 4-TED-2: Same as 4-AN/URT-7 except

SERIAL: All equipments on which field change 3-TED-2 is installed and field change 2-TED-2 is not installed.
IDENTITY: Installation of high voltage waming decals on C139 and C-187, and instalation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter only.
NOTES: This field change is identical to 2-TED-2 except for the maintenance precautions nameplate: in field change 2 .
TED-2, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter

## 5-TED.2: Same as 5-AN/URT-7 except

Correction Materiat: T-4 to NS91585(A)
SERIAL: All equipments on which field change 3-TED-2 is accomplished and field change $!$ TED-2 is not accomplished. NOTES: This field change is identical to 1-TED-2 with the exception that this field chage does not include connectors P110 and P-111. These connectors are not required if 3-TED-2 is installed. See, also, 'notes' of 1-TED. 2.

## 6-TED-2: Cancetled

7-TED-2: Same as 9-TED

## 1-TED-3: Same as 1-AN/URT-7 except

SERIAL: All, except those equipments on which field changes 3 and 5-TED- 3 are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors ( $\mathbf{P}-110$ and $\mathrm{P}-111$ ) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-TED-3 with the exception that 5-TED-3 does not include the blower motor connectors (P-110 and P-113). Field change 3-TED-3 relaced the original blower motor with one of extended life. If 3 -TED-3 is installed, then 5-TED- 3 should be accomplished instead of 1-TED-3.

2-TED-3: Same as 2-AN/URT-7 except
SERIAL: All, except those equipments on which field change 3-TED-3 is installed.
IDENTITY: Installation of high voltage warsing decals on C139 and C-187, and installation of a maintenance precautions
nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-TED-3 except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 4 -TED- 3 is deleted.

## 3-TED-3: Same as 3-AN/URT-7 except

Correction Material: Ch. 2 to NS91796(A)
IDENTITY: The phenolic retaining plates securing the plate caps of the high voltage rectifiers ( V -111 and V -112) are replaced with aluminum retaining plates.

## 4-TED-3: Same as 4-AN/URT-7 except

SERIAL: All equipments on which field change 3-TED-3 is installed and field change 2-TED-3 is not installed.
IDENTITY: Installation of high voltage warning decals on C 139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-TED-3 except for the maintenance precautions nameplate: in field change 2 -
TED-3, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

5-TED-3: Same as 5-AN/URT-7 except
Correction Material: T-1 to NS91796(A)
SERIAL: All equipments on which field change 3-TED-3 is accomplished and field change 1-TED-3 is not accomplished. NOTES: This field change is identical to 1 -TED- 3 with the exception that this field change does not include connectors P110 and P.II1. These connectors are not required if 3 -TED-3 is installed. See, also, 'notes' of 1 -TED-3.

## 6.TED-3: Cancelled

7-TED-3: Same as 9-TED

## 1-TED-4: Same as 1-AN/URT-7 except

SERIAL: Ali, except those equipments on which field changes 3 and 5-TED- 4 are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors ( $\mathrm{P}-110$ and $\mathrm{P}-111$ ) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-TED-4 with the exception that 5-TED-4 does not include the blower motor connectors ( $\mathrm{P}-110$ and $\mathrm{P} \cdot 111$ ). Field change 3 -TED 4 replaced the original blower motor with one of extended life. If 3 TED 4 is installed, then 5-TED 4 should be accomplished instead of 1-TED-4.

## 2-TED-4: Same as 2-AN/URT-7 except

SERIAL: All, except those equipments on which field change 3-TED-4 is accomplished.
IDENTITY: Installation of high voltage warning decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance
precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-TED-4 except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 4 -TED-4 is deleted.

## 3-TED.4: Same as 3-AN/URT-7 except

Correction Material: Ch. 2 to NS92118
IDENTITY: The phenolic retaining plates securing the plate caps of the high voltage rectifiers ( V -111 and V -112) are replaced with aluminum retaining plates.

## 4-TED-4: Same as 4-AN/URT-7 except

SERIAL: All equipments on which field change 3-TED-4 is installed and field change 2-TED-4 is not installed.
IDENTITY: Installation of high voltage warning decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-TED. 4 except for the maintenance precautions nameplate: in field change 2 -
TED-4, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

5-TED-4: Same as 5-AN/URT. 7 except
Correction Material: T-2 to NS 92118
SERIAL: All equipments on which field change 3-TED-4 is accomplished and field change 1-TED-4 is not accomplished. NOTES: This field change is identical to 1-TED-4 with the exception that this field chae does not include connectors P110 and P-1[1. These connectors are not required if 3-TED-4 is installed. See, also, 'notes' of 1-TED-4.

## 6-TED-4: Cancelled

## 7.TED-4: Same as 9-TED

1-TED-5: Same as 1-AN/URT-7 except
SERIAL: All, except those equipments on which field changes 3 and 5-TED. 5 are installed.
NOTES: This field change is identical to 5-TED-5 with the exception that 5-TED-5 does not include the blower motor connectors ( $\mathrm{P}-404$ and $\mathrm{P}-405$ ). Field change 3-TED-5 replaced the original blower motor with one of extended life. If 3 TED. 5 is installed, then S-TED-5 should be accomplished instead of 1 -TED-5.

## 2-TED-5: Same as 2-AN/URT-7 except

SERIAL: All, except those equipments on which field change 3-TED-5 is accomplished.
IDENTITY: Installation of high voltage warning decals on C 139 and C.187, and installation of a maintenance precautions nameplate on the righthand access door. The maintenance precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-TED-5 except for the mai:stenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 4. TED-5 is deleted.

## 3-TED-5: Same as 3-AN/URT-7 except

Correction Material: Ch. 3 to NS91357
IDENTITY: The phenolic retaining plates securing the plate caps of the high voltage rectifiers ( $\mathrm{V}-111$ and $\mathrm{V}-112$ ) are replaced with aluminum retaining plates.

4-TED-5: Same as 4-AN/URT-7 except
SERIAL: All equipments on which field change 3-TED-5 is installed and field change 2-TED-5 is not installed.
IDENTITY: Installation of high voltage warning decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-TED-5 except for the maintenance precautions nameplate: in field change 2 -TED-5, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

## 5-TED-5: Same as 5-AN/URT-7 except

Correction Material: None
SERIAL: All equipments on which field change 3-TED-5 is accomplished and field change $1-T E D-5$ is not accomplished. NOTES: This field change is identical to 1-TED-5 with the exception that this field change does not include connectors $P$. 404 and P-405. These connectors are not required if 3-TED-5 is installed. See, also, 'NOTES' of 1-TED-5.

## 6-TED-5: Cancelled

## 1-TED-6: Same as 1-AN/URT-7 except

SERIAL: All, except those equipments on which field changes 3 and 5-TED-6 are installed.
IDENTITY: Installation of type AN/3106A-12S male and female connectors (P-110 and P-111) in series with the blower motor power cord and located within the blower motor compartment.
NOTES: This field change is identical to 5-TED-6 with the exception that 5-TED-6 does not include the blower motor connectors (P-110 and P-111). Field change 3-TED-6 replaced the original blower motor with one of extended life. If 3 -TED-6 is installed, then 5-TED-6 should be accomplished instead of 1-TED-6.

## 2-TED-6: Same as 2-AN/URT-7 except

SERIAL: AII, except those equipments on which field change 3-TED-6 is installed.
IDENTITY: Installation of high voltage warning decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter and check the brushes of the blower motor.
NOTES: This field change is identical to 4-TED-6 except for the maintenance precautions nameplate: the reference to checking the brushes of the blower motor in field change 4 -TED-6 is deleted.

3-TED-6: Same as 3-AN/URT-7 except
Correction Material: Change 1 to NS92320
IDENTITY: The phenolic retaining plates securing the plate
caps of the high voltage rectifiers (V-111 and V-112) are replaced with aluminum retaining plates.

4-TED-6: Same as 4-AN/URT-7 except
SERIAL: All equipments on which field change 3-TED-6 is installed and field change 2-TED-6 is not installed.
IDENTITY: Installation of high voltage warning decals on C139 and C-187, and installation of a maintenance precautions nameplate on the right-hand access door. The maintenance precautions nameplate instructs personnel to clean the air filter, only.
NOTES: This field change is identical to 2-TED-6 except for the maintenance precautions nameplate: in field change 2-
TED-6, the nameplate instructs personnel to check the brushes of the blower motor in addition to cleaning the air filter.

5-TED-6: Same as 5-AN/URT-7 except
Correction Material: Change 2 to NS92320
SERIAL: All equipments on which field change 3-TED-6 is accomplished and field change 1-TED-6 is not accomplished. NOTES: This field change is identical to l-TED-6 with the exception that this field change does not include connectors $P$. 110 and P-111. These connectors are not required if 3-TED-6 is installed. See, also, 'notes' of 1-TED-6.

## 6-TED-6: Cancelled

7-TED.6: Same as 9-TED
1-TED-7: Same as 3-AN/URT-7 except
Correction Material: Change 1 to NS92701
2.TED-7: Cancelled

3-TED-7: Same as 9-TED

1-TED-8: Same as 3-AN/URT-7 excep:
Correction Material: Change 1 to NS92703
2-TED-8: Cancelled
3-TED-8: Same as 9-TED
1.TED-9: Same as 9-TED

1-TH-39A/UGT: Low pass filter to suppress spurious signals
Correction Material: T-4 (Included in Field Change Bulletin) NS0967-035-6020

I-A NS0967-035-6020
SER1AL: All units manufactured before Serial No. 19348
IDENTITY: Presence of a prepackaged filter network between terminal 7 on transformer T-2 and the turret terminal point for C-23.

2-TH-39A/UGT: Modification to FSK Circuit
Correction Material: T-1, NS0967-035-6011 to NS0967-0356010

11-A FA-4 NS0967-155-9030
SERIAL: All
IDENTITY: MARK HI-MARK LO switch mounted on the front panel.

3-TH-39A/UGT: Replacement of Under-Rated Resistor
Correction Material: To Technical Manual NAVSHIPS 0967.155.9010

2-A FA-I EIB 858 EIC QEOHOOO
SERIAL: Allserial numbers
IDENTITY: Note that cathode pin 3 of tube socket $X V 3$ is a 22 k ohm, 2 watt resistor (vice 22 k ohm, $1 / 2$ watt).

1-TH-39B/UGT: Same as 2-TH-39A/UGT
1-TH-94/UGT: Same as 2-TH-39A/UGT
3-TN-229/SRT: Replacement of B303, B3501, B3502, E305, and 0376

1-A FA. 16 NS981284 None
2-TN-229/SRT: Same as 11-AN/WRT-1
1-TN-342/WRT-2: Same as 1-TN-345/WRT-1
1-TN-345/WRT-1: Elimination of Slipping Shaft Possibility on the Output Coupling of Tuner Drive Assembly
2-A FA.0.5 None SERIAL: All
IDENTITY: Presence of a taper pin on the output coupling of
MP-3301 (two speed drive assembly).
1-TS-890/URN-3: Modification of TS-890/URN-3 to upgrade performance to that of the TS-890A/URN-3 modifies equip. ment to TS-890C/URN

Correction Material: T-2 to NS93231
i-B YF-24 NS0967-105-4020
F5820.624-
8826
SERIAL: All
IDENTITY: Nameplate marked 'Modified to rS-8900/URN. $3^{\prime}$

2-TS-890/URN-3: Modification of RF Unit Cover to Facilitate Alinement

Correction Material: None
2-A FA. 4 NS0969-076-8030
SERIAL: All
IDENTITY: Presence of three snap hole plugs on right side cover of RF unit.

1-TS-890A/URN-3: Same as 2-TS.890/URN-3
1-TS-890C/URN-3: Same as 2-TS-890/URN-3
1-TS-891/URN-3: Rejection Rate of V6203 Reduction
Correction Material: None
1-A FA.3 NS0967-012-2020 2ZA6625-L00.
1104
SERIAL: 1 thru 50 (equipment with higher serials were modilied during production)
IDENTITY: A $2.2 \mathrm{~K} \quad 1 / 2 \mathrm{w}$ resistor connected from pin 1 of V6203 to TB6203 terminal 47 of video chassis.

1-TS-1216B/UD: Mercury Level Provision
Correction Material: T-1 to NS0969-085-301] (formerly NS94165)

1-A FA-6 NS0969-085-3020 None SERIAL: 2 thru II
IDENTITY: A mercury level indicator light on operator's side of the equipment.

1-TS-1453/SYA.1(V): Electronic Circuit Plug-in Unit Tester. Incorporation of Factory Field Bulletins as a Unit Field Change

Correction Material: Incorporated in revised publication
2-A FA. 2 NS0967-923-9020 None SERIAL: All
IDENTITY: Field change number stamped on the Field Change Accomplished plate.

1-TS-1539/USQ-20(V): Keyset Universal Tester - Incorporation of Factory Field Service Orders as a Unat Field Change Correction Material: Incorporated in revised publication
2-A NA NS0967-219-8020 None

SERIAL: 1 thru 7
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-TS-1539/USQ-20(V): Introducer Tester; Fuse Change Correction Material: T- to NS0967-219-8010 (NS94098(A)) 2-A FA-1/4
SERIAL: All
IDENTITY: Visual inspection to see if the .375 amp normal blow fuses have been replaced with .375 amp 'slow blow' fuses.

1-TS-1780/SYA-4(V): Electronic Circuit Plug-In Unit Test Set

- Incorporation of Factory Field Bulletins as a Unit Field

Change
Correction Material: Incorporated in revised Technical Manual

2-A NS0967.923-7030 None
SERIAL: Ai thru A7 and A9 ihru Ai2
IDENTITY: Change number stamped on the Field Change Accomplished plate.

2-TS-1780/SYA-4(V): Modification to Allow Testing of the Pulse Amplifier Gate Card (580607-100)

Correction Material: T-1, NS0967-923-7013 to TM, NS0967-923.7010 (formerly NS94639) and T.4, NS0967-1834015 to TM, NS0967-183-4010 (formerly NS94640(A))

1-A FA-2.5 NS0967-923-7040
SERIAL: All
IDENTITY: Inspection of the equipment for the presence of wiring as shown on Figure 1 of the Field Change Bulletin.

3-TS-1780/SYA-4(V): Same as 4-CV-1320/SYA-4(V) except 1.A FA. 3 NS0967.959.3040 EIC DQ02000 SERIAL: Al thru A25, B1 and B2

4-TS-1780/SYA-4(V): Same as 5-CV-1320/SYA-4(V) except SERIAL: Al thru A25, B1 and B2 and EIC: P804E00

5-TS-1780/SYA-4(V): Improvement of Coarse Control CAM Correction Material: None
1-A FA-2 NS0967-923-7050 EIC P83Q000
SERIAL: All serial numbers

IDENTITY: CAM width measurements should be $3 / 16^{4}$ vice 1/8', also presence of hard nylon roller on the switch actuator.

6-TS-1780/SYA-4(V): Lamp Driver Test Module Construction
Correction Material: T-8, NS0967-183-4102 to NS0967-1834010; T-2, NS0967-923-7015 to NS0967-923-7010

1-A FA-1 NS0967-923-7060 EIC P83Q000 SERIAL: All serial numbers
IDENTITY: Noting a test module for the lamp driver PC card.

2-TS-2302/UYA-1(V): Allow Proper Testing of 104624 Card. Correction Material: To be provided.
1-A FA-6 SE685-AC-FCB-010 EICQM05
SERIAL: AI-A5
IDENTITY: Verify addition of new toggle switch (A9S7) on the DC Bridge and Servo Tester. The new switch is labeled CLOCK CONTROL with positions NORMAL and 104624 ONLY.

1-TS-2317/UYK-5(V): Inhibit Memory During Phase Step
Correction Material: None required
I-A FA-2 NS0967-313-2070 EIC QK07000
SERIAL: Maintenance Panel serial numbers A0thru A67
IDENTITY: Make a continuity check of ' 0 ' ohms between PI pin 68 and ground with the 'High Speed Switch' (S2) in the OFF position.

1-TS-2460/UYA-4(V): Same as 3-CV-2095(V)/UYA-4(V) except
SERIAL: A 1 thru A4, B1, B2, C1, C2 and C5

2-TS-2460/UYA-4(V): Incorporation of HAC Maintenance
Bulletins, Group I, as a Unit Field Change
Correction Material: None
4.A NS0967-238-7430

SERIAL: G26, Cl-C2; G38; Al-A4; Bl-B2, Cl-C8, G49, AlA4, Bl-B2, Cl-C9; G73; Al-A4, Bl-B2, Cl-Cl6
IDENTITY: No hardware change. If the Field Change Record Plate shows this field change number, then HAC Field Change Bulletins G26, G38, G49 and G73 have been installed.

3-TS-2460/UYA-4(V): Incorporation of HAC Maintenance Bulletins, Group II, as a Unit Field Change

Correction Material: None Reguired
NS0967-238-7620
SERIAL: Equipment serial numbers A1 thru A4, B1, B2, Cl thru C25 and G1 thru G5
IDENTITY: Visually inspecting the logic control $D$ card (1537627) which is provided as Mod Test Set Plug-in Assembly A16. Capacitor C6 is changed from 1200 picofarads to 560 picofarads if the change has been accomplished.

4-TS-2460/UYA-4(V): Same as 4-AM-4534/UYA-4(V) except SERIAL: G5, H1, I1-I10, JI

5-TS-2460/UYA-4(V): Same as 42-OA-7979(V)/UYA-4(V) except

SERIAL: AI thru A4, B1, B2, Cl thru C25, Gl thru G5, H1, El thru E4, and II

## 6-TS-2460/UYA-4(V): Test Set Noise Correction

Correction Material: T-1, NS0967-238-7052 to NS0967-2387050; T-6, NS0967-238-7117 io NS0967-238-7110; T-3, NS0967-238-7773 to NS0967-238-7770
1.A FA-10 NS0967-562-6020

SERIAL: Al thru A4, B1, B2, Cl thru C25, D1, El thru E4, Fl thru F5, Gl thru G5, Hi, I1 thru 110, JI, K1 thru K26, LI thru L3, M1 thru M6.
IDENTITY: Verify that R1 and R2 of A2A3 (card p/n 1537769) are 180 ohms, $1 / 2 \mathrm{~W}$. On the front panel, verify that the wire between switch A1S97-3 and connector A1P8-5 is s:hielded.

7-TS-2460/UYA-4(V): MOD Test Set Cable and Tool Kit Changes

Correction Material: T-2, NS0967-LP-238-7053 to NS0967-LP-238-7050; T-8, NS0967-LP-238-7778 to NS0967-LP-2387770

I-A FA-4 NS0967-LP-562-6170 EIC QM06000
SERIAL: Serial numbers Il thru I10, Kl thru K26, J1, LI thru L3, M1 thru M13, N1, N2. HAC S/N's 102, 103, 105 and 112
IDENTITY: Check test cable W24 for wiring changes listed in the bulletin, and check for the additional five items in the tool kit.

## 8-TS-2460/UYA-4(V): RHI Test Cable

Correction Material: Included in new technical manual IV-A FA-1/2 EIB 899

E1C QM06000
SER1AL: Serial numbers M3, M4, M7, M8, M10, and N1
IDENTITY: Establish continuity between W26 P2 pin 50 and W26 P1 pin 93.
9.TS-2460/!YA-4(V): Same as 19-CV-2095(Vi/UYA-4(V) except
SERIAL: Al thru A3, B1, B2, Cl thru C25, G1 thru G5, H1, I1 thru I10, J1, K1 thru K26, L1 thru L3, M1 thru M3, N1, N2, HAC S/N 102, 103, 105 thru 110
10.TS-2460/UYA-4(V): Addition of Ferrule Crimper and Dies Correction Material: None required
I-A FA-1 NS0967-LP-562-6280 EIC QM06000
SERIAL: Procedure A: A1 thru A3, B1, B2, Clthru C25, G1 thru G5, H1 and I1; Procedure B: 12 thru I10, J1, K1 thru K30, L1 thru L3, M1 thru M5, M7 thru M12, M14, M15, and NI thru N6
IDENTITY: Check test set tool kit A for addition of crimping die, Green, P/N 45066-3, and tool kit B for addition of crimping dies, brown, P/N 45064-3, and violet, P/N 45062-3, and crimping tool, $\mathrm{P} / \mathrm{N} 59500$.

11-TS-2460/UYA-4(V): Correct Test Module Discrepancies Correction Material: T- to NS0967-LP-238-7050 IV-A FA-1 EIB 915
SER1AL: Al-A4, B1, B2, Cl-C25, D1, El-E4, Fl-F5, Gl-G5, H1, 11-110, K1-K30, LI-L3, M1-M15, N1-N6, P1, P2, R1
IDENTITY: This field change may be identified by checking for the following: 1. Test Module No. 4 (A13): P/N 1537723-

Observe that the cathode of A13CR2 is connected to A13TB1 terminal 8B. 2. Test Module No. 5 (A14): P,N 1537797 . Check for continuity between A14J1-71 to A14J2-13 and Al4Jl-69 to Al4J2-12. 3. Servo Test Module (Al8): P/N 1537630 - Observe that connectors A18J1 and A18J2 are approximately $3 / 4^{\prime}$ apart vice $1-3 / 4^{4}$

12-TS-2460/UYA-4V): Same as 21-CV-2095(V)/UYA.4(V)
13-TS-2460/UYA-4V): Same as 34-OA-7981A/UYA.4(V).

14-TS-2460/UYA 4V): Rework of W17 Test Set Cable.
Correction Material: Revised TM, NS0967-LP-238-7050, dtd 13 Feb 1976.

2-A FA-S NS0967.LP-562-6400
SERIAL: AI-A4, B1-B2, Cl-C25, D1, E3-E4, Fl-F5, G1-G5, H1, 11-110, Ji, K1-K26, L1-L3, M1-M13, M15, and N1-N3.
IDENTITY: Examine the W17 Test Set Cable to see if connectors Ji and P1 have been interchanged. Conveitor Pl should have wires with male contact pins in holes $26,44,48$, and 62. Connector JI should have wires with female contact pins in holes $26,37,70$, and 85 Jl is $15 / 16$-inch thick while P1 contains a male jackscrew and is only 19/32-inch thick.

15-TS-2460 NYA-4(V): Add Load to W22 Test Cable.
Correction Material: Changes to TM will be provided.
I-A FA-4 NS0967-LP-562-6530 EIC QM06
SERIAL: [1-110, J1, K1-K30, L1,L2,M1-M15, N1-N6, PI, P2, R1-R13, MSN 128-133.
IDENTITY: Remove back cover from the W22 Test Cable Assembly and verify installation of component board assembly (A3TB1) containing 11 resistors. A3TBI is mounted above A2TB1.

1-TS-3389/URN: Strain Relief Clamps for Cable Assembly W3.

Correction Material: None required.
1.A FA-I NE0967-LP-467-6060

EIC L311
SERIAL: All serial numbers.
IDENTITY: Verify that cable strain relief clamps have been installed on connectors on both ends of power cable, W3.

1-TS-3543/U: Wiring Change to Cable Data Input Circuit. (EIB 975)

Correction Material: EIB 975
4.A FA-1 EJB 975

E1C WK6H
SERIAL: All TS-3543/U Digital Data Test Sets used in SNAIAS.
IDENTITY: Verify that four wires are terminated on the chassis ground termination lug IJIEl; three of the wires are connected to pins B, D, and F of 1J1.

1-TSEC/HO-5: Revision of Transmitter Distributor Wiring
FA-1 NS9867
None
SERIAL: 13, 14, and 16
2-TSEC/HO-5: Replacement of Magnetic Memory Units 1-A FA-6 NS981316
SERIAL: 28 thru 50

## 1-TSEC/KG-7: Revision of KGS-1/TSEC

FA-I NS98693 None
SERIAL: 21 thru 66

2-TSEC/KG-7: Revision of Circuitry Involving V-5102, V5202, V-5302, and V. 5402
2.A FA-2 NS98915 None

SERIAL: TSEC/KG-7 component of TSEC/KO-5 procured on contract NObsr 52434 and 63116

3-TSEC/KG-7: Replacing Magnetic Memory Units 1-A FA. 12 NS981248

None
SERIAL: 21 thru 111

## 1-TT-23/SG: Cancelled

2-Tr-23/SG: Protective Sleeves for Patch Cords
Correction Material: None
2-A FA-1 NS981276 2F5815-724.

SERIAL: All
IDENTITY: Presence of synthetic rubber sleeves installed on each patchcord.

3-TT-23/SG: Improvement of Meter Accuracy
Correction Material: T-1, NS0967-116-901] to TM, NS0967-1 16.9010 (formerly NS981276)

2-A FA NS0967-116-9020
F5815.724.
3453
SERIAL: All but not to SB-1203A/UG and SB-1210/UGQ
IDENTITY: Ohmmeter measurement of the resistance of meter calibration resistor, R101 in SB-1203/UG and SB1210A/UGQ, R102 in TT-23/SG through TT-23E/SG and R100 in TT-23F/SG.

1-TI-23A/SG: Same as 3-TT-23/SG
2-TY-23A/SG: Same as 2-TT-23/SG
1-TI-23B/SG: Same as 3-TT-23/SG

2-TI-23B/SG: Same as 2-TT-23/SG
1-TT-23C/SG: Same as 3-TT-23/SG
2-TT-23C/SG: Same as 2-TT-23/SG
1-TT-23D/SG: Same as 3-TT-23/SG

2-TT-23D/SG: Same as 2-TT-23/SG
1.TT-23E/SG: Same as 3-TT-23/SG

2-TI-23E/SG: Same as 2-Tr-23/SG
1-TI-23F/SG: Operational improvements
2.A FA-6 NS981257 None

SERIAL: All
IDENTITY: Absence of 130 ohm, $\{$ watt resistors on looping and set jacks.

2-TT-23F/SG: Same as 2-TT-23/SG

3-TT-23F/SG: Same as 3-TT-23/SG

1-TT.47/UG: Keyboard and type pallet set, modif
Correction Material: T. 3 to NS91393 and T-3 to NS91713
1-A FA-3 NS98350
2N581 5-3020990
SERIAL: All in ship or shore aerological service IDENTITY: Installation of 'RE' weather type keyboard. Nomenclature change to TT-128/UG.
NOTES: Field change 1 is identical to field change 2 except that (1), the nomenclature of the equipment modified by field change 2 is not changed and (2), field change 1 applies only to the following equipments: TT-47/UG, TT-47A, UG, TГ.48/
UG, TT-48A/UG, MT-69/UG, TT-69A/UG, TT-70/UG, and TT-70A, UG.

2-TT-47/UG: Modification Kit MK-599/UG to Provide for Aerological Weather Service

Correction Material: T-4 to NS91393; T-4 to NS91713; T-2 to NS92361; T-3 to NS93241

1-A FA-3 NS981424
F5815.893-
2490
SERIAL: Any of the teletypewriters installed in a ship or at a shore station which are to be used for aerological weather service.
IDENTITY: Installation of 'RE' weather type keyboard. NOTES: Field change 2 is identical to field change 1 except that (1), the nomenclature of the equipment modified by field change $I$ is changed and (2), the field change bulletin for field change 2 has been expanded to include the following additional field changes: 1-TT-47C/UG, 1-TT.47D/UG, 1-TT. 47E/UG, I-7T-48B/UG, I-TT-48C/UG, 1-TT-69B/UG, 1-1T-69C/UG, I.TГ-70C/UG, 1-TT-70D/UG, 1-TT-171~UG, 1.1T-171A/UG, 1-TT-176/UG, 1-TT-176A/UG, and 1-TT-234/SGA-3.

3-TT-47/UG: Installation of MK-698/UG Mod Kit (Converts Equipment from 7.42 Unit Code to 7.00 Unit Code With Synchronous Pulsed Transmission and 45.5, 50, 75 BAUD Speeds)

Correction Material: T-5 to NS91393; T-5 to NS91713; T-5 to NS93241

NS981560A
F5815.088.
6024
SERIAL: Al]
4-TJ-47/UG: Installation of Automatic Type TГ.437/UG (Replace MX-1115/UG or MX-1115A/UG)

Correction Material: T-6 to NS91393; T-7 to NS91713
I-A FA NS981769 F5815-682. 7763
SERIAL: All
IDENTITY: Automatic typer TT-437/UG
5.TT-47/UG: Installation of Oscillating Rail Slide Plate Correction Material: None Required
2-A FA-1/4 NS0967-116.9020
SERIAL: All

IDENTITY: Presence of a plate between the oscillating rail slide clamp.
6.TT-47/UG: Installation of (195415) MK-810/UG Modification Kit to Provide 3-Speed Gearshift for Model 28 KSR or ROSel

Correction Matesial: T-7 to NS91393
I-A FA NS98175S
F5815-0S1.
3824
7.TT-47/UG: Installation of 304599 (MK-821/UG) Modification Kit to Provide Manual Letters Shift
I-A FA-2
NS981770

SERIAL: All
8-TT-47/VG: Normal Input Keying Kit Correction Material: None Required 3-A FA-8 NS0967-109-4120
SERIAL: All
IDENTITY: Installation of decal adjacent to nameplate.
1-TT.47A/UG: Same as I-TT-47iUG except IDENTITY: Modifies nomenclafure to TI-I28A/UG
2.TT-47A/UG: Same as 2.T「-47/UG
3.TT-47A/UG: Same as 3-7T-47/UG

4-TT.47A/UG: Same as 4-TT.47/UG
5.TT-47A/UG: Same as 5-TT-47/UG
6.TT-47A/UG: Installation of Code Bar Yield Mechanism Correction Material: None
2-A FA-2 NS0285.077.9100 None
SERIAL: All containing MX-111SA Automatic Typer with Ser. 8506 and below
IDENTITY: Presence of springs on the 1, 2, and common code bar shift bars.
7.TT.47A/UG: Installation of Oscillator Shift Knee Link Parts of New Design

Correction Material: None
2-A FA-3 NS0285-077-9300 None
SERIAL: Al! equipment containing MX-111SA Automatic Typer with Ser. No. I 1,500 and below
IDENTITY: Presence of torsion spring $1 / 2$ turn (hairpin shaped) in place of a torsion spring of approximately four turns to hold the knee links in their unbuckled position.

8-TT-47A/UG: Installation of Horizontal Postioning Knee Link Assemblies

Correction Material: None
2.A FA-2 NS0285-077-9300 None

SERIAL: All equipment containing MX-1115A Automatic Typer No. 11,500 and below
IDENTITY: Presence of torsion springs in lieu of tension springs on the horizontal positioning knee link assemblies.

9-TT-47A/UG: Installation of Lubrication Assembly
Correction Material: T-4 to NS92361; T. 8 to NS 91713


SERIAL: Al
IDENTITY: Presence of Jubricator assembly mounted on selec. mechanism when viewing the automatic typer from the right side.

10-TI.47A/UG: Installation of One-Piece Non-Adjustable Code Bar Shift Lever Guide Bracket

Correction Material: T-9 to NS91713; T-5 to NS92361

1457
SERIAL: Below 61550 (Typing units)
IDENTITY: Code bar positioning mechanism.
11-TT-47A/UG: Installation of Adjustable Type Box Carriage Adjustment

Correction Material: T-10 to NS93713; T-6 to NS92361
NS0285-077.9600

SERIAL: Thru 16799 (Typing units)
IDENTITY: Type box mechanism

12-TT-47A/UG: Replacement of Range Finder Plate Correction Material: T-11 to NS91713; T-7 to NS92361
2-A FA-1.5 NSO285-077-9700
None
SERIAL: All
IDENTITY: New type range finder knob.

13-Tr.47A/UG: Same as 8-TT.47/UG
1.TT.47B/UG: Same as 3.TT-47/UG

2-TT-47B/UG: Same as 8-TT-47/UG

1-Tr.47C/UG: Same as 2-TT-47/UG

2-Tr-47C/UG: Same as 3-1T-47/UG

3-Tr-47C/UG: Installation of 193936 (MK-764/UG) Modification Kit


SERIAL: LP6 and up
4.Tr.47C/UG: Same as 8.TT-47/UG

1-TI.47D/UG: Same as 2-TT-47几G

2-TI-47D/UG: Same as 3-TT-47/UG

3-TT•47D/UG: Same as 3.TT-47C/UG

4-TT•47D/UG: Same as 8-TT.47/UG

1-Tr.47E/UG: Same as 2-TT-47/UG
3.Tr-47E/UG: Same as 3-TT-47C/UG

4-Tr-47E/UG: Same as 8-TT-47/UG

1-TT.47F/UG: Same as 3-TT-47C/UG

2-TT.47P/UG: Same as 8-TT-47/UG

1-TT-47G/UG: Same as 3-TT-47C/UG

2-TT-47G/UG: Same as 8-TT-47/UG

1-TT-47H/UG: Cancelled

2-Tr.47H/UG: Same as 3-TT-47C/UG

1-TT-48/UG: Same as 1-TT-47/UG except NOTES: Modifies nomenclature to TT-129/UG

2-TT-48/UG: Same as 2-1T-47/UG

3-TT.48/UG: Same as 3-T؟.47/UG
-TT.48/UG: Same as 4-IT.47/UG

5-TT.48/UG: Same as 5-TT-47/UG
6.TT.48/UG: Same as 6.TT.47/UG

1-TT-48A/UG: Same as 1-TT-47/UG except
IDENTITY: Nomenclature changed to IT-129A/UG.
2.TT-48A/UG: Same às 2.TT-47,UG

3-TT-48A/UG: Same as 3-TT-47/UG

4-TT-48A/UG: Same as 4-[T-47/UG
5.TT.48A/UG: Same as 5-TT-47/UG

6-TT-48A/UG: Same as 6-TT-47A/UG
7.TT-48A/UG: Same as 7.TT-47A/UG
-Tr.48A/UG: Same as 8-TT-47A/UG

9-TT.48A/UG: Same as 9-TT-47A/UG
10.TI-48A/UG: Same as I0-TT-47A/UG

11-TT•48A/UG: Same as 11-TT-47ANG
-TT-48B/UG: Same as 2.TT-47/UG

ORIGINAL


7-Tr-69A~UG: Same as 8-TT.47A/UG
8-TT-69A/UG: Same as 9-TГ.47A/UG
9-Tr.69A/UG: Same as 10.TT.47A/UG

10-TT.69A/UG: Same as 11-T「-47A/UG
11.TT-69A/UG: Same as 12-TT.47A/UG

12-Tr-69A/UG: Same as 8-TT.47/UG
1-Tr.69B/UG: Same as 2-TT-47/UG

2-Tr-69B/UG: Same as 3-TГ-47/UG

3-Tr-69B/UG: Same as 3-TT-47C/UG
4-Tr-69B/UG: Same as 8-Tr-47/UG
1-TT-69C~UG: Same as 2-TГ-47/UG

2-Tr-69C/UG: Same as 3-TT-47/UG
3.TT-69C/UG: Same as 8-TI.47/UG

1-TT-69D/UG: Cancelled
2-Tr-69D/UG: Same as 3-TГ-47C/UG

3-TT-69D/UG: Same as 8-TT-47/UG

1-Tr-70/UG: Same as 1-Tr-47/UG except IDENTITY: Nomenclature changed to TI-I31~UG

2-Tr-70/UG: Same as 2-TI-47/UG
3-Tr-70/UG: Same as 3-TT-47/UG
4.TГ-70/UG: Same as 4-TГ-47/UG

S-Tr-70/UG: Same as 5-TT-47/UG
6.TT-70/UG: Same as 6.TT-47/UG

7-Tr-70/UG: Same as 7.TI-47/UG
8-Tr-70/UG: Same as 8-Tr-47/UG
1-Tr-70A/UG: Same as 1-Tr-47/UG
IDENTITY: Nomenclature changed to TY-131A/UG
2-Tr-70A/UG: Same as 2-TT-47/UG

3-TT-70A/UG: Same as 3-T「-47/UG
4.TT-70A/UG: Same as 4-TT.47/UG

5-Tr-70A/UG: Same as 5-Tr-47/UG
6-Tr-70A/UG: Same as 6-TT-47A/UG
fCiG

COMMUNICATIONS

7－1T－70A／UG：Same as 7－1T－47A／UG 8－1T－70A／UG：Same as 8－TГ－47A／UG 9．1T－70A／UG：Same as 9－Tr．47A／UG 10－1T－70A／UG：Same as 10－T「－47A／UG 11－2T－70A／UG：Same as 1i－TI－47A／UG 12－1T－70A／UG：Same as 12．TT．47A／UG

13－1T－70A／UG：Same as 8－1T－47／UG 1－1T－70B／UG：Same as 3－TT－47／UG 2－TT－70B／UG：Same as 8－TГ－47／UG 1－7T－70C／UG：Same as 2－7T．47／UG 2－TT－70C／UG：Same as 3－TT．47／UG 3－TT－70C／UG：Same as 3－TI－47C／UG 4．TT－70C／UG：Same as 8－Tr．47／UG 1－IT－70D／UG：Same as 2－TГ．47／UG

2－TT－70D／UG：Same as 3－TT－47／UG except NOTES：No FSN required

3－TT－70D／UG：Same as 3－7T－47C／UG

4－TT－70D／UG：Same as 8－TT－47／UG

1－Tr－128A／UG：Same as 6－T「．47A／UG

2－Tr－128A／UG：Same as 7－1T－47A／UG

3－TT－128A／UG：Same as 8－TT－47A／UG

4－Tr－128A／UG：Same as 9－TT－47A／UG

5－IT－128A／UG：Same as 10－TT－47A／UG

6．Tr－128A／UG：Same as 11．TT－47AへG

7－TT－128A／UG：Same as 12－TГ 47A／UG

1－TT－128B／UG：Cancelled

2－Tr－128B／UG：Same as 3－TT－47C／UG

1．TI．129／UG：Same as 3．TT－47／UG

1－TT－129A／UG：Same as 3－Tr－47／UG

2－IT－129A／UG：Same as 6．TT－47A／UG

3－TT－129A／UG：Same as 7－TI－47A／UG

NS0967－LP－000－0010

4－1T－129A／UG：Same as 8 －TT－47A／UG

5－TT－129A／UG：Same as 9．TT－47A／UG

6．IT－129A／UG：Same as 10－Tr－47A／UG

7．1T－129A／UG：Same as 11．Tr－47A／UG

8－1T－129A／UG：Same as 12－T「．47A／UG

1－Tr－130／UG：Same as 3－Tr－47／UG

1－1T－130A／UG：Same as 3－TT－47／UG

2－TI－130A／UG：Same as 6．TT－47A／UG

3－1T－130A／UG：Same as 7．T「－47A／UG

4－TT－130A／UG：Same as 8－1T－47A／UG

5－TT－130A／UG：Same as 9－1T－47A／UG
6．TT－130A／UG：Same as 10－TT－47A／UG

7－Tr－130A／UG：Same as 11－1T－47A／UG

8－TT－130A／UG：Same as 12．TГ－47A／UG

1－TT－130B／UG：Same as 3－TI－47／UG

1－Tr－130C／UG：Same as 3－TT－47／UG

1－TT－131A／UG：Same as 6－1T－47A／UG

2－1T－131A／UG：Same as 7－TT－47A／UG

3－Tr－131ANG：Same as 8－TT－47A／UG

4－TI－131A／UG：Same as 9－1T－47A，UG

5－TT－131A／UG：Same as 10－7T－47A／UG

6．Tr－131A／UG：Same as 1！－TT－47A／UG

7．TT－131A／UG：Same as 12－TT－47A／UG

1－TT－159／UG：Addition of Message Copy Holder Correction Material：None
A FA－0．5 NS98391
F5815－333．
2410

SERIAL：1－150
IDENTITY：Copy holder fastens to teletype cover

1－TT－171／UG：Same as 2－TT－47／UG

2－TT－171／UG：Same as 4－TT．47／UG

3－TT－171／UG：Same as 7．1T．47／UG
4－TI－171／UG：Same as 6．7T－47A／UG
COMMUNICATIONS
5-1T-171/UG: Same as 7-1TT-47A/UG
6.1T-171~UG: Same as 8.7T-47A/UG
7-TT-171/UG: Same as 9-TT-47A/UG
8-1T-171/UG: Same as 10-1T-47A/UG
9.TT-171/UG: Same as I1-TT-47A/UG
10-TT-171/UG: Same as 12-TT-47A/UG
1-1T-171A/UG: Same as 2-1T-47/UG
2-1T-171A/UG: Same as 3.1T-47/UG
3.TT-171A/UG: Same as 3.TT-47C/UG
1-1T-171B/UG: Same as 3.-「T-47C/UG
1-TT-176/UG: Same as 2-1T-47/UG
2-TT-176/UG: Same as 3-TT-47/UG except
NS981560A
F5815-988-6025
3-1T-176/UG: Same as 5-TT-47/UG
4-1T-176/UG: Same as 7-ГT-47/UG
5-1T-176/UG: Same as 9-7T-47A/UG
6.1T-176/UG: Same as 10.TT-47A/UG
7.1T-176/UG: Same as 11-TT-47A/UG
8-1T-176/UG: Same as 12-TT-47A/UG
9.TT-176/UG: Normal Input Keying Kit
Correction Materia): None required3-A FA-7 NS0967-173-7010
IDENTITY: Installation of decal adjacent to nameplate.
1-1T-176A/UG: Same as 2.1T-47/UG
2-IT-176A/UG: Same as 3-TT-47/UG except
NS981560A
F5815.088-6025
3-1T-176A/UG: Modification for Proper Break Key OperationCorrection Material: None required2-A FA-0.5 NSO967-116-9020
SERIAL: AllIDENTITY: When White/Green lead on pin 2 of the electri-cal service unit keyboard connector plug has been relocated topin 1.
4-1T-176A/UG: Same as 3-TT-47C/UGNS0967-LP-000-0010
5-1T-176A/UG: Same as 9.'IT-176/UG
1-IT-176B/UG: Cancelled
2-IT-176B/UG: Same as 3-1T-47C/UG
3-TT-176B/UG: Same as 9-'ГT-176/UG
1-IT-176C/UG: Same as 9-TT-176/UG
1-1T-187/UG: Installation of 194031 Mod Kit (Converts equip.from 7.42 unit code to 7.00 unit code with synchronous pulsedtransmission and 45.5, 50, 75 BAUD speeds)

Correction Material: T-2 to NS92733(A)

$$
\text { NS } 981560(\mathrm{~A})
$$

F5815-0083250

2-1T-187/UG: Installation of 195442 (MK.811/UG) and Modi
fication Kits to Provide 3-Speed Gearshift for Model 28
Transmitter Dist. Bases (LXD)

Correction Material: T-3 to NS92733(A)
F5815.051-

1-TT-187A/UG: Same as 1-TT-187/UG

## 2-TT-387A/UG: Normal Input Keying Kit

Correction Material: None Required
3-A FA-6 NS0967-173-8050
SERIAL: All
IDENTITY: Installation of decal on front panel.
1-TT-187B/UG: Installation of 199913 Mod Kit (Converts equip. from 7.00 unit code to 7.42 unit code $60,75,100 \mathrm{WPM}$ speeds)

Correction Materiaj: T-i to NSS2̃i33(A)

> NS981562(A)

2N5815-9813252

## 2-IT-187B/UG: Same as 2-TT-187A/UG

1-TT-192/UG: Installation of 194032 Mod Kit (Converts equip. from 7.42 unit code to 7.00 unit code with synchronous pulsed transmission and 45.5,50, 75 BAUD speeds)

> NS981560(A)

F5815-981-
3252

2-IT-192/UG: Installation of Improved Main Shaft and Function Clutch Bearings

Correction Material: T-5 to NS93534 and T-1 to NS94456
2.A FA NS981707 None

SERIAL: Equipments prior to Serial number 12,000 and 2,800 IDENTITY: Field Change accomplishment tab installed adjasent to modified unit nameplate.

1-1T-192A/UG: Same as 1-1T-192/UG
.2-IT-192A/UG: Cancelled

## 1-TF-234/SGA-3: Same ss 2-TT-47/UG

2-TT-234/SGA-3: Installation of 194029 Mod Kit (Converts equip. from 7.42 unit code to 7.00 unit code with synchronous pulsed transmission and 45.5, 50, 75 BAUD speeds)

NS98 1560(B)
None
SERIAL: All
1-TI-252/UG: Same as 2-TT-192/UG

1-TT-253/UG: Installation of Modification Kit 174235
1-A FA NS981334

2-TT-253/UG: Installation of 194030 Mod Kit (Converts equip. from 7.42 unit code to 7.00 unit code with synchronous pulsed transmission and 45.5, 50, 75 BAUD speeds)

NS981560(A)
F5815-981-
3251
3-TT-253/UG: Same as 2-TГ-192/UG

## 1.Tr-253A/UG: Cancelled

1-Tr-261/UG: Same as 3-TT.47C/UG

2-TI-261~UG: Same as 7-TT.47/UG

1-TT-265/UG: Same as 2-TT-192/UG
1-IT-266/UG: Same as 2-TT-192/UG except
SERIAL: Equipments prior to 2800
1-Tr-267/UG: Same as 2-TT-192/UG except
SERIAL: Equipments prior to 2800
j-TT-268/UG: Increasing Value of Spike Suppression Resistors Correction Material: T-1 to NS93454
2-A FA-1 NS981429 None
SERIAL: All
IDENTITY: Substitution of the 1 K -ohm resistor with a resistor of 2 K -ohm value.

1-TT-273/UG: Same as 1-TT-187/UG
1.TT-275/UG: Same as 7-TT-47/UG

1-TT-283/UG: Same as 7-TT-47/UG

1-TT-298B/UG: Modification Kit 'B' Keyboard Cover. Correction Material: Supplement 1, NSO967-066-1012
J-A FA-8 NS0967-066-1070
SERIAL: Al\}
IDENTITY: Nameplate, Modification by Addition of FC-I,
Contract MOC027, C0020, installed on keyboard cover.

2-TT-298B/UG: Same as 1-TT-299/UG
3-TI-2988/UG: Addition of Elapsed Time Meter
Correction Material: T-2, NS0967.066.1013 to TM,

NS0967.066-1010 (formerly NS95898)
1-A FA-1 NS0967-066.1090

2N5815-226. 2974
SERIAL: A-100, A102, A410, A412, A413, Bl56, B161
IDENTITY: Presence of an elapsed time meter on inner front keft hand side of electrical chassis.

1(GG)-Tr-298B/UG: Addition of Auxiliary Ground (Part of FC b-IT-298B/UG; 1-TT-299B/UG)

## Correction Material: None

2.A FA-1 NS0967.066-1060

SERIAL: All A and B models of TT-298/UG and TT-299/ UG
IDENTITY: See figure 3-1 on page 3-1 of technical manual, NS95898, which shows a view of the Marine Cotps counterpart of Navy's Teletypewtiter T「-2990/UG. At the right side of the front cover, on thee horizontal surface, approximately midway between the fastener stud, legend No. 2 and the copy window release, legend No. 4, mark the letters 'GG' in white paint or enamel. Each letter should be approximately within $3 / 4$ in. sq. The decal for the FC No. 1 is intended to completely cover these letters.

1-TI-299/UG: Inclusion of Maintenance Fixture, MITE P/N 37200, with Maintenance and Adjustment Tools

1-A FA-0.15 NS0967-066-1080
SERIAL: All
1-Tr-299A/UG: Addition of Guard and Lock Lever Assembly on Keyboard

> 1.A FA-2 NS0967-066.1030 F581S-788.

SERIAL: 70 equipments (all)
2-TI-299A/UG: Incorporation of New and Redesigned Production Parts

Correction Material: T-1 to NS0967-066-1040 (formerly NS95898)

1-A FA NS0967-066-1040
SERIAL: All
IDENTITY: Decal containing notification of compliance affixed to the tight side of the front cover just above the WARNING plate.

3-TI-299A/UG: Elimination of Potential Shock Hazard Correction Material: None
2-A FA-3 NS0967-066-10S0 None
SERIAL: All A and B models of Teleprinters TT-298/UG and Teletypewriters T「-299/UG
IDENTITY: See figure 3-1 on page 3-1 of Technical Manual, NAVSHIPS 95898, which shows a view of the Marine Corps counterpart of Navy's TT-299( )/UG Teletypewriter. At the right side of the front cover, on the hotizontal surface, approximately midway between the fastener stud, legend No. 2, and the copy window release, legend No. 4, mark the letters ' $G G$ ' in white paint or enamel. Each letter should be approximately within a $3 / 4$ in square. The decal for the full Field Change No. 1 is intended to completely cover these letters.

4-TT-299A/UG: Same as 1-TT-299/UG

5-Tr-299A/UG: Same as 2-TT-298B/UG except SERIAL: A63

## 2-Tr-299B/UG: Same as 1-TT-299/UG

3-TI-299B/UG: Same as 2-TT-298B/UG except
SERIAL: A97, A104, A444, A449, A411, A409, B162, and 108

1(GG)-TT-299B/UG: Same as l(GG)-TT-298B/UG

1-Tr-333/UG: Universal Modification Kit Assemblies Correction Material: None
3-A FA-30 NS0967-287-7050
SERIAL: All equipments
IDENTITY: Installation of decal on front panel of equipment.

1-TT-333A/UG: Modification Kit Assembly
Correction Material: Included in Revised Technical Manual

3-A FA-18 NS0967-287-7040
SERIAL: All
IDENTITY: Installation of decal on front panel of equipment.
2-TT-333A/UG: Same as 1-TT-333/UG

1-TT-405/UG: Same as 1-TT-333/UG

1-TT-405A/UG: Same as 1-TT-333/UG

1-TT-462/UG: Same as 1-IT-333/UG
2-TT-462/UG: Modification Kit Assembly
Correction Material: None
3-A FA-12 NS0967-875-5030
SERIAL: All equipments
IDENTITY: Instaliation decai on front panej of equipment.
1-TE-624(V),UG: Reliability Update Modifications for Teleprinters Tr-624(V)/UG and TT-624(V)l/UG.

Correction Material: To be provided - NE0967-LP-3196010 requires change.

1-A FA. 40 NE0967-LP-544-8010
EIC QU19
SER1AL: TT-624(V) Ser no. 680108A-001 thru 680108A-033.
TT-624(V)l Ser no. 680109A-001 thru 680109A-003.
IDENTITY: Hinged top cover installed on cabinet.

1-TT-624(V)1/UG: Same as 1-TT-624(V)/UG

1-TYPE 7712: Secure Teletype Control Panel; Reduction of Signal Loop Resistance

Correction Matenal: To be provided
II-A FA-1.5 NS0967-437-6020
SERIAL: Signal loops of the Type 7712 which contain TSEC/KWR-37 or TSEC/KG-14 equipments IDENTITY: Presence of jumper wires across the resistors in the affected loops.

1-TZU: Additional Circuit and Equipment Protection Provision

1-B YF-16 NS981061 None

SERIAL: All
IDENTITY: F1 and F2 are 25 amp fuses, $F 7$ is .037 amp fuse.
1-UN: Not applicable

2-UN: Provision for Level Compensating Feedback Voltage Correction Material: See NS98295
A FA NS98295 None
SERIAL: All
IDENTITY: Value of R-8 is increased from 150 K to 200 K ohms.

1-UNDERWATER LOG EQUIPMENT (Mfg. Chesspeake Instrument Corp.): Replacement with an Electronic Solid State Integrator to Improve Accuracy and Reliability of Distance Traveled Indicated

Correction Material: Supplementary Technical Manual No. 1, NSO365-292-5013, Supplementary Technical Manual No. 2, NS0965-022-80!1

1-A FA-4 NS0365-292-5020
SERIAL: All serial numbers of Chesapeake InstrumentCorporation's Underwater Log Indicator/Transmitters (Part Number H-3076)
IDENTITY: Remove cover from Indicator-Transmitter and observe area between the Distance Assembly and Dial Pedestal Assembly. If the Tune Base Motor has been replaced with an assembly consisting of four printed circuit boards, the modification has been performed.
NOTES: Equipment redesignated 'MK 4 MOD 1
UNDERWATER LOG EQUIPMENT* by accomplishment of this field change. This field change was originally published as $1-\mathrm{MK} 4$ MOD 1 .

2-UNDERWATER LOG EQUIPMENT (Mfg. Chesapeake Instrument Corp): Same as 2-MK 4 MOD 1 Underwater Log Equipment

1-UP: Twinning of Teletype Channels Correction Material: None
A FA-2 NS98773 None
SERIAL: All
IDENTITY: 'snd lp bat' sw on front of marking detectors
2-UP: Telephone Terminating Circuit Switching to Eliminate Feed Back

Correction Material: See NS98166
A FA-40-7 NS98166
None
SERIAL: All
IDENTITY: Tel tem ckt can be sw'd from 2 to 4 wire oper.

1-UQ: Addition of Wavemeter Reading Adjustment Resistor
R260 in Transmitter A/N Type T-430/FRC
Correction Material: Change 1 to NS91845
A FA-1 NS98561 F5820-325-
7469
SERIAL: 1-68 (OA-501/FRC) 1-68 (OA-502/FRC)
IDENTITY: Resistor R260 added on back of meter panel.
2-UQ: Addition of Ground Strap on Modulator and Mixer Shaper Mounting Chassis NUS-1420B to Prevent Spurious
Pulse Generation
Correction Material: Change $]$ to NS91845
A FA-0.5 NS98567 F5820.325-7471C
SERIAL: AllIDENTITY: Jumper: Term F \& A of J202 (spare channel mo-dulator)
3.UQ: Addition of Crystal Calibration Circuit and Interference Reduction in OS-38/FRC
A FA-i NS98666 F6625-643.1896
SERIAL: 1-53
4-UQ: TCK Replacement Brush Kits
1-A FA-1 NS98764 None
SERIAL: Al!5-UQ: Installation of PRE-1F Amplifier NUS-3179 and Modi-fication of Receiver Output Circuit to Reduce Noise OutputCorrection Material: Change 3 to NS91845
A FA-3 NS98828 F5820-568-1963
SERIAL: All CNO \& BUAER equity6-UQ: Increase of Accuracy of Fading Margin Checks
Correction Material: Change 4 to NS91845
A FA-I NS98832 F5820-568-2090
SERIAL: All
1-WIND DIRECTION AND SPEED DETECTOR, TYPE F:
Protects Wind Speed Mechanism Against Airbome Particles
Correction Material: T-1, NS0365-280-4011 to NS0365-280-4010
I-A FA-1 NSU355-280.4020
SERIAL: All equipment manufactured before January 1973.All later equipment corrected by identical production change
IDENTITY: The diameter of the forward end of the new
bearing flange is I inch compared with 0.75 inch for the origi-
nal flange. See index 11, figure 7-1, NAVSHIPS 0365-280-
4010 for location.
I-WIND SPEED TRANSMITTER, TYPE F: Protect Wind Speed Transmitter Against Incorrect Application of 60 Hz and 400 Hz Power.
Correction Material: Chg 1 to TM, NS0965-LP-108-9010, included in Field Change Bulletin, NS0965-LP-108-9020.
1.A FA-2 NS0965-LP-108-9020
SERIAL: All Type F Wind Speed Transmitters manufactured before July 1975. (Equipment manufactured after July 1975 modified by an identical production change).
IDENTITY: Installation of relay K101 on the Wind Speed Transmitter mounting plate (201).
1-YE-1: Installation of Matching Transformer Type CRV. 47194

## FA. 3 NS

SERIAL: All
None

2-YE-1: Modification to Antenna Assembly Drive Unit Heater Circuit
FA-1 NS None

SERIAL: All
3-YE-1: Addition of Capacitors to Gyroeslyn System
YF-2 NS None
SERIAL: All

4-YE-1: Shorting of Interlock Switch S-114
FA-1 NS None

SERIAL: All
5-YE-1: Change in Value of Resistor R-503
FA-1 NS
SERIAL: All
6YE-1: Elimination of Interference in Radio and Radar
Equipments

| FA-t | NS | None |
| :--- | :--- | :--- |
| SERIAL: All |  |  |
| 7-YE-1: Modification of Motor Generator |  |  |
| YF-96 |  |  |
| NS98556 | None |  |

SERIAL: All installed on submarines if operating on 230 volt DC
8.YE-1: Antenna Modifications
FA-S NS98593 None

SERIAL: All
1.YE-2: Same as 1-YE-1

2-YE-2: Same as 2-YE-1
3-YE-2: Same as 3-YE-1
4-YE-2: Same as 4-YE-1
5-YE-2: Same as 5-YE-1
6-YE-2: Same as 6-YE-1
7-YE-2: Same as 7-YE-I
8-YE-2: Same as 8-YE-1
1-YE-3: Same as 1-YE-1
2-YE-3: Same as 2-YE-1
3-YE-3: Same as 3-YE-1
4.YE-3: Same as 4-YE-1

## COMMUNICATIONS

5-YE-3: Same as 5-YE-1
6.YE-3: Same as 6.YE-1

7-YE-3: Same as 7-YE-1
8.YE-3: Same as 8-YE-1

1-YG: Change in Over-the-Bow Keying Circuit

FA.1 NS98835
SERIAL: All

2-YG: Hood for Barco Joint

YF-3 NS98835
SERIAL: All

NS0967-LP-000-0010
FCIG

3-YG: Cancelled
4.YG: Elimination of Keying Relay K-101

FA-3 NS98835
None
SERIAL: All
5.YG: Addition of True Bearing Control Unit CAIH-23408

YF-8 NS98835
SERIAL: All
6-YG: Improved Insulation for Resistors R-109 to R-112
FA-1 NS98835
None
SERIAL: 1-30
1-YG-1: Same as J-YG
2-YG-1 thru 4-YG-1: Not applicable
5-YG-1: Same as S-YG
6-YG-1: Not applicable


[^0]:    2-AN/URN-3: Installation of 1350 CPS Tone Chassis
    Correction Material: T-12 to NS92348

[^1]:    3-AN/URN-20: Modefication to AN/URN- 20 TACAN
    Correction Material: Change 5, NS0967.041-0016 to

[^2]:    24-AN/WRT-2: Installation of Standby and Emitting Status Monitoring Relays

    Correction Material: T-19, NS0967-073-3207 to TM,

[^3]:    2-CP-642B/USQ-20(V): Switchlamp Assembly Replacement Correction Material: T-1 to Commercial Manual PX3290-31

