

Dlink+CPDLC Users Guide

SLC Doc Number UG-14114

Revision -



12335 134th Court NE
Redmond, WA 98052

USA

Tel: (425) 285-3000

Fax: (425) 285-4200

Email: info@spectralux.com

RESTRICTION ON USE, PUBLICATION, OR DISCLOSURE OF PROPRIETARY INFORMATION

This document contains information proprietary to Spectralux Corporation, or to a third party to which Spectralux Corporation may have a legal obligation to protect such information from unauthorized disclosure, use, or duplication. Any disclosure, use, or duplication of this document or of any of the information contained herein for other than the specific purpose for which it was disclosed is expressly prohibited, except as Spectralux Corporation may otherwise agree in writing.

Preparer: Paul Newby 2011.12.31

Engineer: Paul Newby 2011.12.31

Program Manager: Robert W. Bernstein 2011.12.31

Quality Assurance David Cierebiej 2011.12.24

CHANGE RECORD

Paragraph	Description Of Change	Approval/ Date	Revision
All	Initial release	Paul Newby 12/20/2011	- SVN 21123

Table of Contents

Dlink+CPDLC Users Guide.....	1
SLC Doc Number UG-14114.....	1
Revision -	1
CHANGE RECORD.....	2
1 Introduction	7
1.1 Using the Dlink+ w/CPDLC	8
1.1.1 Basic User Interface.....	9
1.1.2 Keyboard.....	9
1.1.3 Advisories.....	11
2 Menu Page Tree	13
2.1 Menu Parameter Description	14
3 Common Menus	15
3.1 Splash Screen	15
3.2 Main Menu.....	16
3.3 Main – Flight Information Menu.....	17
3.4 Main – Maintenance Menu.....	18
3.4.1 Maintenance – Monitor Menu Page 1	19
3.4.2 Maintenance – Monitor Menu Page 2.....	21
3.4.3 Maintenance – System Control Messages Menu	22
3.4.4 Maintenance – Configuration Maintenance Menu	23
3.4.5 Maintenance - Set UTC Menu.....	24
3.4.6 Maintenance – Fail Status Menu.....	25
3.5 Configuration Maintenance Menu	26
3.5.1 Configuration Maintenance – Password Menu	26
3.5.2 Configuration Maintenance – User Edit Menu	27
3.5.3 Configuration Maintenance – System Edit Menu.....	27
3.5.4 Configuration Maintenance – Software Versions Menu.....	27
3.6 User Edit Menu.....	28
3.6.1 User Edit – Edit Configuration Menu Page 1	28
3.6.2 User Edit – Edit Configuration Menu Page 2	29
3.6.3 User Edit – Edit Configuration Menu Page 3	30
3.6.4 User Edit – Edit Configuration Menu Page 4	32
3.6.5 User Edit – Edit Configuration Menu Page 5	33
3.7 User Edit – Addresses Configuration Menu.....	34
3.8 User Edit – User Defined Uplinks Menu	35
3.8.1 User Edit – Uplink Format Menu Page 1	35
3.8.2 User Edit – Uplink Format Menu Page 2	37
3.8.3 User Edit – Uplink Format Menu Page 3	39

3.8.4	User Edit – Uplink Format Menu Page 4	41
3.9	User Event – User Defined Events Menu	42
3.10	User Edit – User Defined Messages Menu	44
3.10.1	User Edit – User Defined Message Edit Menu Page 1	44
3.10.2	User Edit – User Defined Message Edit Menu Page 2	45
3.10.3	Definition of Optional Data in User Defined Messages	50
3.11	User Edit – Software Versions Menu	54
3.11.1	User Edit – Software Versions Menu Page 1	54
3.11.2	User Edit – Software Versions Menu Page 2	55
3.12	System Edit Menu	56
3.12.1	System Edit – System Configuration Menu Page 1	56
3.12.2	System Edit – System Configuration Menu Page 2	57
3.12.3	System Edit – System Configuration Menu Page 3	58
3.12.4	System Edit – System Configuration Menu Page 4	59
3.12.5	System Edit – System Configuration Menu Page 5	60
3.12.6	System Edit – System Configuration Menu Page 6	61
3.12.7	System Edit – System Configuration Menu Page 7	62
3.12.8	System Edit – System Configuration Menu Page 8	63
3.12.9	System Edit – System Recall Information Menu	64
3.12.10	System Edit – Analog Input Discrete Configuration Menu	65
3.12.11	System Edit – Digital Input Discrete Configuration Menu	66
3.12.12	System Edit – Arinc 429 Input Configuration Menu	67
3.12.13	System Edit – Output Configuration Menu	68
4	ACARS Menus	69
4.1	ACARS Index Menu	69
4.1.1	ACARS Index – Service Messages Menu	70
4.1.2	ACARS Index – ATS Requests Menu	71
4.1.3	ACARS Index – Message Log Menu	72
4.1.4	ACARS Index – System Control Messages Menu	74
4.1.5	ACARS Index – Station Table POA Stations Menu	75
4.1.6	ACARS Index – Station Table AOA Stations Menu	76
4.1.7	ACARS Index – Flight Information Menu	77
4.2	ACARS Service Messages Menus	78
4.2.1	ACARS Service Messages – Weather Request Menu	78
4.2.2	ACARS Service Messages – Estimated Time of Arrival Report Menu	79
4.2.3	ACARS Service Messages – Diversion Report Menu	80
4.2.4	ACARS Service Messages – Position Report Menu Page 1	81
4.2.5	ACARS Service Messages – Position Report Menu Page 2	82
4.2.6	ACARS Service Messages – Estimated Time of Arrival Revision Menu	83
4.2.7	ACARS Service Messages – Engine Data Menu	84

4.2.8	ACARS Service Messages – User Messages Menu	85
4.2.9	ACARS Service Messages – Aircrew Miscellaneous Message Menu.....	86
4.2.10	ACARS Service Messages – Service Message Setup Menu	87
4.2.11	ACARS Service Messages – IATA Report Setup Menu Page 1	88
4.2.12	ACARS Service Messages – IATA Report Setup Menu Page 2	89
4.2.13	ACARS Service Messages – ICAO Report Setup Menu	90
4.3	ATS Requests Menu	91
4.3.1	ATS Request – ATIS Report Request Menu	92
4.3.2	ATS Request – Clearance Request Menu.....	93
4.3.3	ATS Request – Terminal Weather Information for Pilots Request Menu	98
4.3.4	ATS Request – ATS Free Text Message Menu.....	99
4.4	System Control Messages Menu	100
4.4.1	System Control Messages – AVLC Ping Test Menu	101
4.4.2	System Control Messages – ACARS Ping Test Menu	102
5	ACARS Messages	103
5.1	ARINC 618 Formatted Messages	103
5.2	ARINC 622 Formatted Messages	104
6	ACARS Operation	105
6.1	Start up.....	105
6.1.1	Entering the Flight Number	105
6.1.2	Entering Origin and Destination Stations	105
6.2	Sending a Message	105
6.2.1	Requirements for Sending a Message.....	105
6.3	Reading Received Messages	105
7	CPDLC Operation.....	106
7.1	CPDLC Menus	106
7.1.1	CPDLC – Index Menu	106
7.1.2	CPDLC – Free Text Menu.....	108
7.1.3	CPDLC – CM Logon Menu	109
7.1.4	CPDLC – Message Log Menu	112
7.1.5	CPDLC – Request Index Menu.....	115
7.1.6	CPDLC – Vertical Request Menu.....	117
7.1.7	CPDLC – Speed Request Menu	123
7.1.8	CPDLC – Route Mod Request Menu	125
7.1.9	CPDLC – Request Weather Deviation Menu.....	131
7.1.10	CPDLC – Lateral Offset Menu	133
7.1.11	CPDLC – When Can We Menu.....	137
7.1.12	CPDLC – Voice Request Menu.....	141
7.1.13	CPDLC – Report Index Menu	143
7.1.14	CPDLC – Heading/Altitude Report Menu.....	145

7.1.15	CPDLC – Monitoring Report Menu	149
7.1.16	CPDLC – Position Report Menu	152
7.1.17	CPDLC – Speed Report Menu.....	155
7.1.18	CPDLC – Notification Menu	157
7.2	CPDLC Operational Scenario	159
7.2.1	CM Logon.....	159
7.2.2	CPDLC Start from the Ground	164
7.2.3	Vertical/Route Mod Message Exchange with ATC	165
7.2.4	Next Data Center Established.....	177
7.2.5	Change of Current Data Center	178
7.2.6	Contact Request.....	179
7.3	Supported ATN CPDLC Messages.....	180
7.3.1	Uplink Messages Supported by Dlink+ w/CPDLC	180
7.3.2	Downlink Messages Supported by Dlink+ w/CPDLC.....	192
8	Events	197
8.1	OOOI Events	197
8.1.1	Out Event	197
8.1.2	Off Event	197
8.1.3	On Event	197
8.1.4	In Event	197
8.1.5	Out Return In Event	197
8.1.6	Reset Event.....	197
8.2	OOOI Initialize State	197
9	Startup	200
9.1	Visual Indicators.....	200
9.2	ACARS	200
9.3	CPDLC	200
10	Shutdown.....	201
10.1	User-Initiated Reset	201

1 Introduction

The Dlink+ w/CPDLC unit provides aircraft and flight crews with the ability to send and receive Controller Pilot Data Link Communications (CPDLC) and Aircraft Communications Addressing and Reporting Systems (ACARS) messages over Very-High Frequency Digital Link (VDL) Mode A/2 networks. This document is the user's guide and is to be used for training purposes only.



1.1 Using the Dlink+ w/CPDLC

The Dlink+ w/CPDLC emulates a 14-line ARINC 739 Multi-purpose Control and Display Unit (MCDU) using a 9 line display to show the information in two parts called the A and B screens.

- The A screen puts the MCDU title line on line 1, MCDU lines 2 through 7 on display lines 2 through 7, and the MCDU scratch line (line 14) on line 8.
- The B screen puts the MCDU title line on line 1, MCDU lines 8 through 13 on display lines 2 through 7, and the MCDU scratch line (line 14) on line 8.
- When there is any text from MCDU line 8 through 13 on the B screen, the text above the lower left Line Select Key (LSK) will read "A/B" and the rightmost character of display line 1 will show the current screen (either A or B). Pressing the lower left LSK ("A/B") will toggle between the two screens.

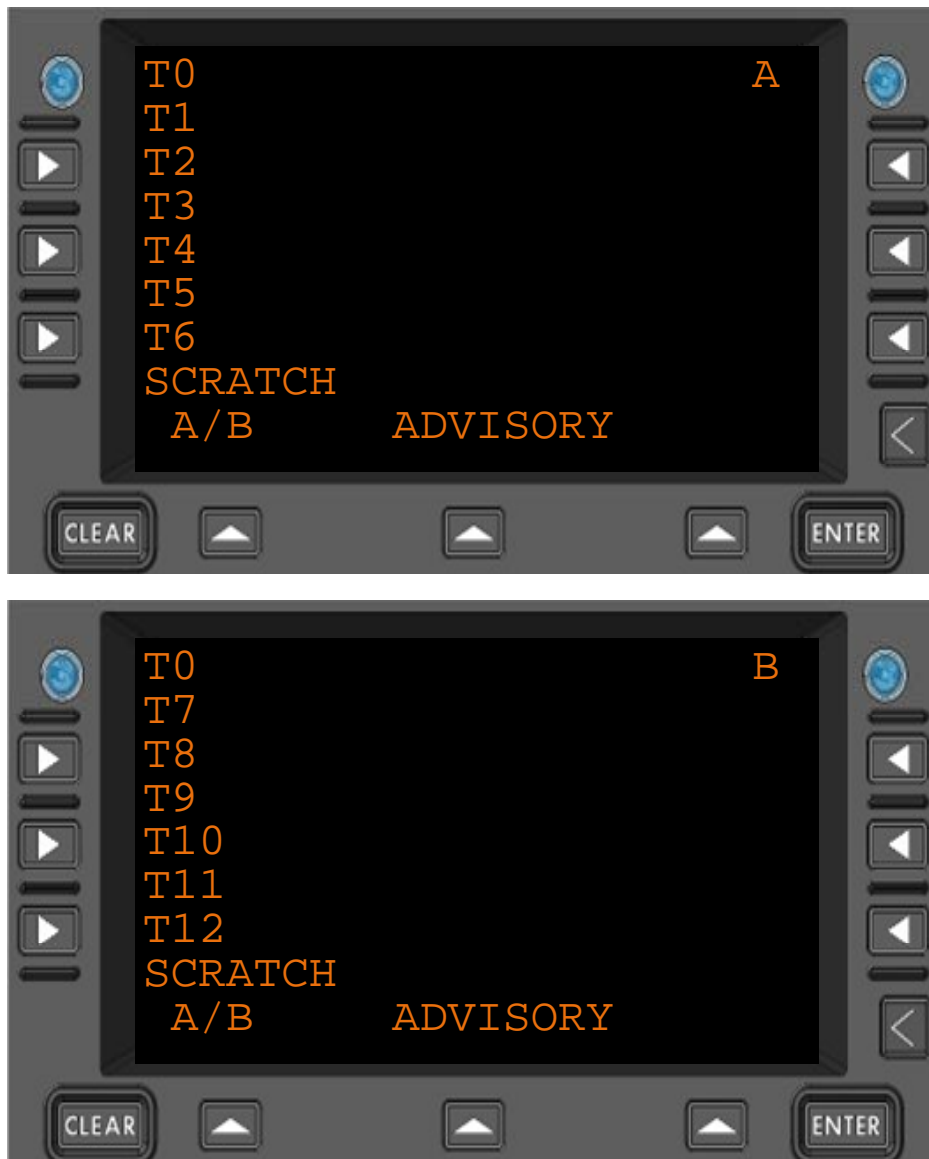


Figure 1.1.1-1 Dlink+ w/CPDLC Text Line Identification

1.1.1 Basic User Interface

When first powered up or restarted, the Dlink+ w/CPDLC will appear as follows:

Note: The 1st line may have the airline name and unit version number.



1.1.2 Keyboard

Entering text from the keyboard will be shown on the “scratch pad” line located near the bottom of the display. Entered text will start at column 1 and be added left to right. See Figure 1.1.1-1 Dlink+ w/CPDLC Text Line Identificaiton.

1.1.2.1 Alpha Numeric Keys

A standard QWERTY keyboard performs the expected functions. All alphabetic characters are always upper case so they do not respond to the shift key.

1.1.2.2 Non Alpha Numeric Keys

1.1.2.2.1 User Function Keys

The user function keys are located at the top of the keyboard. Functionality is provided for each of the keys. Function of each key is dependent on the state of the shift key.

Functions associated with each non-shifted User Function Key:

- **ACARS** – Displays the ACARS Index Menu.
- **MSG** – Displays the ACARS messages log.
- **READ** – Displays the Monitor menu page.
- **SEND** – Displays the Aircrew Miscellaneous Message page.
- **EMRG** – Displays the E7500 Menu.
- **USER** – Displays the Main System User Menu.
- **MENU** – Displays the Subsystem Menu.
- **CPDLC** – Displays the CPDLC Index Menu.

The following functions associated with each shifted User Function Key:

- **ACARS** – Displays the ACARS Index Menu.
- **MSG** – Displays the ACARS messages log.
- **READ** – Displays the Station Table Menu.
- **SEND** – Displays the ATS Free Text Menu.
- **EMRG** – Displays the E7500 Menu
- **USER** – Print the current ACARS message if displayed else print current menu.
- **MENU** – Displays the Subsystem Menu.
- **CPDLC** – Displays the CPDLC Index Menu.

Pressing the MENU user key selects the MCDU MAIN MENU where any additional devices using the Dlink+ w/CPDLC as an MCDU can be selected. Normally this only displays " <DLINK+>" for the Dlink+ w/CPDLC internal display functionality.

1.1.2.2.2 Line Select Keys

There are 9 Line Select Keys (LSKs): 3 on the left and right sides of the display and 3 below the display.

The function of the 3 lower LSKs are:

- 1) **LEFT** is the A/B select. This LSK will toggle between A and B screens. If there is no text on the B screen the LSK is ignored and the text above the key is blank. If this LSK is held for 2 seconds a "lamp test" is performed. The annunciator lamps will illuminate briefly then go out and all of the pixels on the display will turn on while the key is held.
- 2) **CENTER** is below the Advisory field. Its function changes depending of the content of the advisory field.
- 3) **RIGHT** is the NEXT/PREV page key. When the shift light is off this is NEXT and when the shift light is on this is the PREV key. When a menu contains multiple pages, the right end of line 1 (next to the A/B character) displays "n/m" where "n" is the current page and "m" is the total number of pages. Pressing NEXT increments the current page and pressing PREV decrements it. If the menu contains only 1 page pressing this LSK will cause the data on the display to be refreshed.

The three left and right LSKs map to the 6 MCDU left and right LSKs. When the A screen is displayed they map to MCDU LSKs 1 through 3 and when the B screen is displayed they map to MCDU LSKs 4 through 6. The character on the display closest to the LSK determines the function the LSK will perform.

- 1) "<" or ">" indicates another menu will be displayed.
- 2) "*" indicates a function will be called or a message will be sent.
- 3) "[" and "]" indicates a selection field and each press of the LSK will select the next item in the selection list.

- 4) Any other characters normally indicate a variable field for data entry. Pressing the LSK while the scratch line is blank will cause the current contents of the LSK variable to be copied to the scratch line for editing. Pressing the LSK when there is data on the scratch line causes the contents of the scratch line to be copied to the LSK field. The data is verified before it is inserted and an error message is display for any problems.
- 5) Text can also be displayed on a line next to an LSK and the LSK will have no defined function. In this case, pressing the LSK will result in a warning on the scratch line.

1.1.2.2.3 Arrow Keys

The function of the up (^), down (v), left (<), and right (>) arrow keys changes depending on the circumstances:

- 1) Normal operation: (Shift is off, no data on the scratch line)
 - UP and DOWN move through multiple page menus ½ a screen at a time.
 - LEFT is the equivalent of the Return key
 - RIGHT is ignored.
- 2) Edit mode: (Shift is off, there is data on the scratch line)
 - UP and DOWN have the same function as normal operation.
 - LEFT and RIGHT move the cursor (an underscore) on the scratch line.

1.1.2.2.4 Clear Key

- 1) If a message is displayed on the scratch line it clears the message and restores the text that was on the line.
- 2) If in edit mode it performs a backspace delete function.
- 3) If held for more than 1 second it clears the scratch line.

1.1.2.2.5 Enter Key

- 1) When data has been copied to the scratch line by pressing the associated LSK, pressing ENTER stores the edited data to the original LSK field.
- 2) When entering a password the ENTER key enters and checks the password.

1.1.2.2.6 Del Key

The DEL key deletes the character under the cursor.

1.1.2.2.7 Return Key

The Return key returns to the previous menu if there is one. If there is no previous menu it is ignored.

1.1.2.2.8 +/- Key

This key displays a minus in the scratch pad on the first press and will toggle to + with a second press. It does not change based on the shift key.

1.1.2.2.9 Shift Key

The shift key operates as a shift lock key. Pressing it toggles the shifted/not shifted lamp (lamp is on when shifted). Do not hold down the shift key to produce a symbol from the numeric keys. Simply press shift once to turn on the lamp then press the numeric key to get the desired symbol. Press shift again to turn it off.

1.1.3 Advisories

The Advisories alert the pilot to messages or problems.

1.1.3.1 Lamps

1.1.3.1.1 MSG Lamp

The MSG lamp illuminates when there is at least one unread message in the ACARS receive buffer. The user can press the MSG user function key to display the ACARS receive buffer. Once all the message(s) has been viewed the light will be extinguished.

1.1.3.1.2 Fail Lamp

The FAIL lamp is illuminated when a failure is detected in the Dlink+ w/CPDLC. The Dlink+ w/CPDLC may perform an automatic reset to clear the problem. If the problem cannot be cleared the FAIL lamp will stay on and the Dlink+ w/CPDLC is considered failed and should be serviced.

The particular failure status can be viewed from the Maintenance Menu.

1.1.3.1.3 Temp Lamp

The TEMP lamp will illuminate when the temperature inside the Dlink+ w/CPDLC is too cold (less than -41C, -41F) or too hot (greater than 90C, 194F) to function.

The Dlink+ w/CPDLC will stay in reset until the temperature returns to normal operation range.

1.1.3.1.4 CPDL Lamp

The CPDL lamp illuminates when there is at least one unread message in the CPDLC receive buffer. The user can press the CPDLC user function key to display the CPDLC receive buffer. Once all the message(s) has been viewed the light will be extinguished.

1.1.3.2 Discrete Outputs

These outputs are available through the 61-pin connector on the back of the Dlink+ w/CPDLC.

1.1.3.2.1 ACARS Discrete Output

The ACARS Discrete output will follow the activity of the MSG Lamp, presenting an output ground when the lamp is on and an open when the lamp is off on discrete output 3.

1.1.3.2.2 CPDLC Discrete Output

The CPDLC discrete output will follow the activity of the CPDL lamp, presenting an output ground when the lamp is on and an output open when the lamp is off on discrete output 2.

1.1.3.2.3 CPDLC Chime Discrete Output

The CDPLC chime functionality is associated with the CPDL lamp and drives discrete output 1. The output will present a ground when active and an open when not active. Characteristics of the chime, pulse width and pulse spacing are part of the system configuration.

2 Menu Page Tree

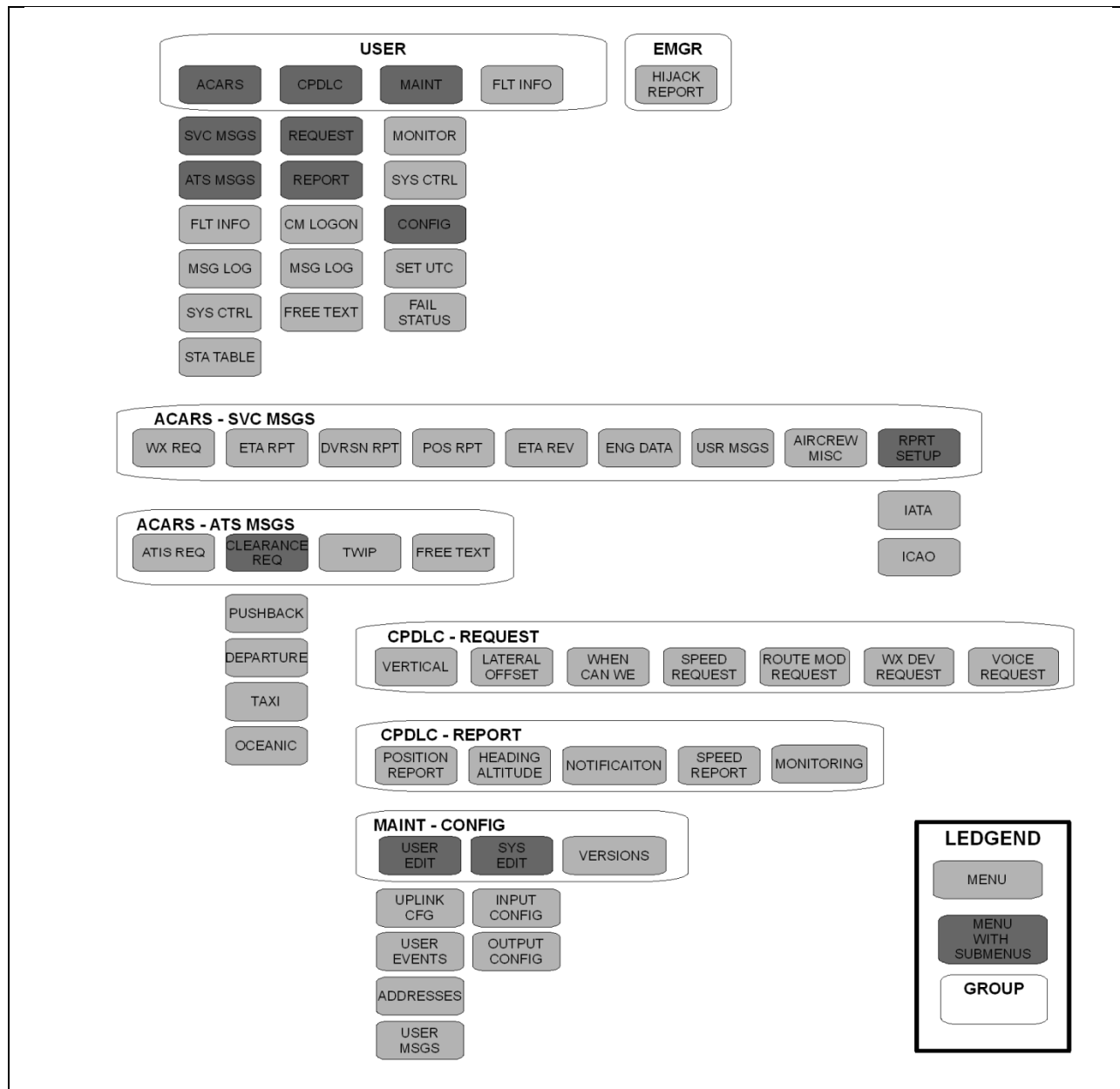


Figure 1.1.3-1 Menu Tree

2.1 Menu Parameter Description

Throughout this document the variable fields in menus will be described using notation listed in Table 1. The fields in the menus are dynamic and will change as conditions or data changes.

Table 1 Variable Format Definition

Format Identifier	Format Definition	Example	
A	Alpha-numeric	(AAAAA)	– “DLINK”
N	Numeric	(N)	– “1”
N.NN	Numeric with decimal	(N.NN)	– “0.75”
SN	Signed Numeric	(SN)	– “-9”
SN.N	Signed Numeric with decimal	(SN.N)	– “9.9”
B	BCD	(BBB)	– “51E”
Z	Numeric with leading zeros	(ZZZ)	– “042”
P	Password	(PPPPPP)	– USER PASSWORD. Will be displayed as “*****”

3 Common Menus

3.1 Splash Screen

The Splash screen is presented when the Dlink+ w/CPDLC is first powered on or after a restart. This screen should stay present for approximately 5 seconds before transitioning to the main menu.



Figure 1.1.3-1 Splash Screen

3.2 Main Menu

The Main menu is the starting or home menu, and can be accessed directly by pressing the USER key.

Note: The 1st line may have the airline name and unit version number.

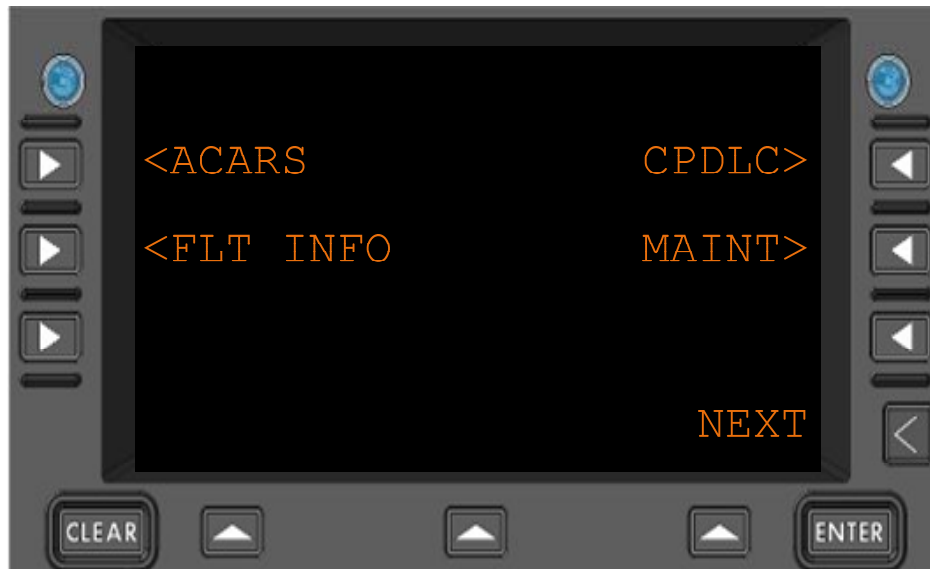


Figure 1.1.3-1 Main Menu

- | | |
|---------------------|---|
| <ACARS | Navigate to the ACARS Menu |
| <FLT INFO | Navigate to the Flight Information Menu |
| CPDLC> | Navigate to the CPDLC Menu |
| MAINT> | Navigate to the Maintenance Menu |
| RETURN | Return to previous page |

3.3 Main – Flight Information Menu

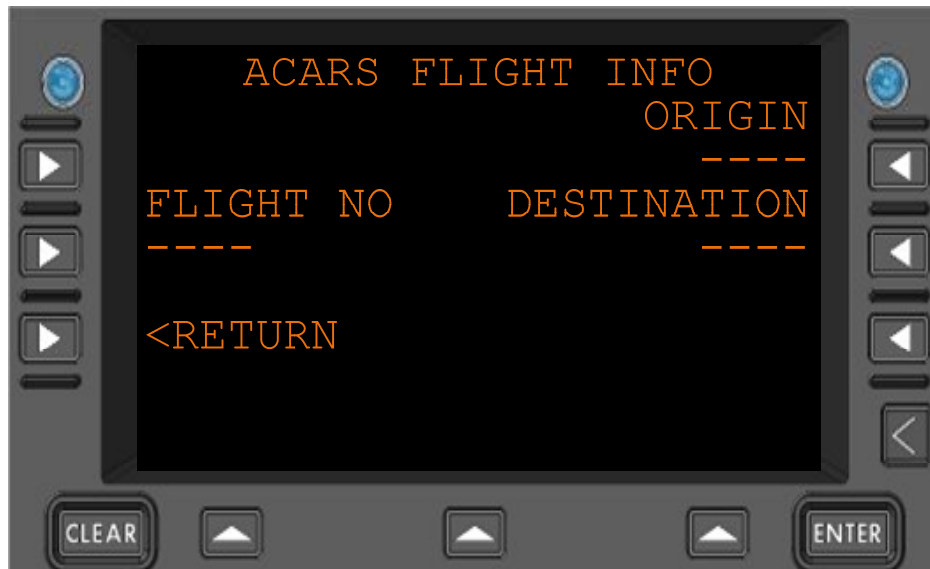


Figure 1.1.3-1 Flight Information Menu

FLIGHT NO	Flight number. Format: 1-4 alpha-numeric characters. (AAAA)
ORIGIN	Flight departure (origin) station. Format: 3-4 alpha characters (AAAA)
DESTINATION	Flight destination station Format: 3-4 alpha characters (AAAA)
RETURN	Return to previous page

3.4 Main – Maintenance Menu



Figure 1.1.3-1 Maintenance Menu

<MONITOR	Navigate to the MONITOR menu
<SYS CNTRL	Navigate to the SYS CNTRL menu
CONFIG>	Navigate to the CONFIG menu
SET UTC>	Navigate to the SET UTC menu
FAIL STATUS>	Navigate to the FAIL STATUS menu
<RETURN	Return to previous page

3.4.1 Maintenance – Monitor Menu Page 1

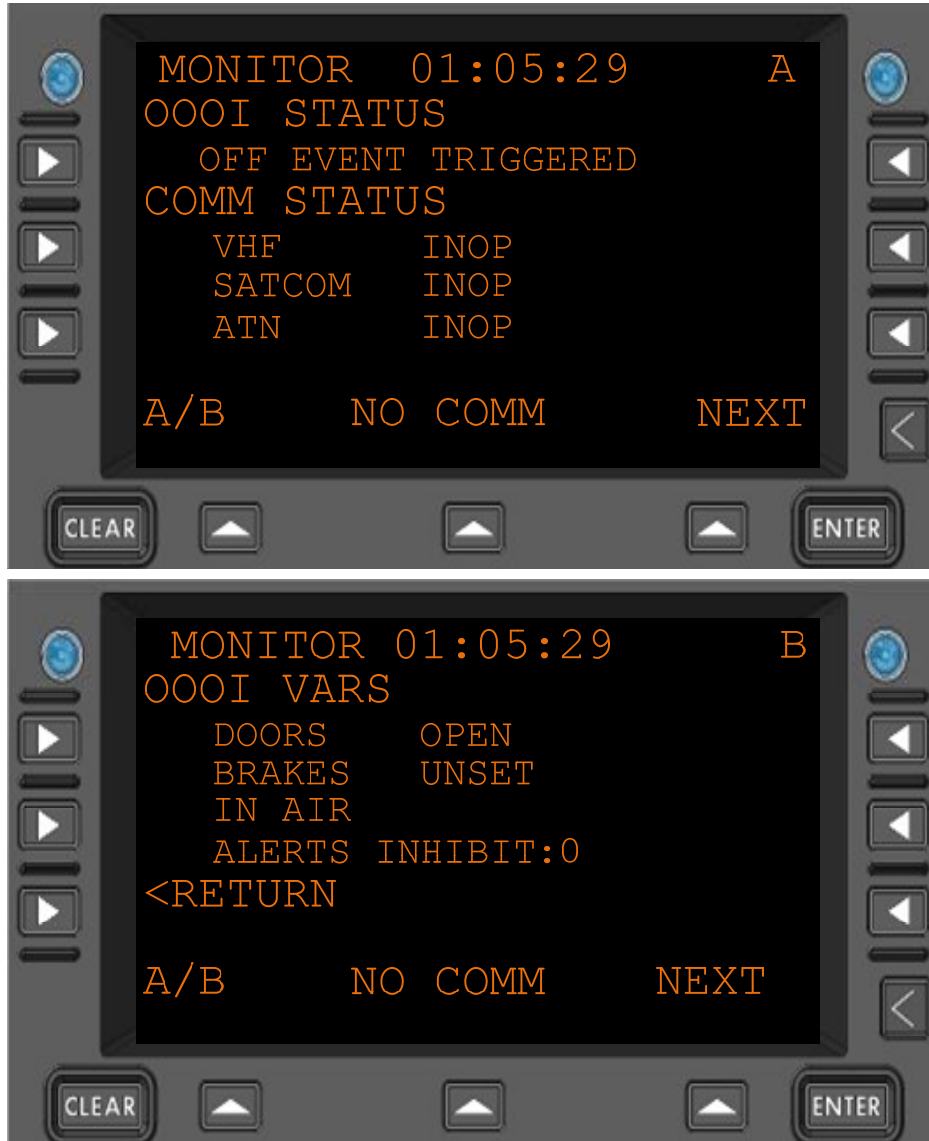


Figure 3.4.1-1 Monitor Menu 1

OOOI Status Reports the current state of the OOOIs
 "INITIALIZING STATE...", "WAITING FOR OUT",
 "OUT EVENT TRIGGERED", "RETURN EVENT TRIGGERED",
 "OFF EVENT TRIGGERED", "ON EVENT TRIGGERED",
 "IN EVENT TRIGGERED"

COMM STATUS Reports the current communication status

- VHF
 "INOP",
 "M2 AVAIL",
 "MA AVAIL",
 "NO COMM"
- SATCOM
 "AVAILABLE",
 "NO COMM",
 "INOP"
- ATN
 "AVAILABLE",

"INOP",
"UNAVAIL"

OOOI VARS Reports the current state of OOOI variables.

- DOORS
"DOORS CLOSED",
"DOORS OPEN"
- BRAKES
"BRAKES UNSET",
"BRAKES SET"
- AIR GROUND
"ON GROUND",
"IN AIR"
- ALERTS INHIBIT
"0",
"1"

<RETURN Return to previous page

3.4.2 Maintenance – Monitor Menu Page 2

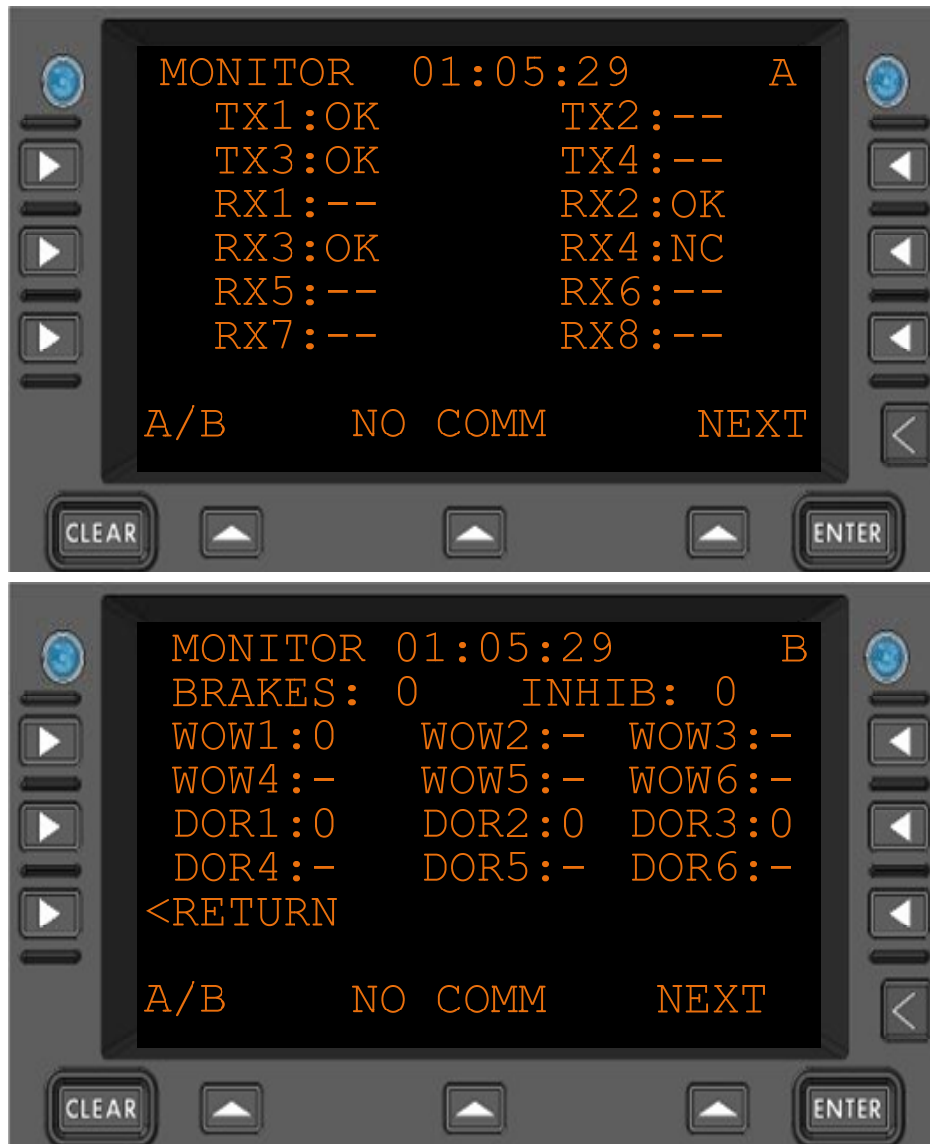


Figure 3.4.2-1 Monitor Menu 2

TX(1-4) or RX(1-8) The ARINC 429 channel being monitored.

Statuses:

“OK” – channel has valid activity

“NC” – channel has no valid activity

“- -” – channel is not part of the system configuration.

Discrete Inputs WOW(1-6) – Weight On Wheels input used for Air / Ground logic.

DOR(1-6) – Doors used for all doors open / closed logic

BRAKES – input from the brakes used in brakes set logic.

INHIB – the “flaps up” signal used to inhibit annunciators.

<RETURN Return to previous page

3.4.3 Maintenance – System Control Messages Menu



Figure 3.4.3-1 Sys Control Menu

*GROUND UTC REQUEST	Send a Universal Coordinated Time request to the ground. Flight number must be filled in prior to request being sent.
*LINK TEST	Send a link test (Label Q0) to the ground. Flight number must be filled in prior to request being sent.
RADIO STATUS	The current radio operation. What is currently being sent or received or follow-on operation due to previous uplink or downlink.
VOICE CONTACT REQUEST	Will send a Label 54 messages requesting voice contact at the entered frequency. Format: 10 digits (AAAAAAAAAA)
<AVLC PING ACARS PING>	Navigate to the AVLC PING menu Navigate to the ACARS PING menu
<RETURN	Return to previous page

3.4.4 Maintenance – Configuration Maintenance Menu

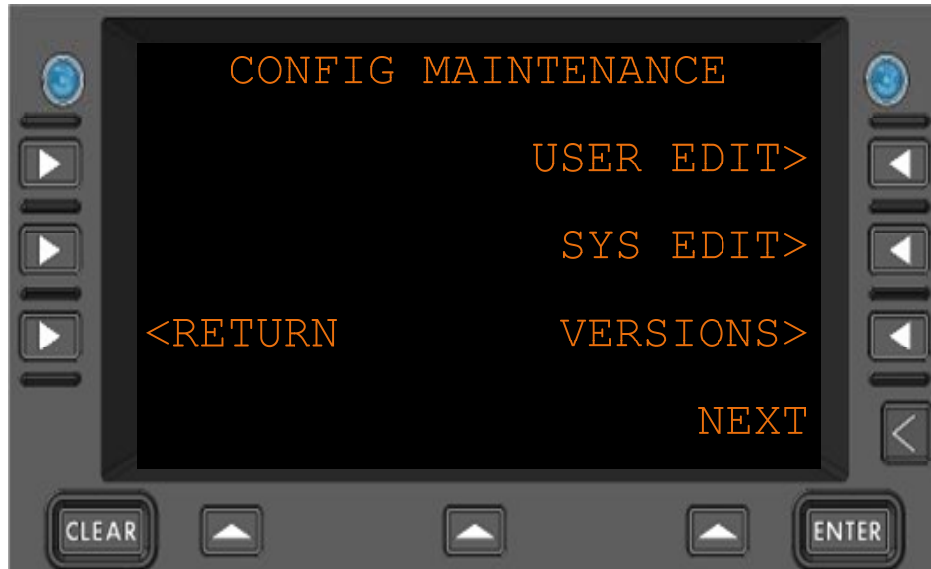


Figure 3.4.4-1 Configuration Menu

- | | |
|----------------------|--------------------------------|
| USER EDIT> | Navigate to the USER EDIT menu |
| SYS EDIT> | Navigate to the SYS EDIT menu |
| VERSIONS> | Navigate to the VERSIONS menu |
| <RETURN | Return to previous page |

3.4.5 Maintenance - Set UTC Menu

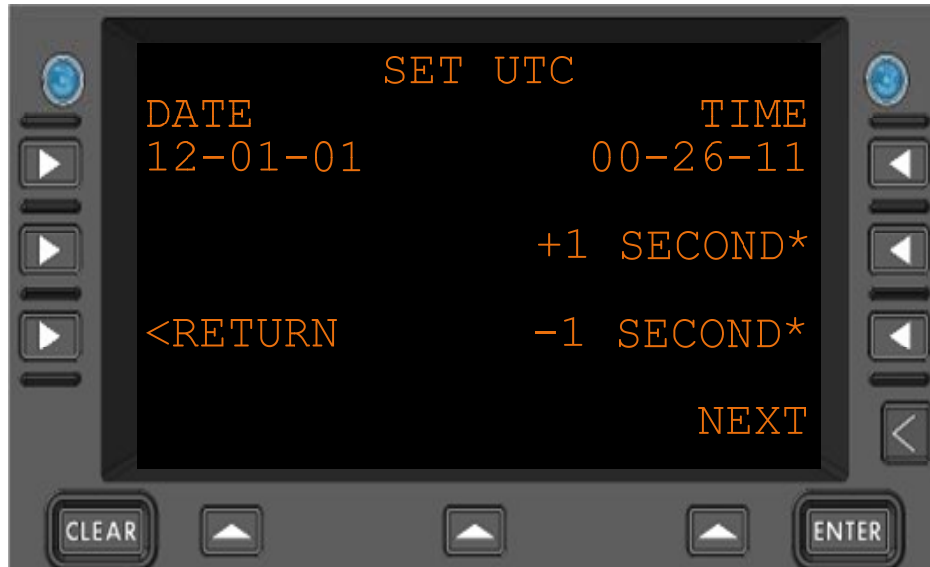


Figure 3.4.5-1 Set UTC Menu

Date	The current date Format: MM-DD-YY
Time	The current time Format: HH-MM-SS
+1 SECOND*	Advance the current time by one second
-1 SECOND*	Retard the current time by one second.
<RETURN	Return to previous page

3.4.6 Maintenance – Fail Status Menu

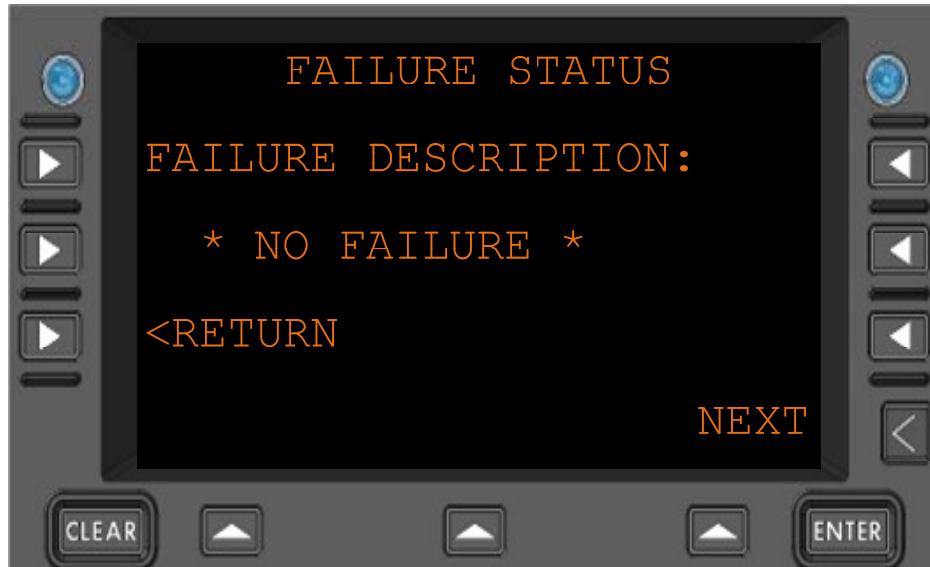


Figure 3.4.6-1 Fail Status Menu

FAILURE DESCRIPTION: The Current failure, if present. The FAIL annunciator will also be lit if a failure is present.

Format: 22 Characters

<RETURN Return to previous page

3.5 Configuration Maintenance Menu

The configuration information, accessed through the Configuration Maintenance Menu, is password protected. There are two separate areas, User and System, each requiring a unique password. The system password and access to its data area are only available to authorized Spectralux maintenance personnel.

3.5.1 Configuration Maintenance – Password Menu

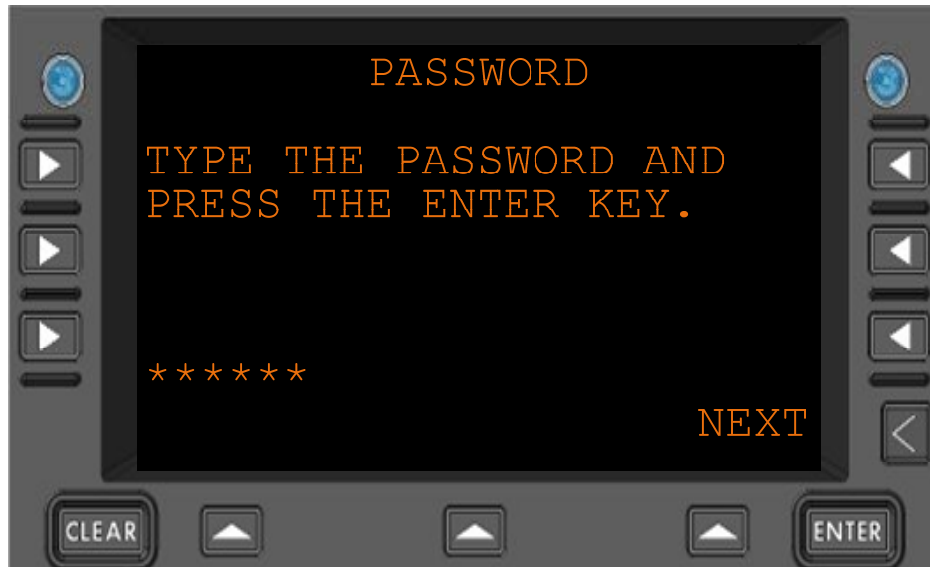


Figure 3.5.1-1 Password Menu

***** Password entered by the user

ENTER Pressing the ENTER key will accept the password

3.5.2 Configuration Maintenance – User Edit Menu

See User Edit Menu

3.5.3 Configuration Maintenance – System Edit Menu

See System Edit Menu

3.5.4 Configuration Maintenance – Software Versions Menu

See User Edit Menu – Software Versions

3.6 User Edit Menu

3.6.1 User Edit – Edit Configuration Menu Page 1

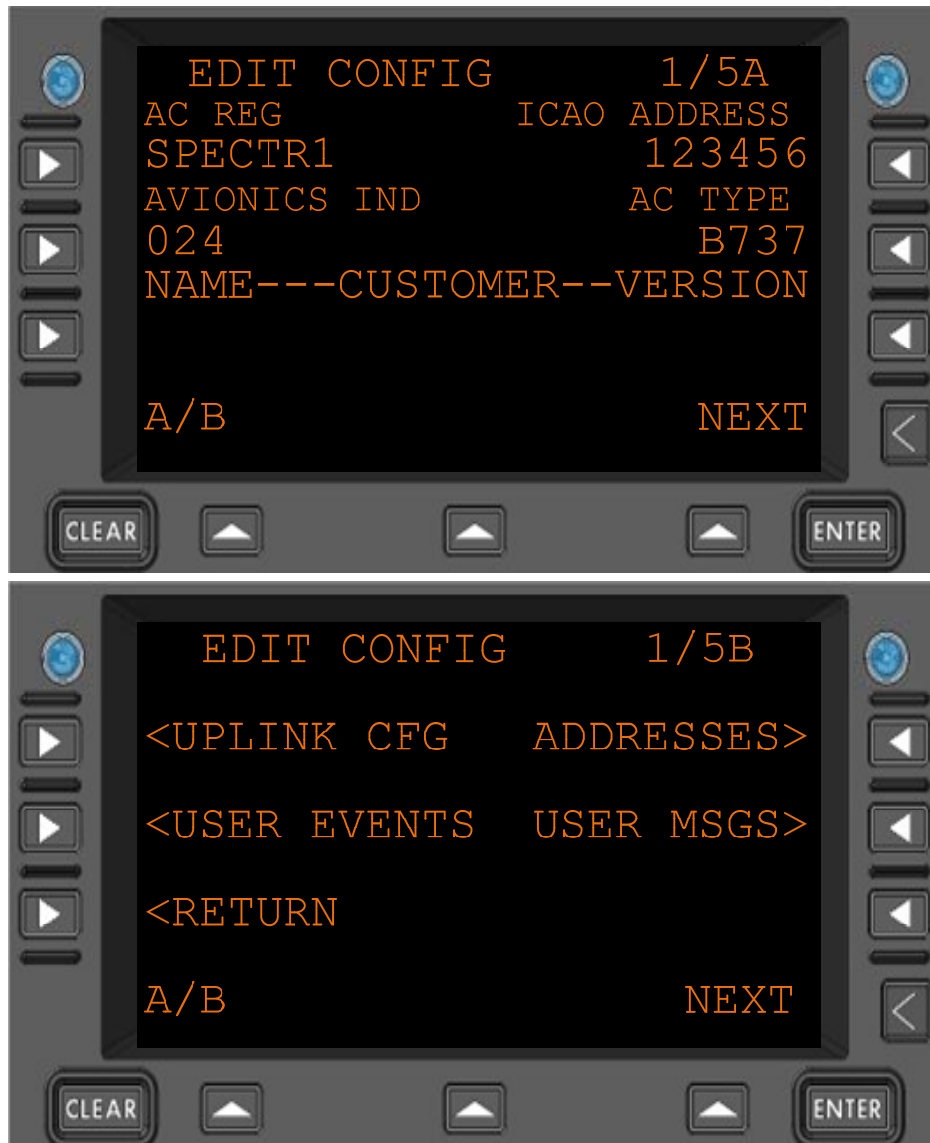


Figure 3.6.1-1 Edit Configuration Menu

AC REG	Aircraft registration Format: (AAAAAAA)
ICAO ADDRESS	ICAO Address Format: 6 hex-digits
AVIONICS IND	Avionic indicator, the page width of printed messages. Format: (ZZZ)
AC TYPE	Aircraft type Format: (AAAA)
CUSTOMER NAME	Customer defined text Format: 14 characters (AAAAAAAAAAAAAAAA)
CUSTOMER VERSION	Customer defined text

	Format: (AAAAA)
<UPLINK CFG	Navigate to the UPLINK CFG menu
<USER EVENTS	Navigate to the USER EVENTS menu
ADDRESSES>	Navigate to the ADDRESSES menu
USER MSGS>	Navigate to the USER MSGS menu
<RETURN	Return to previous page

3.6.2 User Edit – Edit Configuration Menu Page 2

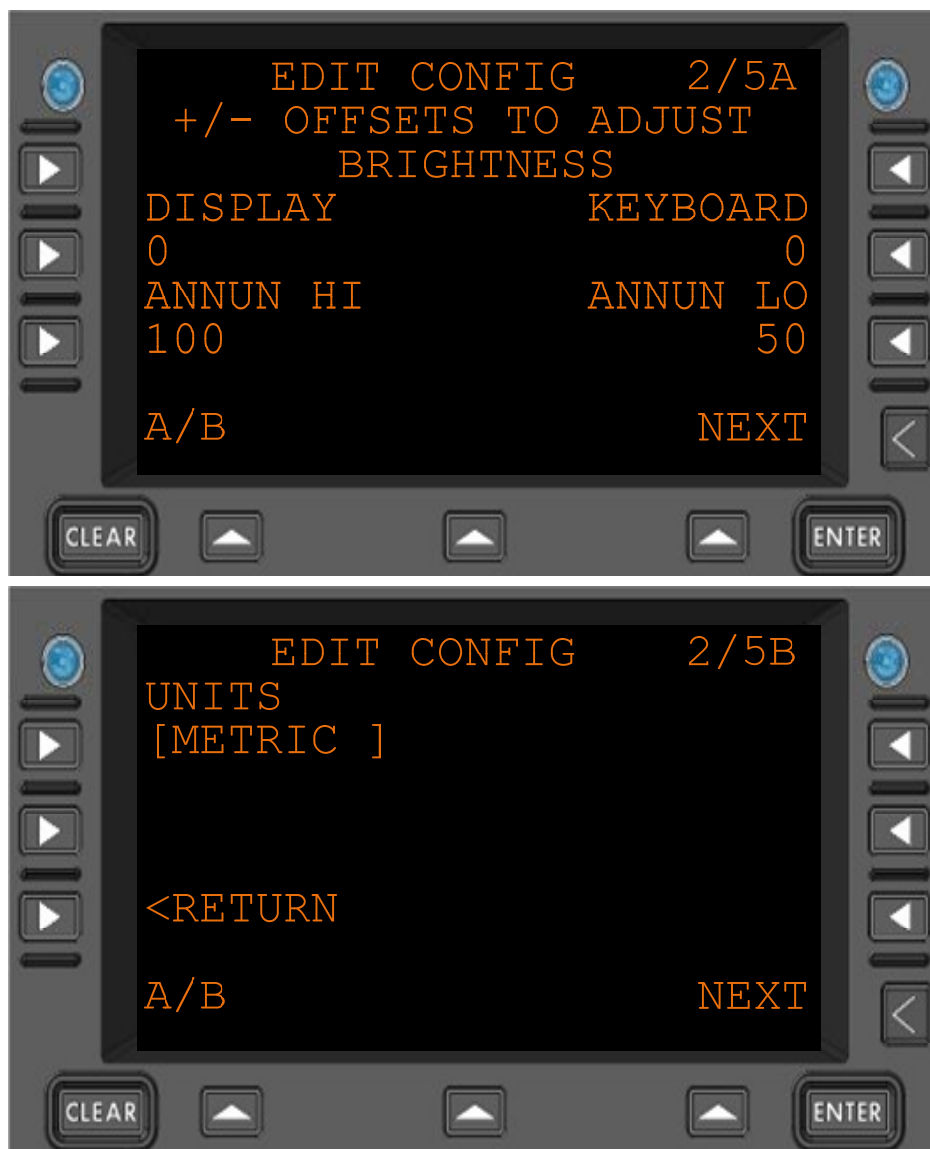


Figure 3.6.2-1 Edit Configuration Menu 2

DISPLAY Display brightness offset adjustment
Format: 4 digits, signed +/- 2000

- KEYBOARD** Keyboard brightness offset adjustment
Format: 4 digits, signed +/- 2000
- ANNUN HI** Annunciator HI brightness offset adjustment
Format:3 digits. 0-100 percent
- ANNUN LO** Annunciator LO brightness offset adjustment
Format:3 digits 0-100 percent
- UNITS** Which format are units displayed in.
Format: "ENGLISH", "METRIC"
- <RETURN** Return to the previous page.

3.6.3 User Edit – Edit Configuration Menu Page 3

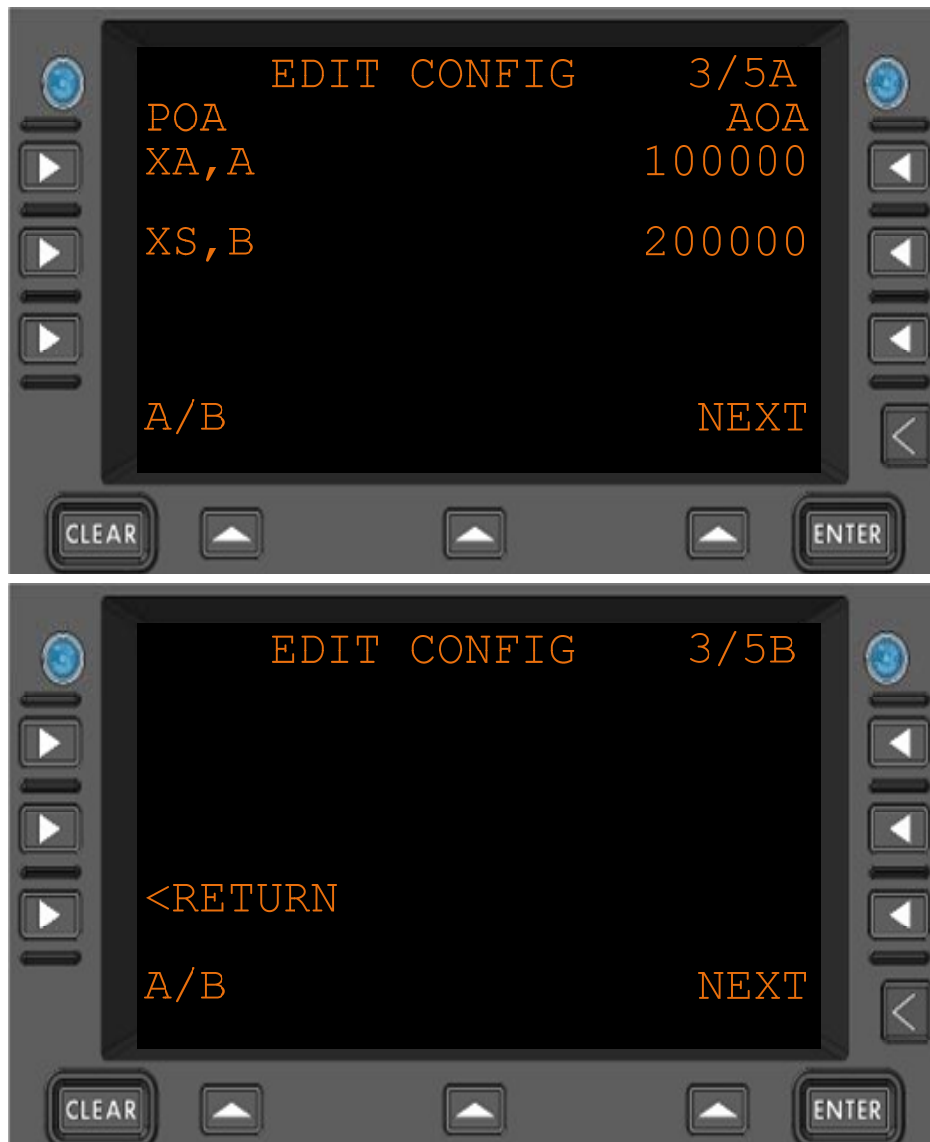


Figure 3.6.3-1 Edit Configuration Menu 3

- POA** A listing of the POA (Plain Old ACARS) service providers, in order of preference.
Up to 3 can be listed.
Format: 4 characters (Service Provider [2 chars], "-", Network type (A or B)

Typical: "XA,A" – ARINC or "XS,B" - SITA

- AOA** A listing of the AOA (ACARS over AVL) service providers, in order of preference.
Up to 3 can be listed.
Format: 6 hex-digits
Typical: "100000" – ARINC, "200000" - SITA
- <RETURN** Return to the previous page.

3.6.4 User Edit – Edit Configuration Menu Page 4

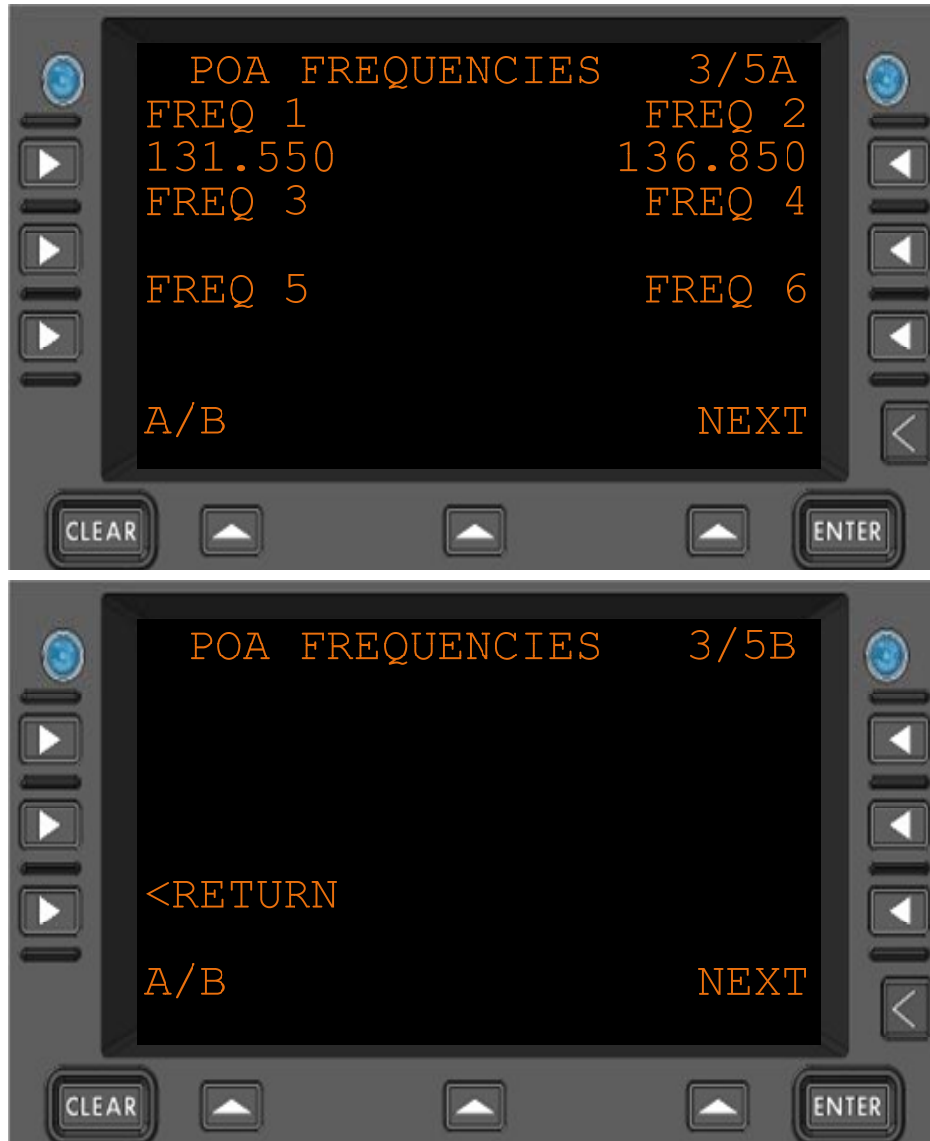


Figure 3.6.4-1 Edit Configuration POA Frequencies

- FREQ 1** POA (Plain Old ACARS) base frequency
Format: NNN.NNN in 0.025 increments min = 118.000 max = 136.975
- FREQ 2** POA (Plain Old ACARS) secondary frequency
Format: NNN.NNN in 0.025 increments min = 118.000 max = 136.975
- FREQ 3** POA (Plain Old ACARS) secondary frequency
Format: NNN.NNN in 0.025 increments min = 118.000 max = 136.975
- FREQ 4** POA (Plain Old ACARS) secondary frequency
Format: NNN.NNN in 0.025 increments min = 118.000 max = 136.975
- FREQ 5** POA (Plain Old ACARS) secondary frequency
Format: NNN.NNN in 0.025 increments min = 118.000 max = 136.975
- FREQ 6** POA (Plain Old ACARS) secondary frequency
Format: NNN.NNN in 0.025 increments min = 118.000 max = 136.975
- <RETURN** Return to the previous page.

3.6.5 User Edit – Edit Configuration Menu Page 5

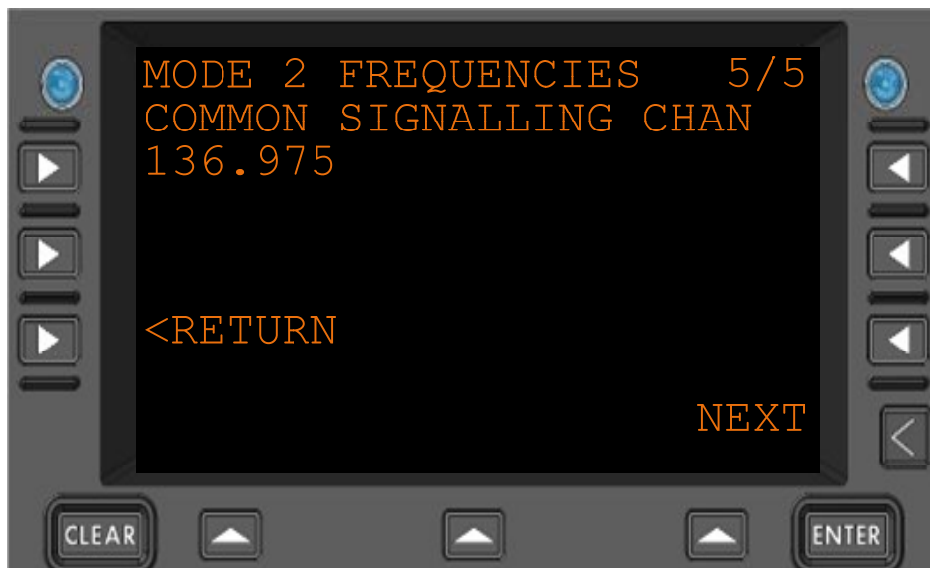


Figure 3.6.5-1 Edit Configuration Mode2 CSC

**COMMON
SIGNALLING
CHAN** Base frequency for VDL Mode 2

<RETURN Return to the previous page.

3.7 User Edit – Addresses Configuration Menu

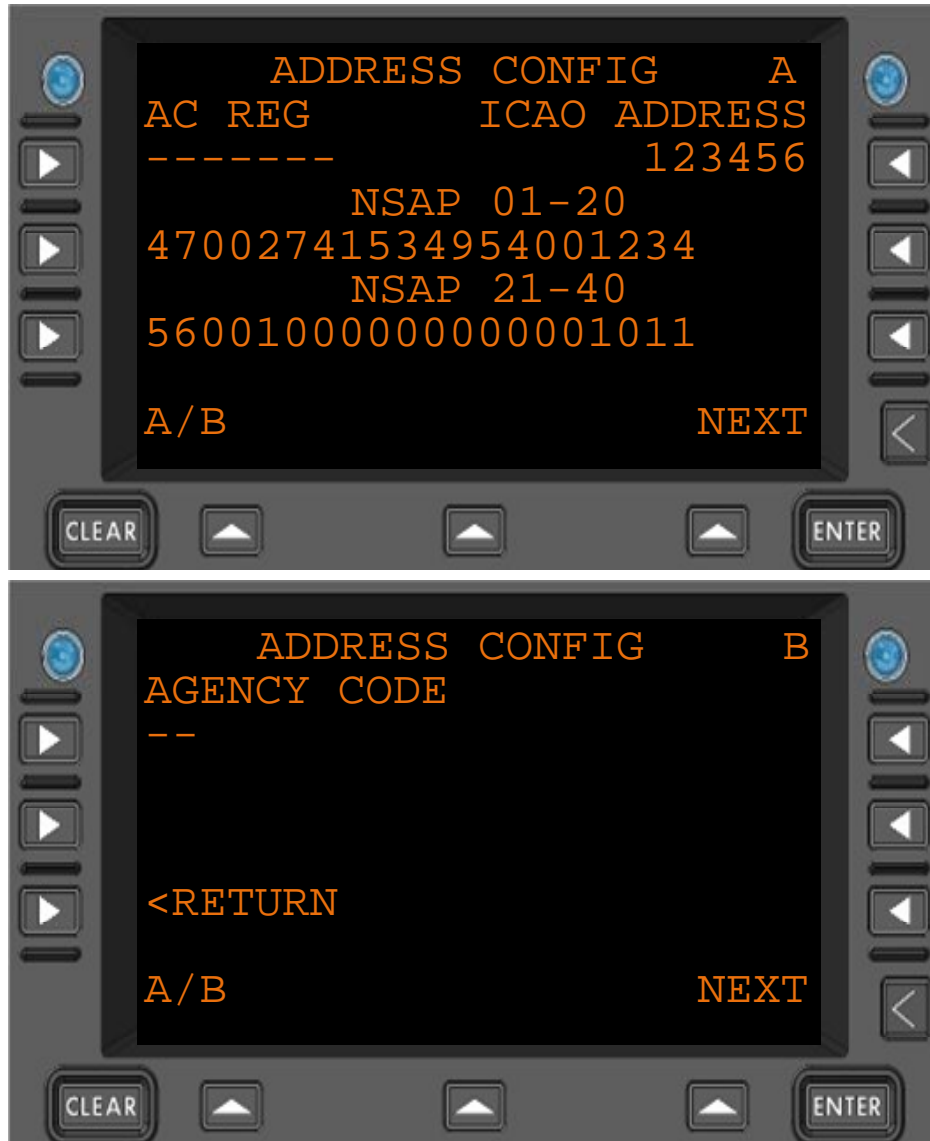


Figure 3.6.5-1 Address Configuration Menu

- AC REG** The aircraft registration (AAAAAAA)
- The may contain a "-" (dash) only if it is followed up by a number.
 - The string may contain a " " (space) as long as the string stays within the 7 character limit. NOTE – Each space will count as 1 character
- ICAO ADDRESS** The ICAO address (6 hexadecimal digits)
- NSAP 01-20** First 20 characters of the NSAP address. (20 hexadecimal digits)
- NSAP 21-40** Second 20 characters of the NSAP address. (20 hexadecimal digits)
- AGENCY CODE** Airline agency code. (AA)
- <RETURN** Return to the previous page.

3.8 User Edit – User Defined Uplinks Menu

3.8.1 User Edit – Uplink Format Menu Page 1

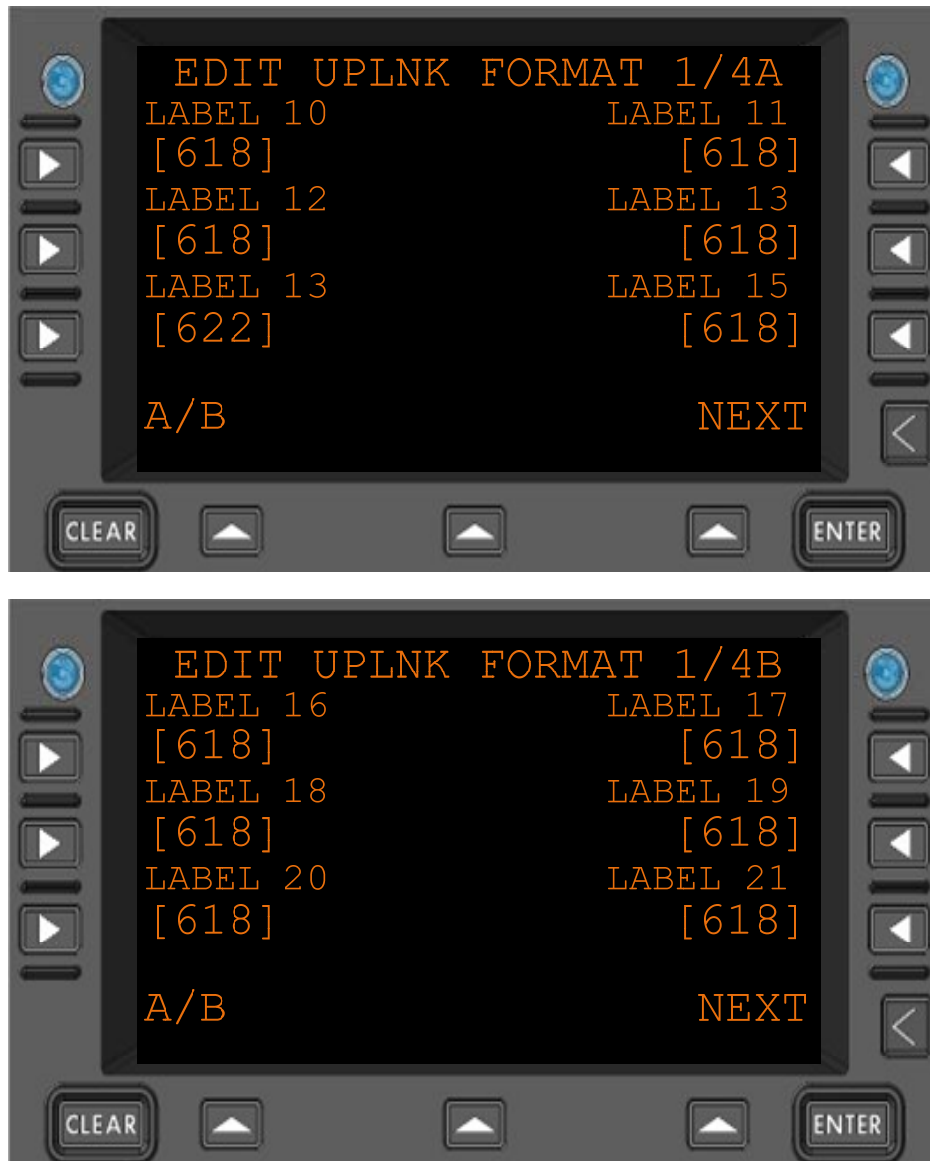


Figure 3.8.1-1 Edit Uplink Format Menu 1

- LABEL 10** Expected uplink format for messages with Label 10
Format: "618" , or "622"
- LABEL 11** Expected uplink format for messages with Label 11
Format: "618" , or "622"
- LABEL 12** Expected uplink format for messages with Label 12
Format: "618" , or "622"
- LABEL 13** Expected uplink format for messages with Label 13
Format: "618" , or "622"
- LABEL 14** Expected uplink format for messages with Label 14
Format: "618" , or "622"

- LABEL 15** Expected uplink format for messages with Label 15
Format: "618" , or "622"
- LABEL 16** Expected uplink format for messages with Label 16
Format: "618" , or "622"
- LABEL 17** Expected uplink format for messages with Label 17
Format: "618" , or "622"
- LABEL 18** Expected uplink format for messages with Label 18
Format: "618" , or "622"
- LABEL 19** Expected uplink format for messages with Label 19
Format: "618" , or "622"
- LABEL 20** Expected uplink format for messages with Label 20
Format: "618" , or "622"
- LABEL 21** Expected uplink format for messages with Label 21
Format: "618" , or "622"

3.8.2 User Edit – Uplink Format Menu Page 2

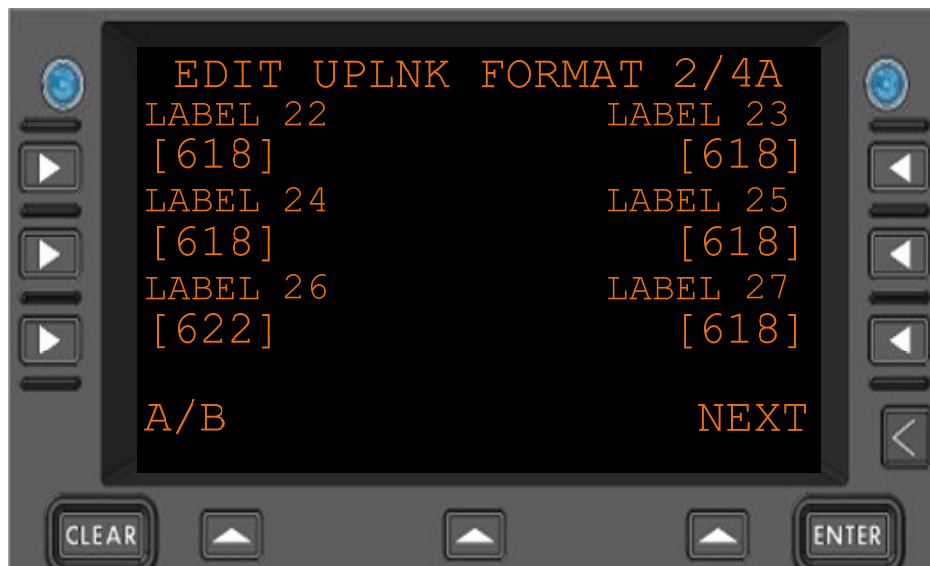


Figure 3.8.2-1 Edit Uplink Formant Menu 2

- | | |
|-----------------|---|
| LABEL 22 | Expected uplink format for messages with Label 22
Format: "618" , or "622" |
| LABEL 23 | Expected uplink format for messages with Label 23
Format: "618" , or "622" |
| LABEL 24 | Expected uplink format for messages with Label 24
Format: "618" , or "622" |
| LABEL 25 | Expected uplink format for messages with Label 25
Format: "618" , or "622" |
| LABEL 26 | Expected uplink format for messages with Label 26
Format: "618" , or "622" |

- LABEL 27** Expected uplink format for messages with Label 27
Format: "618" , or "622"
- LABEL 28** Expected uplink format for messages with Label 28
Format: "618" , or "622"
- LABEL 29** Expected uplink format for messages with Label 29
Format: "618" , or "622"
- LABEL 30** Expected uplink format for messages with Label 30
Format: "618" , or "622"
- LABEL 31** Expected uplink format for messages with Label 31
Format: "618" , or "622"
- LABEL 32** Expected uplink format for messages with Label 32
Format: "618" , or "622"
- LABEL 33** Expected uplink format for messages with Label 33
Format: "618" , or "622"

3.8.3 User Edit – Uplink Format Menu Page 3

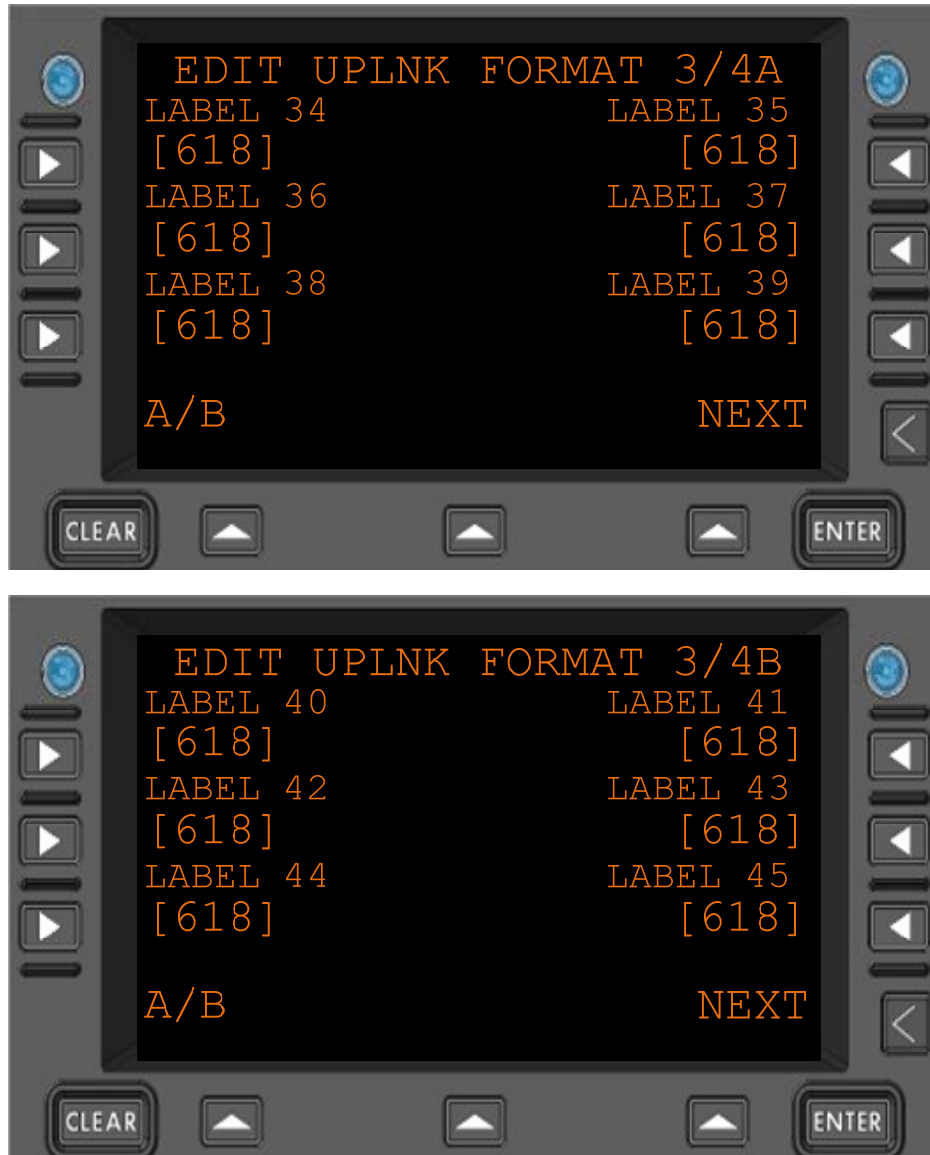


Figure 3.8.3-1 Edit Uplink Format Menu 3

- LABEL 34** Expected uplink format for messages with Label 22
Format: "618" , or "622"
- LABEL 35** Expected uplink format for messages with Label 23
Format: "618" , or "622"
- LABEL 36** Expected uplink format for messages with Label 24
Format: "618" , or "622"
- LABEL 37** Expected uplink format for messages with Label 25
Format: "618" , or "622"
- LABEL 38** Expected uplink format for messages with Label 26
Format: "618" , or "622"
- LABEL 39** Expected uplink format for messages with Label 27

- Format: "618" , or "622"
- LABEL 40** Expected uplink format for messages with Label 28
Format: "618" , or "622"
- LABEL 41** Expected uplink format for messages with Label 29
Format: "618" , or "622"
- LABEL 42** Expected uplink format for messages with Label 30
Format: "618" , or "622"
- LABEL 43** Expected uplink format for messages with Label 31
Format: "618" , or "622"
- LABEL 44** Expected uplink format for messages with Label 32
Format: "618" , or "622"
- LABEL 45** Expected uplink format for messages with Label 33
Format: "618" , or "622"

3.8.4 User Edit – Uplink Format Menu Page 4

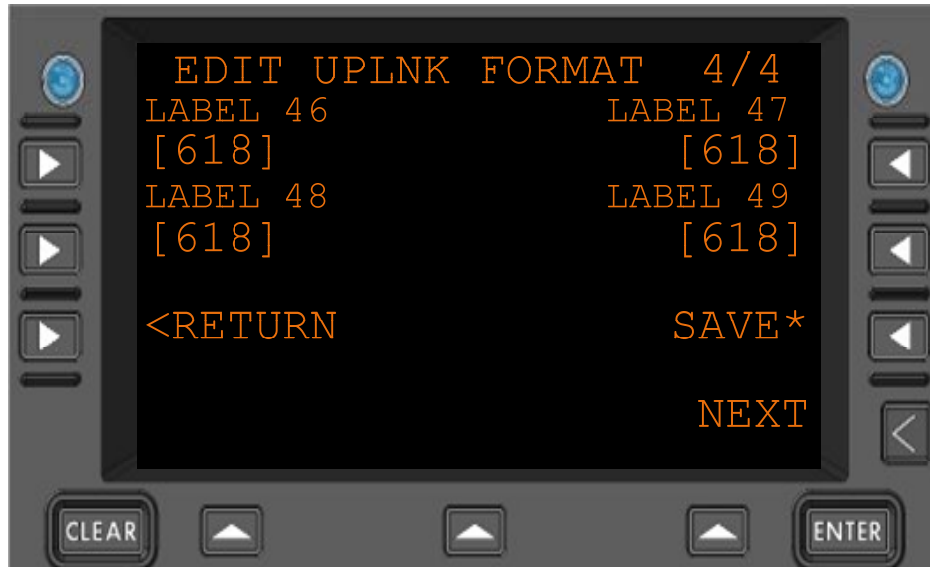


Figure 3.8.4-1 Edit Uplink Format Menu 4

LABEL 46	Expected uplink format for messages with Label 46 Format: "618" , or "622"
LABEL 47	Expected uplink format for messages with Label 47 Format: "618" , or "622"
LABEL 48	Expected uplink format for messages with Label 48 Format: "618" , or "622"
LABEL 49	Expected uplink format for messages with Label 49 Format: "618" , or "622"
SAVE*	Save the modified expected uplink formats
<RETURN	Return to previous page

3.9 User Event – User Defined Events Menu

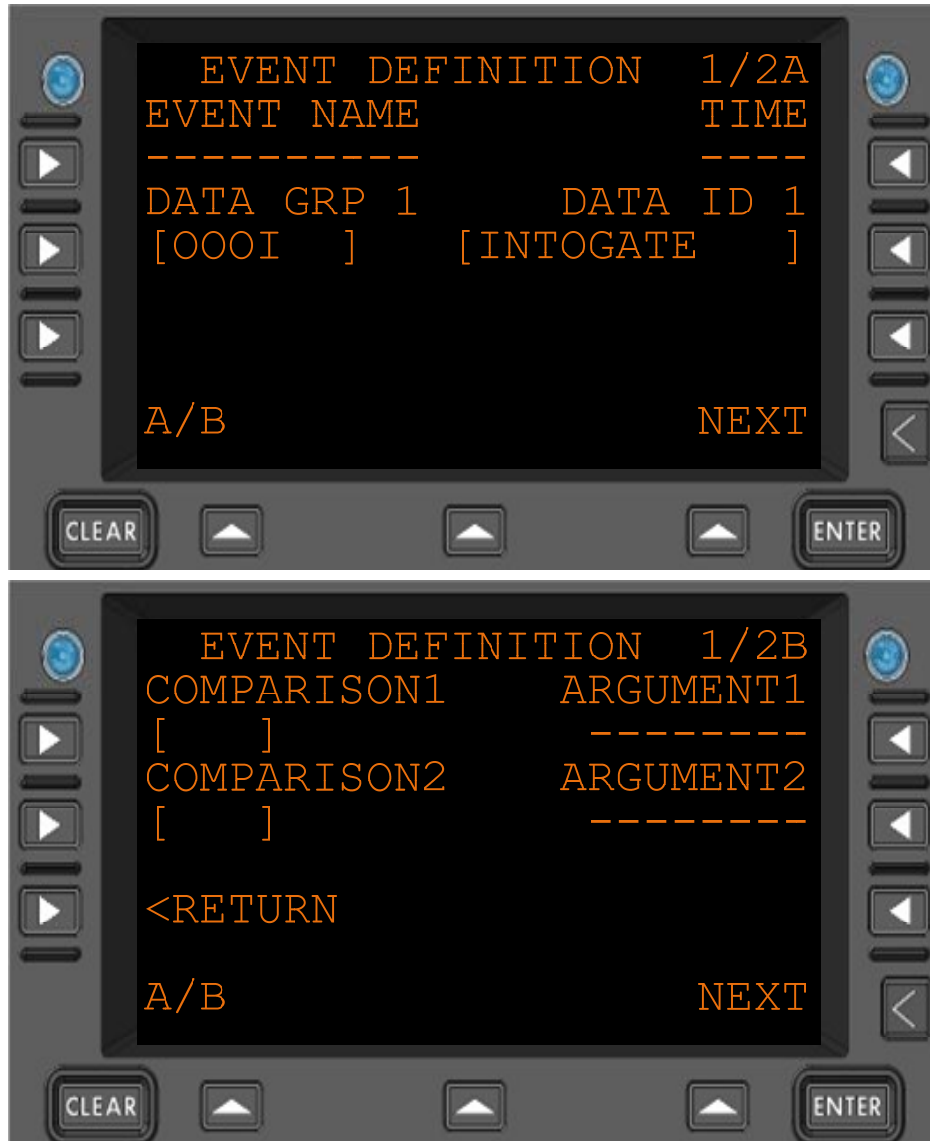


Figure 3.8.4-1 User Defined Event Edit Menu Page 1

- EVENT NAME** The name of the event. This is used to uniquely identify and describe the event. Additionally it is used to link a user defined message to the event. Maximum 10 characters in length.
- TIME** Interval – (0–9999) Number of seconds to require the event to be TRUE for before the event is actually considered triggered. If no criteria are specified in this interval then it is interpreted to be 0 seconds. If no conditions are elsewhere specified in the event, then the event is simply triggered once every this number of seconds.
- DATA GRP 1** Which grouping is the data ID to be collected from. The groups are: OOOI, AIR DATA, NAV DATA, ENG DATA 1, ENG DATA 2, ENG DATA 3, ENG DATA 4, ENGDATAAVG, FLT CNTRL
- DATA ID 1** Which data item from Data Group 1 will be used for the event.

COMPARISON 1 Which comparison should take place between Argument 1 and Data ID 1.

The possible comparisons will be one of the following :

- “ “ :No Comparator (default)
- “= “: Equals
- “>= “: Greater Than or Equal
- “> “: Greater Than
- “< “: Lesser Than
- “<= “: Lesser Than or Equal

COMPARISON 2 Comparator with format identical to Comparator 1 with the distinction that it represents the comparison between Data ID 1 and Argument 2.

ARGUMENT 1 Argument to be compared with Data ID 1 using Comparator 1. It is a maximum of 8 characters in length and can be any real number that can be contained in those 8 characters, including decimal points and negative signs as characters.

ARGUMENT 2 Argument with format identical to Argument 1 with the distinction that it represents the data to be compared with Data ID 1 using Comparator 2.

<RETURN Return to previous page

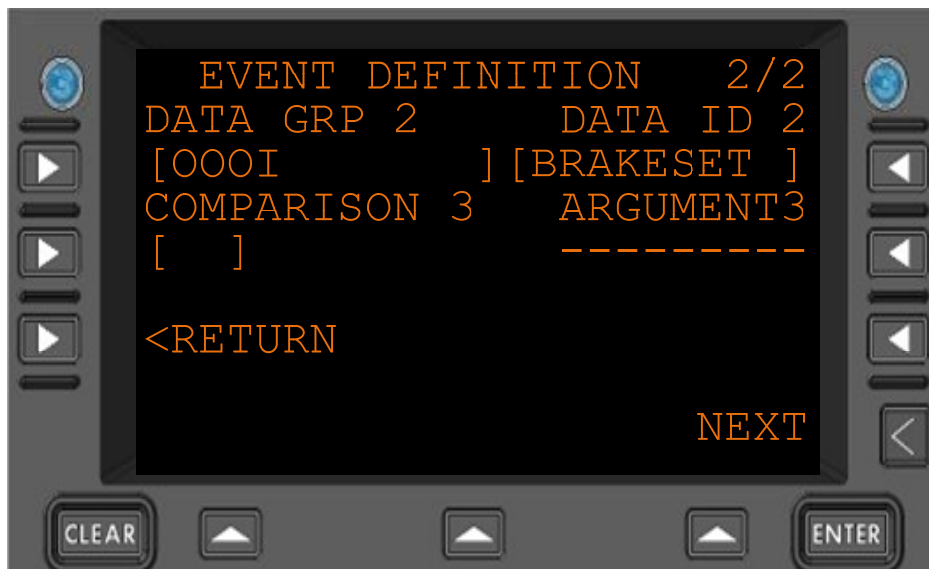


Figure 3.8.4-2 User Defined Event Edit Menu Page 2

DATA GRP 2 The data group from which DATA ID 2 will be collected.

DATA ID 2 Indicating the second data ID in use by the event. Its format is identical to the format of Data ID 1

COMPARISON 3 Comparator with format identical to Comparator 1 with the distinction that it represents the comparison between Data ID 2 and Argument 3

ARGUMENT 3 Argument with format identical to Argument 1 with the distinction that it represents the data to be compared with Data ID 2 using Comparator 3.

<RETURN Return to previous page

3.10 User Edit – User Defined Messages Menu

3.10.1 User Edit – User Defined Message Edit Menu Page 1

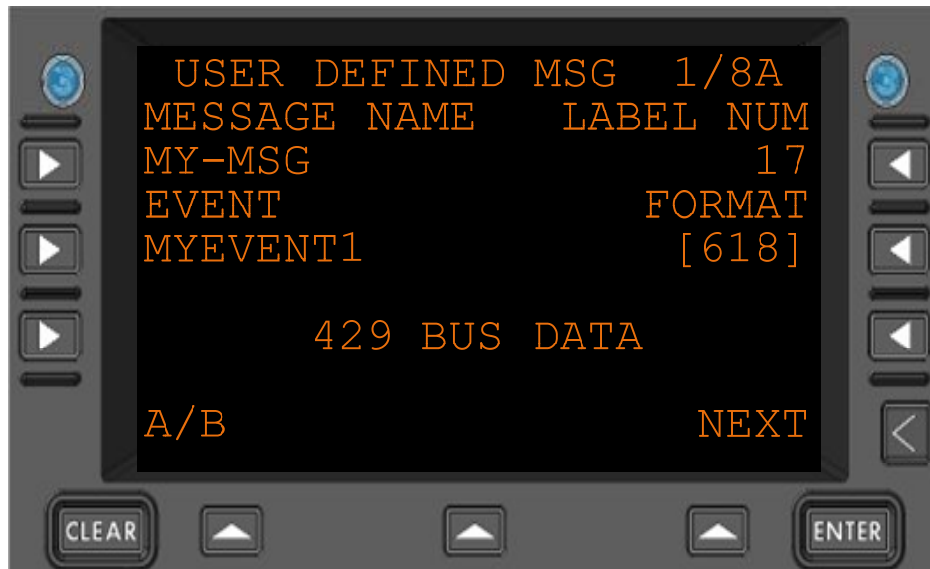
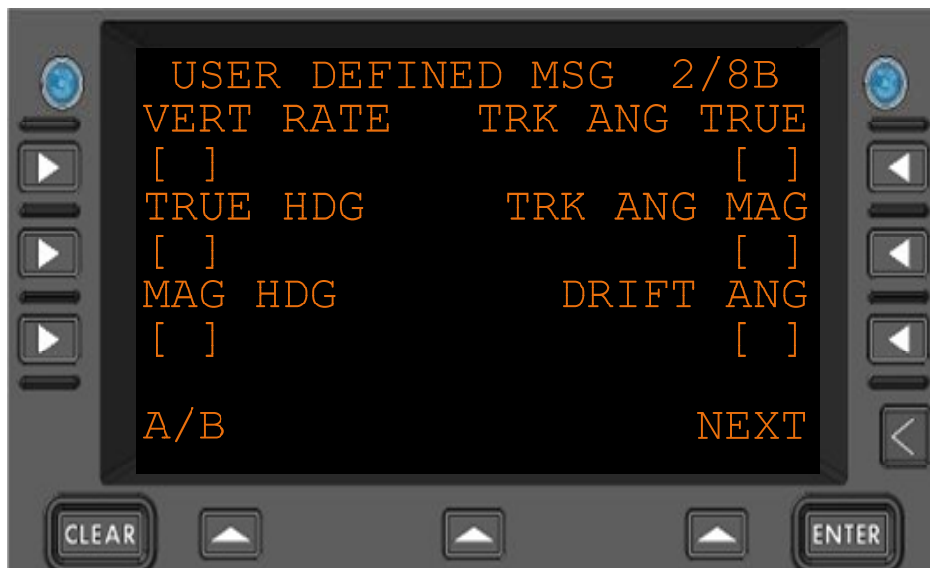
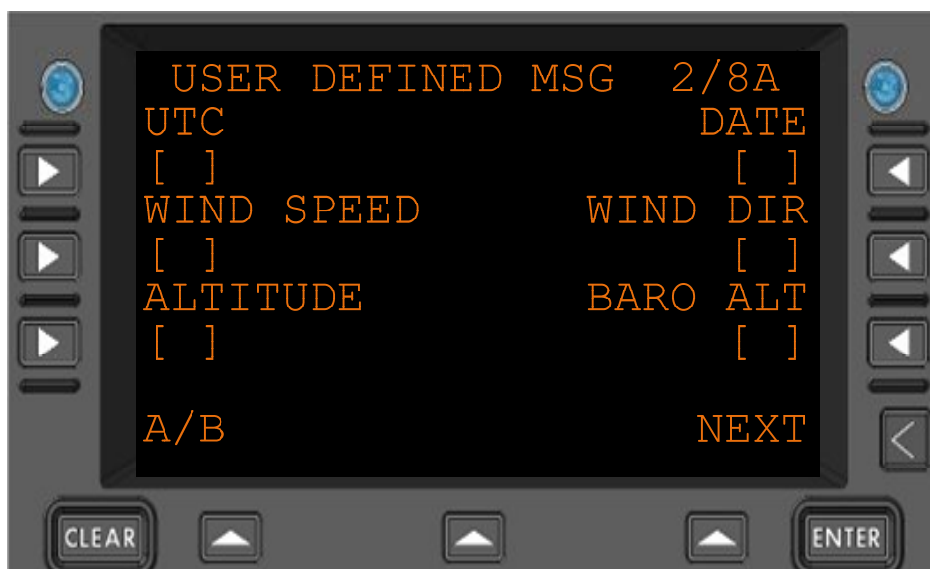
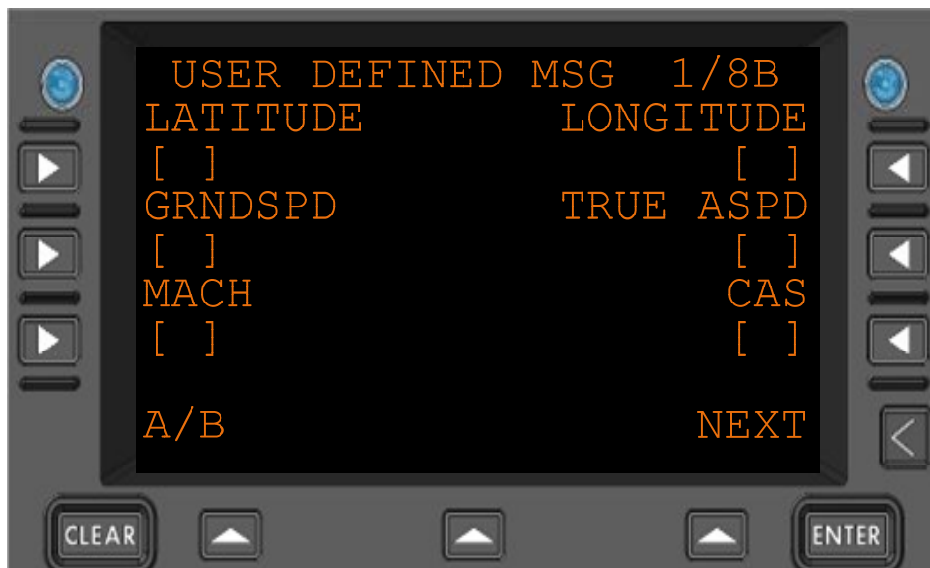
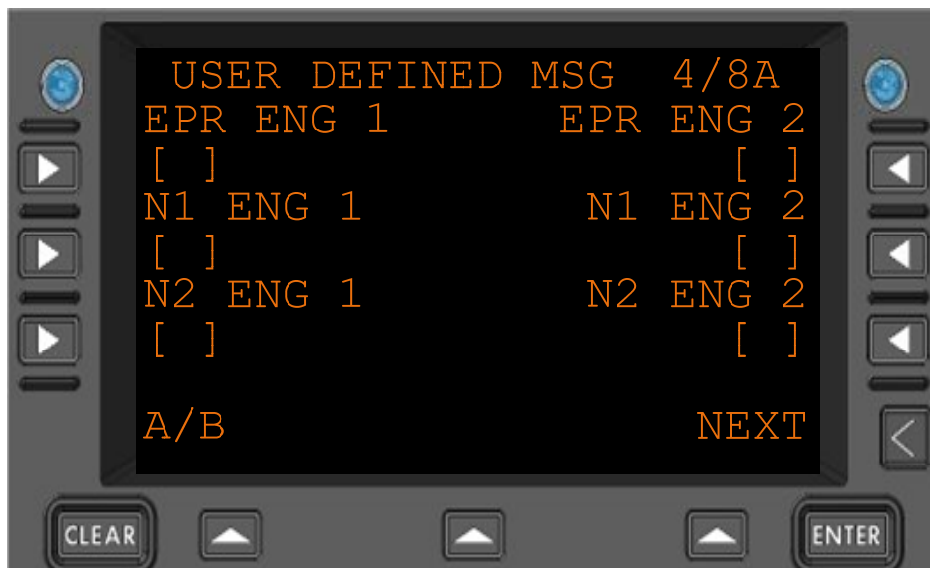
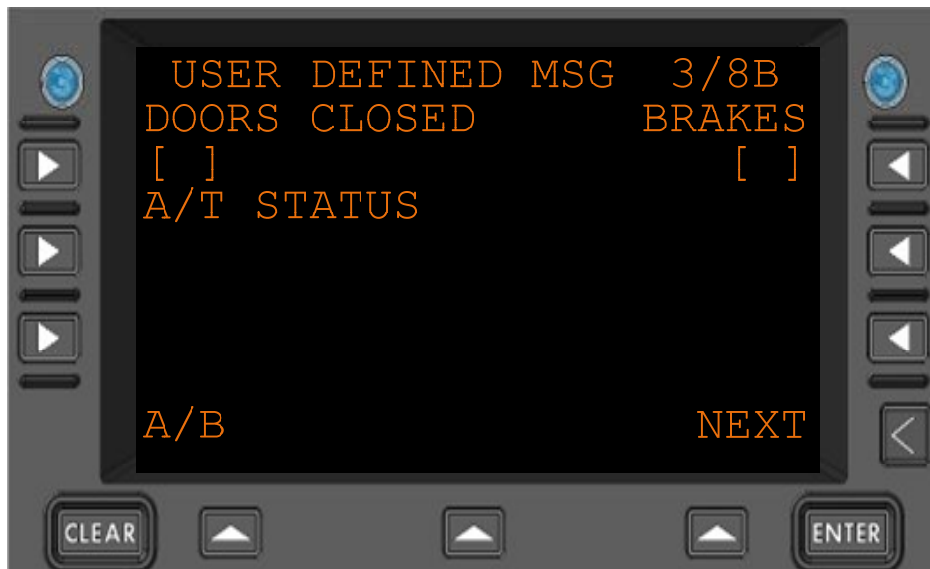
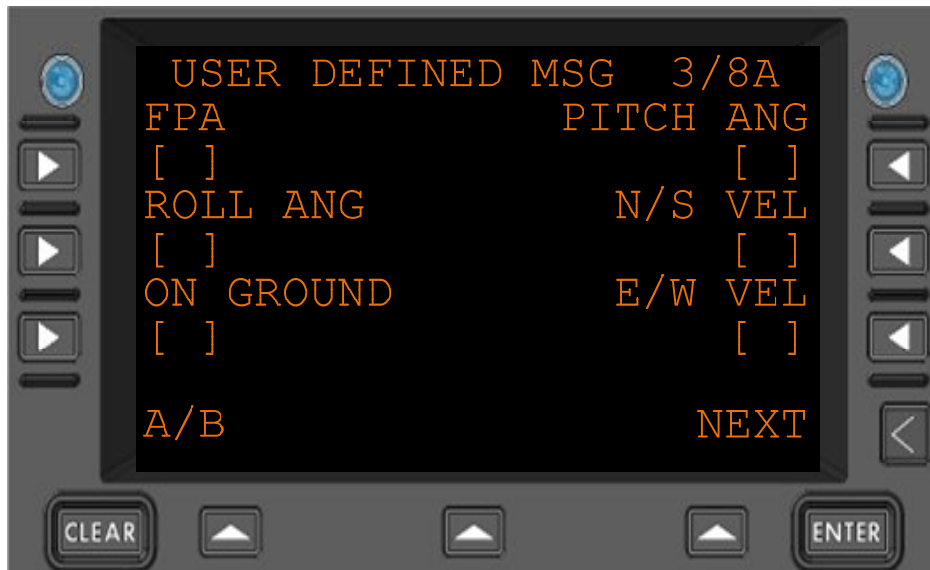


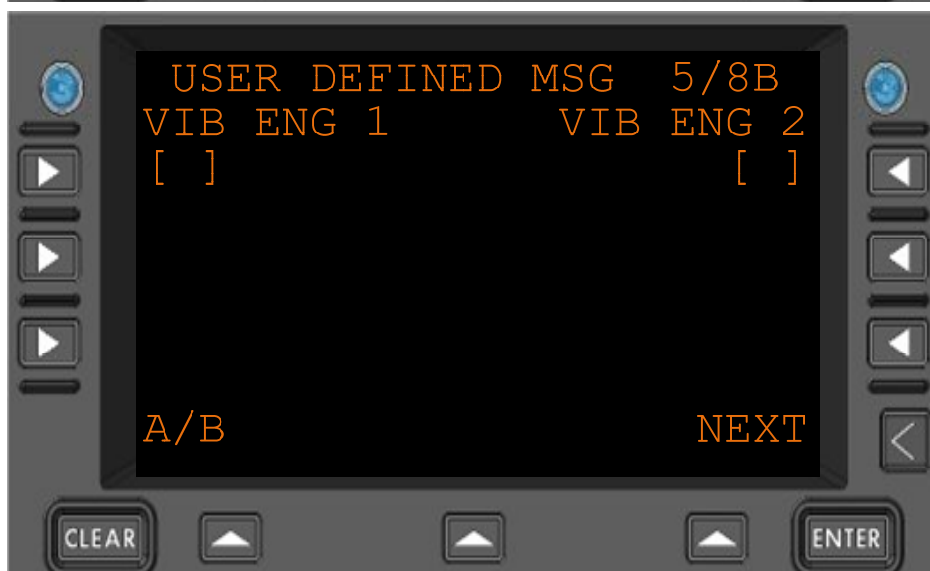
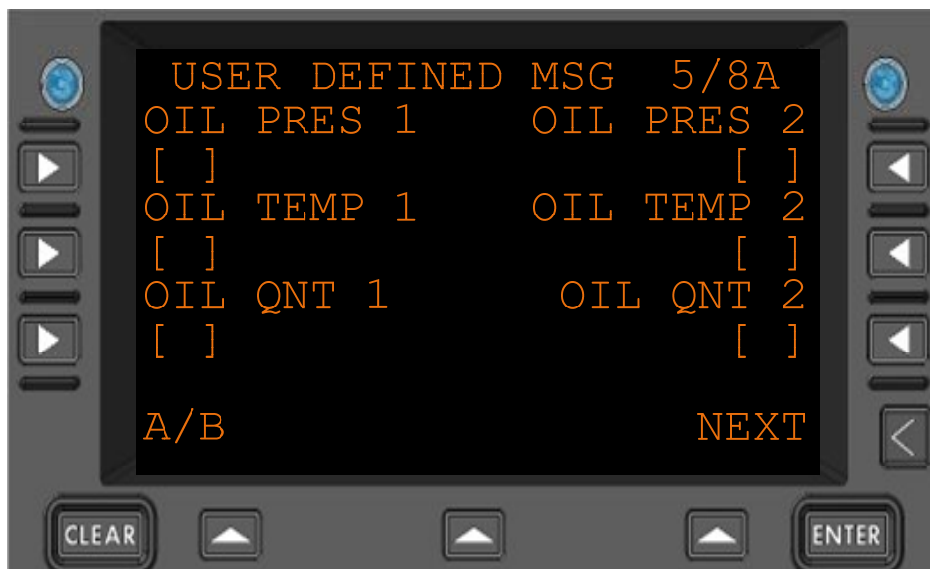
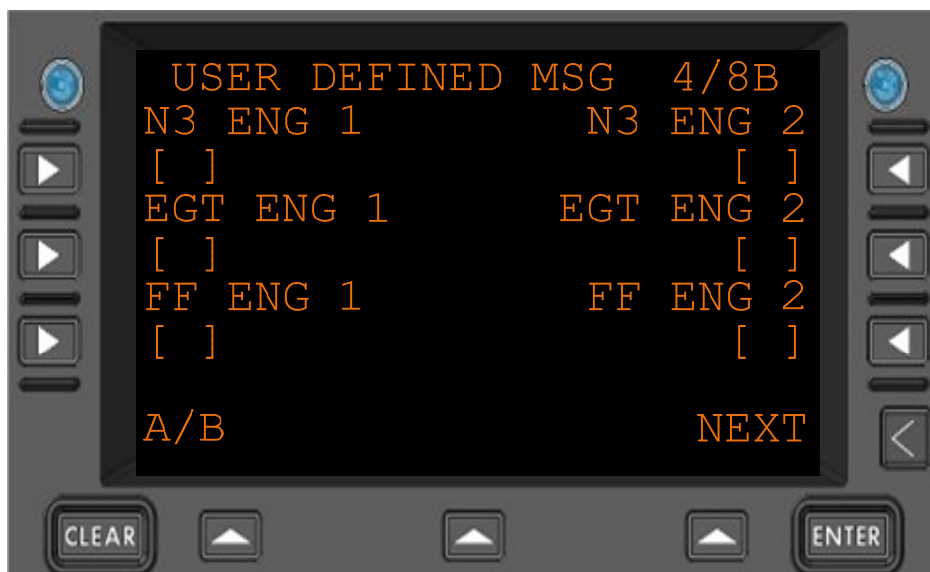
Figure 3.10.1-1 User Defined Message Edit Menu 1

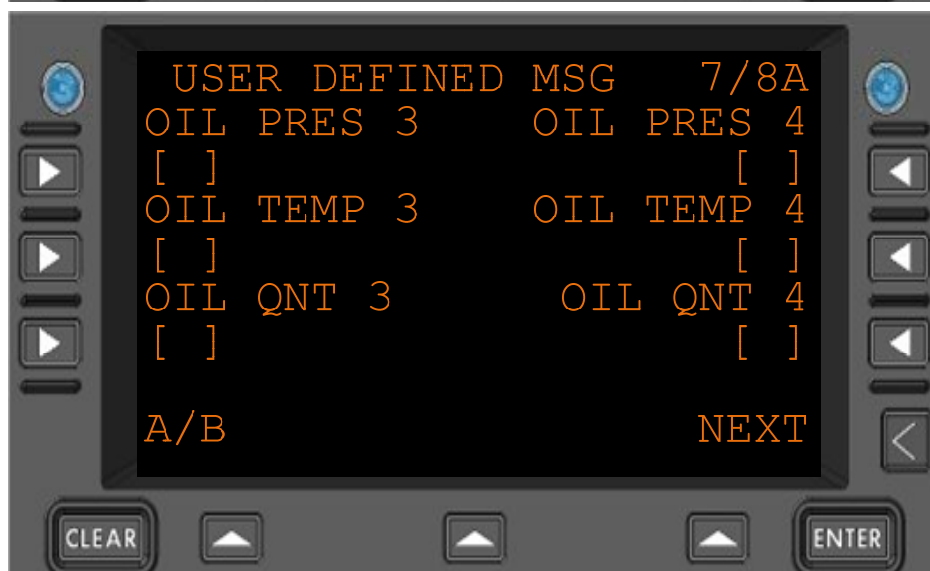
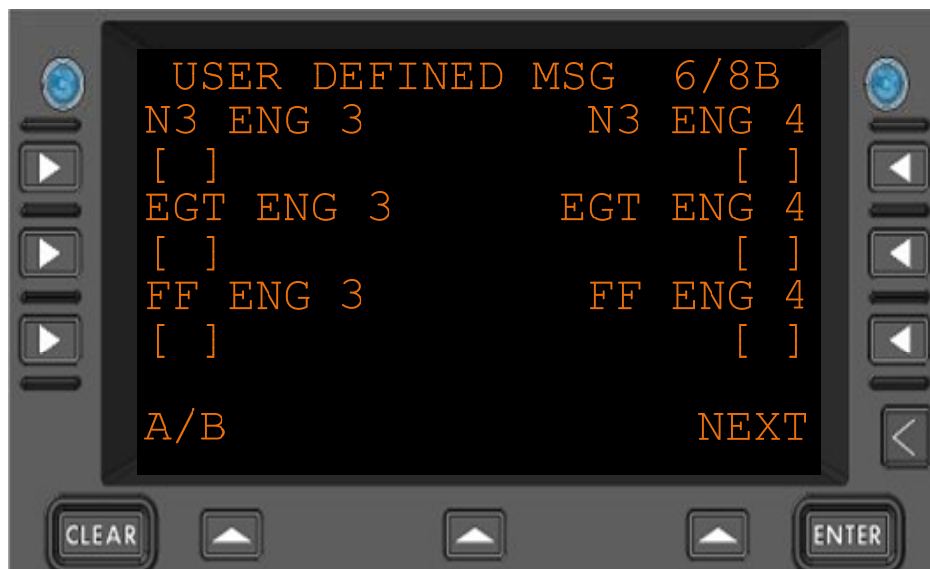
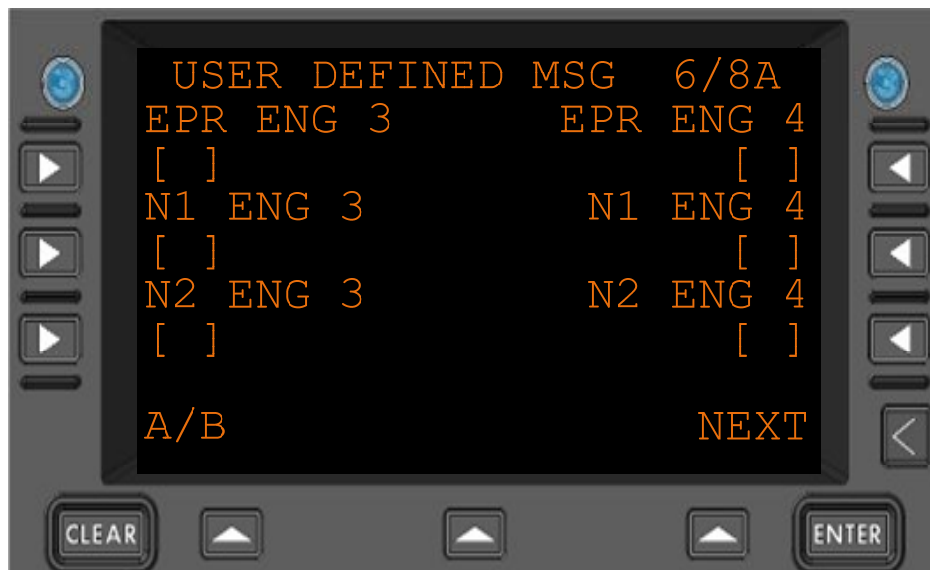
MESSAGE NAME	The name of the message represented to the user when they are selecting a user defined message to Send/Edit/Delete. Maximum 14 characters in length.
EVENT	The name of the event that triggers the transmission of this user defined message. Maximum 10 characters in length can be empty to indicate that the message may only be transmitted upon pilot input.
LABEL NUM	The ACARS label attached to the message.
FORMAT	Indicates if the message is an ARINC 618 or ARINC 622 message.
429 BUS DATA	The following menus provide a checkbox to select which data will be included in the message.

3.10.2 User Edit – User Defined Message Edit Menu Page 2









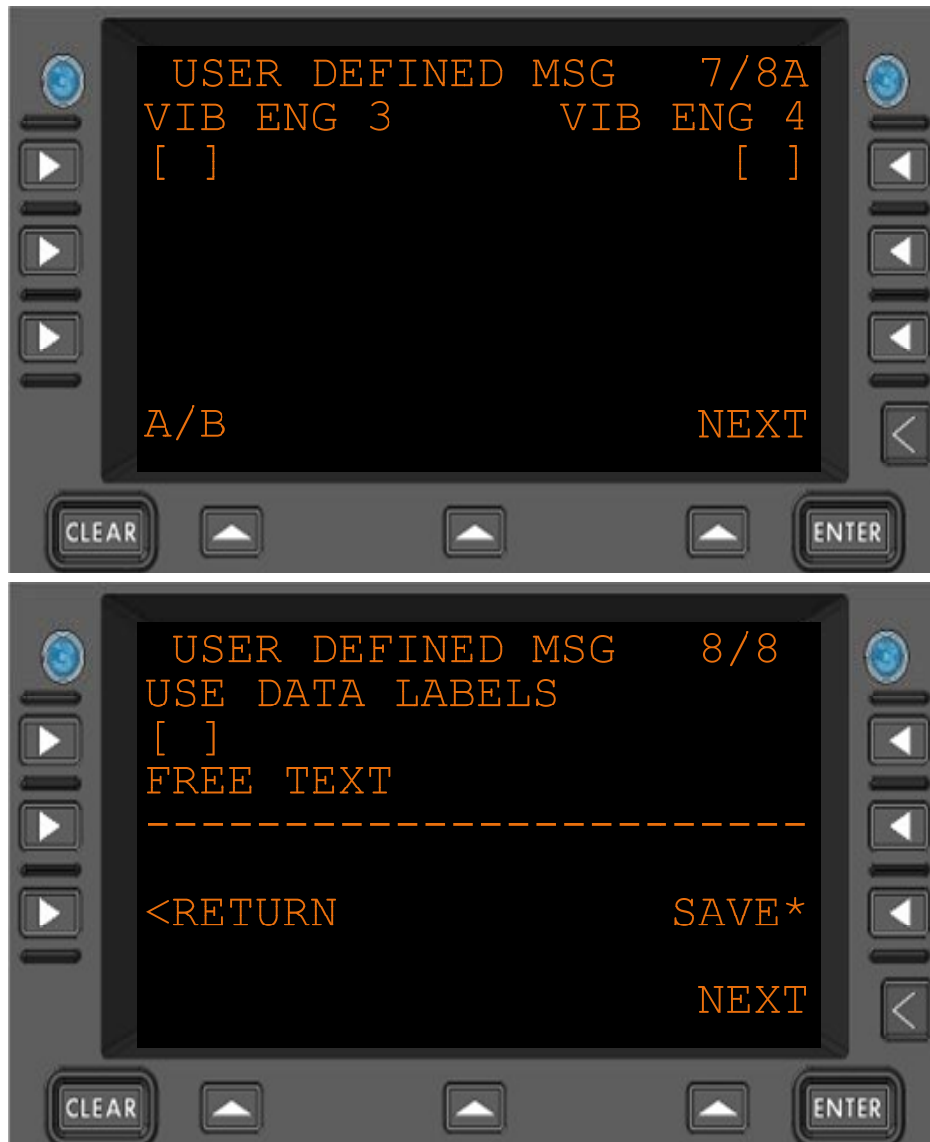


Figure 3.10.2-1 User Defined Message Edit Data Menus

- USE DATA LABELS** Will the data labels be included in the message.
- FREE TEXT** Every user defined downlink can have up to 24 characters of free text appended to it prior to transmission.
- SAVE** Commit this user defined message to the configuration module. Will cause the Dlink+ w/CPDLC to reboot after saving.
- <RETURN** Return to previous page

3.10.3 Definition of Optional Data in User Defined Messages

Data	Format and Space Requirements					Example w/ Total Character Space Req'd				
	Label		Format/Separator			w/ Label		w/o Label		
Latitude	LAT:	5	NDDMM.MM	8	,	2	LAT: NDDMM.MM,	15	NDDMM.MM,	10
Longitude	LON:	5	NDDDMM.MM	9	,	2	LON: NDDDMM.MM,	16	NDDDMM.MM,	11
Date	DATE:	6	DDMMYY	6	,	2	DATE: DDMMYY,	14	DDMMYY,	8
UTC	UTC:	5	HHMM.M	6	,	2	UTC: HHMM.M,	13	HHMM.M,	8
Altitude	ALT:	5	NNNNN	5	,	2	ALT: NNNNN,	12	NNNNN,	7
Baro Altitude	BAROALT:	9	NNNNN	5	,	2	BAROALT: NNNNN,	16	NNNNN,	7
Magnetic Heading	MAGHDG:	8	NNN.N	5	,	2	MAGHDG: NNN.N,	15	NNN.N,	7
True Heading	TRUHDG:	8	NNN.N	5	,	2	TRUHDG: NNN.N,	15	NNN.N,	7
Track Angle True	TRKANGTRU:	11	NNN.N	5	,	2	TRKANGTRU: NNN.N,	18	NNN.N,	7
Track Angle Mag	TRKANGMAG:	11	NNN	3	,	2	TRKANGMAG: NNN,	16	NNN,	5
Drift Angle	DRIFTANG:	10	NNN	3	,	2	DRIFTANG: NNN,	15	NNN,	5
Flight Path Angle	FPA:	5	NNN	3	,	2	FPA: NNN,	10	NNN,	5
Ground Speed	GRNDSPD:	9	NNNN	4	,	2	GRNDSPD: NNNN,	15	NNNN,	6
True Airspeed	TAS:	5	NNN	3	,	2	TAS: NNN,	10	NNN,	5
Mach	MACH:	6	N.NNN	5	,	2	MACH: N.NNN,	13	N.NNN,	7
CAS	CAS:	5	NNN	3	,	2	CAS: NNN,	10	NNN,	5
Vertical Rate	VRATE:	7	SNNNNN	6	,	2	VRATE: SNNNNN,	15	SNNNNN,	8
N/S Velocity Inertial Vertical Speed	NSVEL: INERTVSPD:	711	NNNNSNNNNN	46	,	22	NSVEL: NNNN, INERTVSPD: SNNNNN,	13 19	NNNN, SNNNNN,	68
E/W Velocity N/S Velocity	EWVEL: NSVEL:	77	NNNNNNNN	44	,	22	EWVEL: NNNN, NSVEL: NNNN,	13 13	NNNN, NNNN,	66
Pitch Angle E/W Velocity	PITCH: EWVEL:	77	SNNNNNNN	34	,	22	PITCH: SNN, EWVEL: NNNN,	12 13	SNN, NNNN,	56
Roll Angle Pitch Angle	ROLL: PITCH:	67	SNNNSNN	33	,	22	ROLL: SNN, PITCH: SNN,	11 12	SNN, SNN,	55
Wind Speed Roll Angle	WINDSPD: ROLL:	96	NNNSNN	33	,	22	WINDSPD: NNN, ROLL: SNN,	14 11	NNN, SNN,	55
Wind Direction Wind Speed	WINDDIR: WINDSPD:	99	SNNNNNNN	43	,	22	WINDDIR: SNNN, WINDSPD: NNN,	15 14	SNNN, NNN,	65
Total Air Temperature Wind Direction	TAT: WINDDIR:	59	SNNNSNNN	34	,	22	TAT: SNN, WINDDIR: SNNN,	10 15	SNN, SNNN,	56
Outside Air Temperature Total Air Temperature	OAT: TAT:	55	SNNNSNN	33	,	22	OAT: SNN, TAT: SNN,	10 10	SNN, SNN,	55
On Ground Outside Air Temperature	ONGROUND: OAT:	105	NSNN	13	,	22	ONGROUND: N, OAT: SNN,	13 10	N, SNN,	35
Doors Closed On Ground	DOORSCLSD: ONGROUND:	1110	NN	11	,	22	DOORSCLSD: N, ONGROUND: N,	14 13	N, N,	33
Brakes Set Doors Closed	BRAKESSET: DOORSCLSD:	1111	NN	11	,	22	BRAKESSET: N, DOORSCLSD: N,	14 14	N, N,	33
AT SDI Brakes Set	ATSDI: BRAKESSET:	711	N	01	,	22	ATSDI: , BRAKESSET: N,	91 4	, N,	23
AT Status AT SDI	ATSTAT: ATSDI:	87		00	,	22	ATSTAT: , ATSDI:	10	' '	22

								9		
EPR Engine 1AT Status	EPRENG1: ATSTAT:	98	N	10	,	22	EPRENG1: N, ATSTAT: ,	12 10	N, ,	32
EPR Engine 2EPR Engine 1	EPRENG2: EPRENG1:	99	NN	11	,	22	EPRENG2: N, EPRENG1: N,	12 12	N, N,	33
EPR Engine 3EPR Engine 2	EPRENG3: EPRENG2:	99	NN	11	,	22	EPRENG3: N, EPRENG2: N,	12 12	N, N,	33
EPR Engine 4EPR Engine 3	EPRENG4: EPRENG3:	99	NN	11	,	22	EPRENG4: N, EPRENG3: N,	12 12	N, N,	33
N1 Engine 1EPR Engine 4	N1ENG1: EPRENG4:	89	N	01	,	22	N1ENG1: , EPRENG4: N,	10 12	, N,	23
N1 Engine 2N1 Engine 1	N1ENG2: N1ENG1:	88		00	,	22	N1ENG2: , N1ENG1: ,	10 10	, ,	22
N1 Engine 3N1 Engine 2	N1ENG3: N1ENG2:	88		00	,	22	N1ENG3: , N1ENG2: ,	10 10	, ,	22
N1 Engine 4N1 Engine 3	N1ENG4: N1ENG3:	88		00	,	22	N1ENG4: , N1ENG3: ,	10 10	, ,	22
N2 Engine 1N1 Engine 4	N2ENG1: N1ENG4:	88		00	,	22	N2ENG1: , N1ENG4: ,	10 10	, ,	22
N2 Engine 2N2 Engine 1	N2ENG2: N2ENG1:	88		00	,	22	N2ENG2: , N2ENG1: ,	10 10	, ,	22
N2 Engine 3N2 Engine 2	N2ENG3: N2ENG2:	88		00	,	22	N2ENG3: , N2ENG2: ,	10 10	, ,	22
N2 Engine 4N2 Engine 3	N2ENG4: N2ENG3:	88		00	,	22	N2ENG4: , N2ENG3: ,	10 10	, ,	22
N3 Engine 1N2 Engine 4	N3ENG1: N2ENG4:	88		00	,	22	N3ENG1: , N2ENG4: ,	10 10	, ,	22
N3 Engine 2N3 Engine 1	N3ENG2: N3ENG1:	88		00	,	22	N3ENG2: , N3ENG1: ,	10 10	, ,	22
N3 Engine 3N3 Engine 2	N3ENG3: N3ENG2:	88		00	,	22	N3ENG3: , N3ENG2: ,	10 10	, ,	22
N3 Engine 4N3 Engine 3	N3ENG4: N3ENG3:	88		00	,	22	N3ENG4: , N3ENG3: ,	10 10	, ,	22
EGT Engine 1N3 Engine 4	EGTENG1: N3ENG4:	98		00	,	22	EGTENG1: , N3ENG4: ,	11 10	, ,	22
EGT Engine 2EGT Engine 1	EGTENG2: EGTENG1:	99		00	,	22	EGTENG2: , EGTENG1: ,	11 11	, ,	22
EGT Engine 3EGT Engine 2	EGTENG3: EGTENG2:	99		00	,	22	EGTENG3: , EGTENG2: ,	11 11	, ,	22
EGT Engine 4EGT Engine 3	EGTENG4: EGTENG3:	99		00	,	22	EGTENG4: , EGTENG3: ,	11 11	, ,	22
FF Engine 1EGT Engine 4	FFENG1: EGTENG4:	89		00	,	22	FFENG1: , EGTENG4: ,	10 11	, ,	22
FF Engine 2FF Engine 1	FFENG2: FFENG1:	88		00	,	22	FFENG2: , FFENG1: ,	10 10	, ,	22
FF Engine 3FF Engine 2	FFENG3: FFENG2:	88		00	,	22	FFENG3: , FFENG2: ,	10 10	, ,	22
FF Engine 4FF Engine 3	FFENG4: FFENG3:	88		00	,	22	FFENG4: , FFENG3: ,	10 10	, ,	22
BB Engine 1FF Engine 4	BBENG1: FFENG4:	88		00	,	22	BBENG1: , FFENG4: ,	10 10	, ,	22
BB Engine 2BB Engine 1	BBENG2: BBENG1:	88		00	,	22	BBENG2: , BBENG1: ,	10 10	, ,	22
BB Engine 3BB Engine 2	BBENG3: BBENG2:	88		00	,	22	BBENG3: , BBENG2: ,	10 10	, ,	22

BB Engine 4BB Engine 3	BBENG4 : BBENG3 :	88		00	,	22	BBENG4 : , BBENG3 : ,	10 10	, ,	22
Oil Pressure Engine 1 BB Engine 4	OILPRESENG1 : BBENG4 :	138		00	,	22	OILPRESENG1 : , BBENG4 : ,	15 10	, ,	22
Oil Pressure Engine 2 Oil Pressure Engine 1	OILPRESENG2 : OILPRESENG1 :	1313		00	,	22	OILPRESENG2 : , OILPRESENG1 : ,	15 15	, ,	22
Oil Pressure Engine 3 Oil Pressure Engine 2	OILPRESENG3 : OILPRESENG2 :	1313		00	,	22	OILPRESENG3 : , OILPRESENG2 : ,	15 15	, ,	22
Oil Pressure Engine 4Oil Pressure Engine 3	OILPRESENG4 : OILPRESENG3 :	1313		00	,	22	OILPRESENG4 : , OILPRESENG3 : ,	15 15	, ,	22
Oil Temperature Engine 1 Oil Pressure Engine 4	OILTEMPENG1 : OILPRESENG4 :	1313	SNNN	40	,	22	OILTEMPENG1 : SNNN , OILPRESENG4 : ,	19 15	SNNN , ,	62
Oil Temperature Engine 2 Oil Temperature Engine 1	OILTEMPENG2 : OILTEMPENG1 :	1313	SNNNSNNN	44	,	22	OILTEMPENG2 : SNNN , OILTEMPENG1 : SNNN ,	19 19	SNNN , SNNN ,	66
Oil Temperature Engine 3 Oil Temperature Engine 2	OILTEMPENG3 : OILTEMPENG2 :	1313	SNNNSNNN	44	,	22	OILTEMPENG3 : SNNN , OILTEMPENG2 : SNNN ,	19 19	SNNN , SNNN ,	66
Oil Temperature Engine 4 Oil Temperature Engine 3	OILTEMPENG4 : OILTEMPENG3 :	1313	SNNNSNNN	44	,	22	OILTEMPENG4 : SNNN , OILTEMPENG3 : SNNN ,	19 19	SNNN , SNNN ,	66
Vibration Engine 1 Oil Temperature Engine 4	VIBENG1 : OILTEMPENG4 :	913	NSNNN	14	,	22	VIBENG1 : N , OILTEMPENG4 : SNNN ,	12 19	N , SNNN ,	36
Vibration Engine 2 Vibration Engine 1	VIBENG2 : VIBENG1 :	99	NN	11	,	22	VIBENG2 : N , VIBENG1 : N ,	12 12	N , N ,	33
Vibration Engine 3 Vibration Engine 2	VIBENG3 : VIBENG2 :	99	NN	11	,	22	VIBENG3 : N , VIBENG2 : N ,	12 12	N , N ,	33
Vibration Engine 4Vibration Engine 3	VIBENG4 : VIBENG3 :	99	NN	11	,	22	VIBENG4 : N , VIBENG3 : N ,	12 12	N , N ,	33
Duct Pressure Engine 1 Vibration Engine 4	DUCTPRESENG1 : VIBENG4 :	149	N	01	,	22	DUCTPRESENG1 : , VIBENG4 : N ,	16 12	, N ,	23
Duct Pressure Engine 2 Duct Pressure Engine 1	DUCTPRESENG2 : DUCTPRESENG1 :	1414		00	,	22	DUCTPRESENG2 : , DUCTPRESENG1 : ,	16 16	, ,	22
Duct Pressure Engine 3 Duct Pressure Engine 2	DUCTPRESENG3 : DUCTPRESENG2 :	1414		00	,	22	DUCTPRESENG3 : , DUCTPRESENG2 : ,	16 16	, ,	22

Duct Pressure Engine 4 Duct Pressure Engine 3	DUCTPRESENG4: DUCTPRESENG3:	1414		00	,	22	DUCTPRESENG4: , DUCTPRESENG3: ,	16 16	, ,	22
AC Pack Engine 1 Duct Pressure Engine 4	ACPACKENG1: DUCTPRESENG4:	1214		00	,	22	ACPACKENG1: , DUCTPRESENG4: ,	14 16	, ,	22
AC Pack Engine 2 AC Pack Engine 1	ACPACKENG2: ACPACKENG1:	1212		00	,	22	ACPACKENG2: , ACPACKENG1: ,	14 14	, ,	22
AC Pack Engine 3 AC Pack Engine 2	ACPACKENG3: ACPACKENG2:	1212		00	,	22	ACPACKENG3: , ACPACKENG2: ,	14 14	, ,	22
AC Pack Engine 4 AC Pack Engine 3	ACPACKENG4: ACPACKENG3:	1212		00	,	22	ACPACKENG4: , ACPACKENG3: ,	14 14	, ,	22
AC Pack Engine 4	VERTG1: ACPACKENG4:	812		00	,	22	VERTG1: , ACPACKENG4: ,	10 14	, ,	22
Free Text	RMK: VERTG4: VERTG3:	588	FREE TEXT	2400	,	022	RMK: FREE TEXTVERTG4: , VERTG3: ,	29 10 10	FREE TEXT, ,	2422
Free Text	RMK: VERTG4:	58	FREE TEXT	240	,	02	RMK: FREE TEXTVERTG4: ,	29 10	FREE TEXT,	242
Free Text	RMK:	5	FREE TEXT	24		0	RMK: FREE TEXT	29	FREE TEXT	24

Table 2 Required Character Space for Optional Data in User Defined Messages

3.11 User Edit – Software Versions Menu

3.11.1 User Edit – Software Versions Menu Page 1

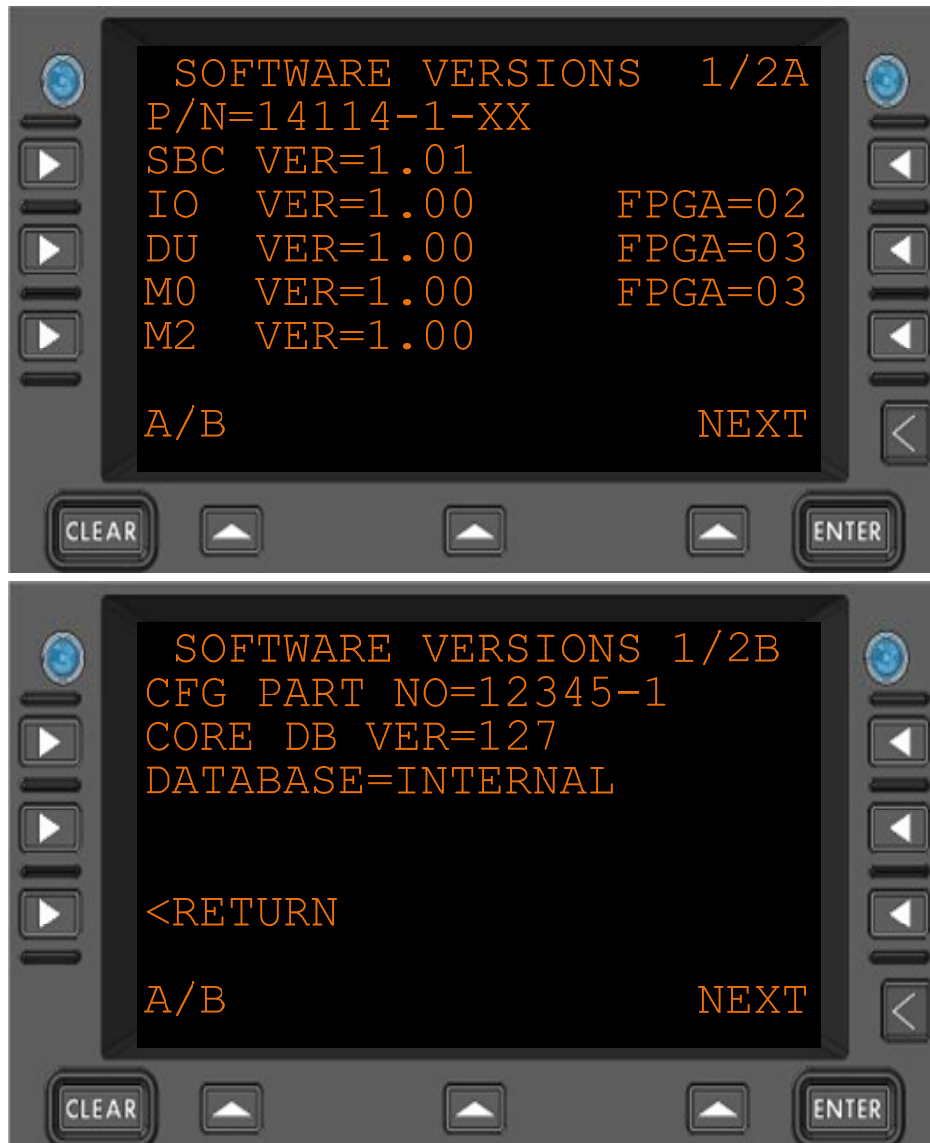


Figure 3.11.1-1 Software Versions Menu 1

P/N	Part number of the Dlink+ /w CPDLC
SBC VER	Version number for the Single Board Computer application
IO VER	Version number for the Input Output application and FPGA
DU VER	Version number for the Display Unit application and FPGA
M0 VER	Version number for the Mode 0 VDL application and FPGA
M2 VER	Version number for the Mode 2 VDL application
CFG PART NO	Customer specific part number for the configuration
CORE DB VER	Internal tracking information.
<RETURN	Return to previous page

3.11.2 User Edit – Software Versions Menu Page 2

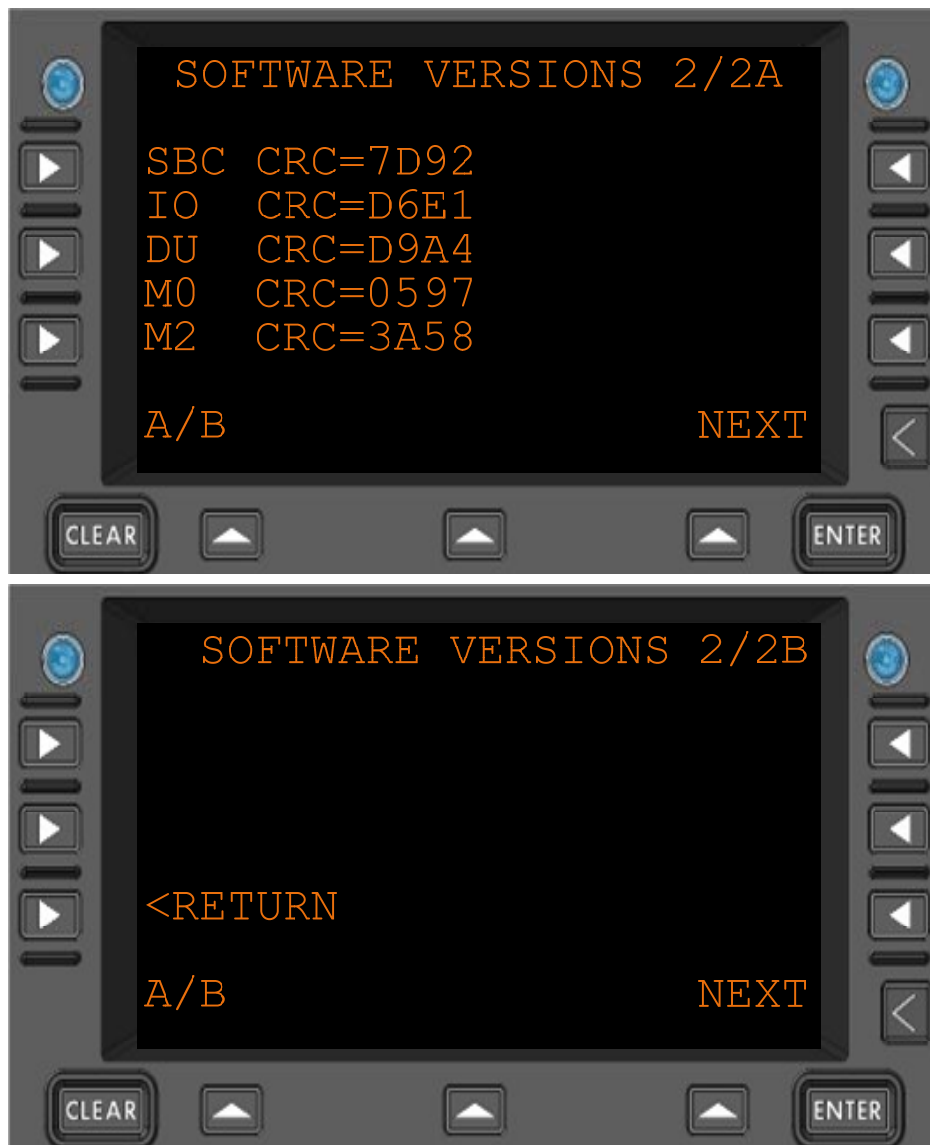


Figure 3.11.2-1 Software Versions Menu 2

SBC CRC	Unique application image check data
IO CRC	Unique application image check data
DU CRC	Unique application image check data
MO CRC	Unique application image check data
M2 CRC	Unique application image check data
<RETURN	Return to previous page

3.12 System Edit Menu

3.12.1 System Edit – System Configuration Menu Page 1

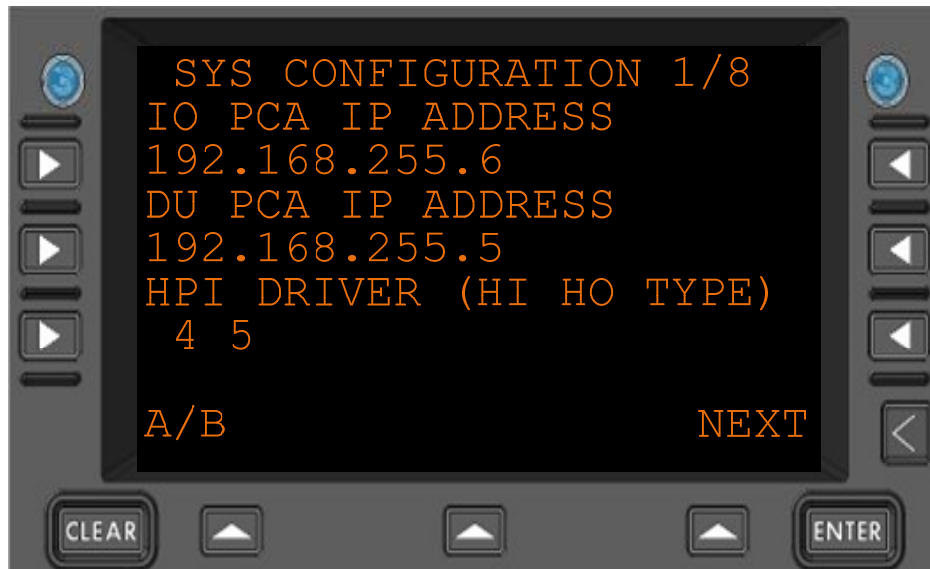


Figure 3.12.1-1 System Configuration Menu 1

IO PCA IP ADDRESS	Internal address for the Input Output circuit assembly
DU PCA IP ADDRESS	Internal address for the Display Unit circuit assembly
HPI DRIVER (HI HO TYPE)	Driver information for the internal radio bus.

3.12.2 System Edit – System Configuration Menu Page 2

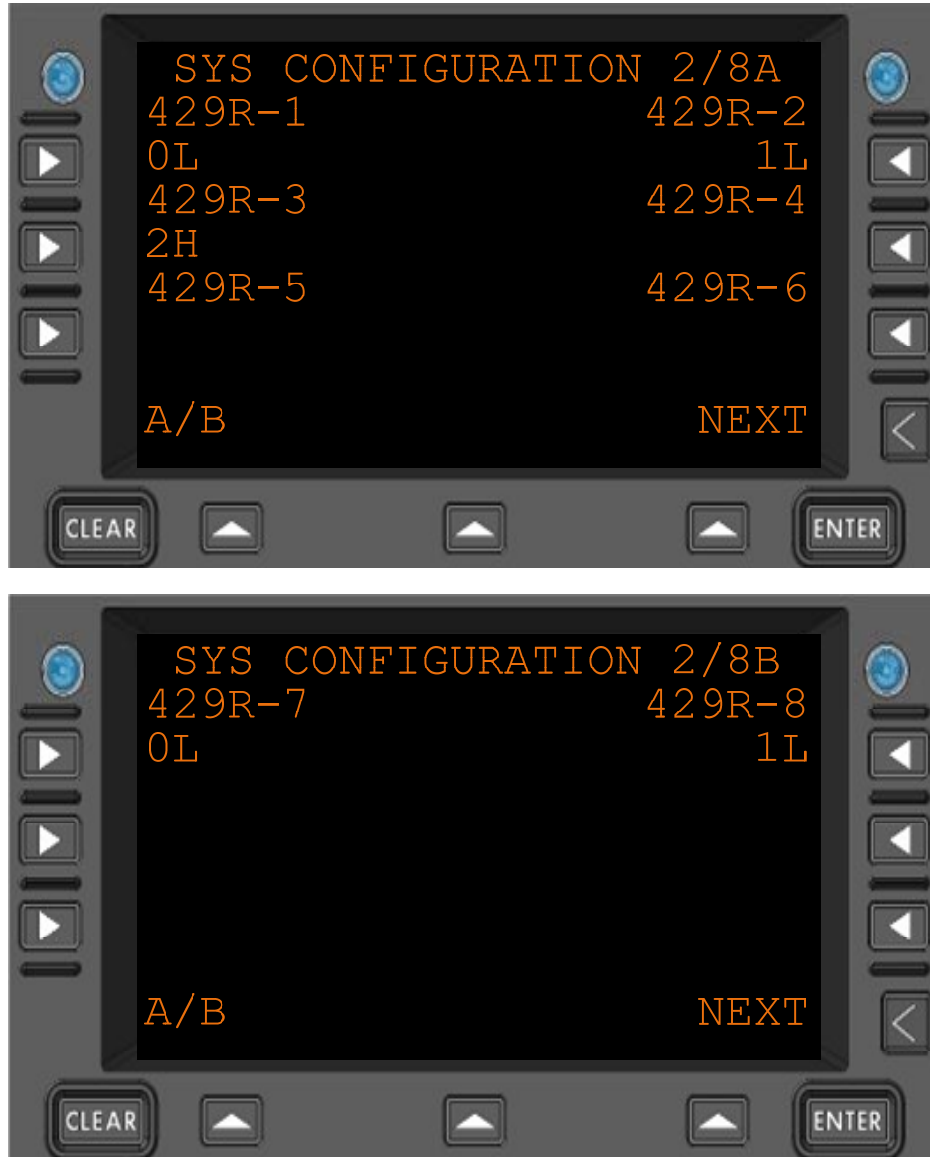


Figure 3.12.2-1 System Configuration Menu 2

- 429R-n** Software configuration for the ARINC 429 receiver ports 1 - 8
 H – High speed
 L – Low speed
 Details are beyond the scope of this document. Please contact an authorized Spectralux maintenance representative for more information.

3.12.3 System Edit – System Configuration Menu Page 3

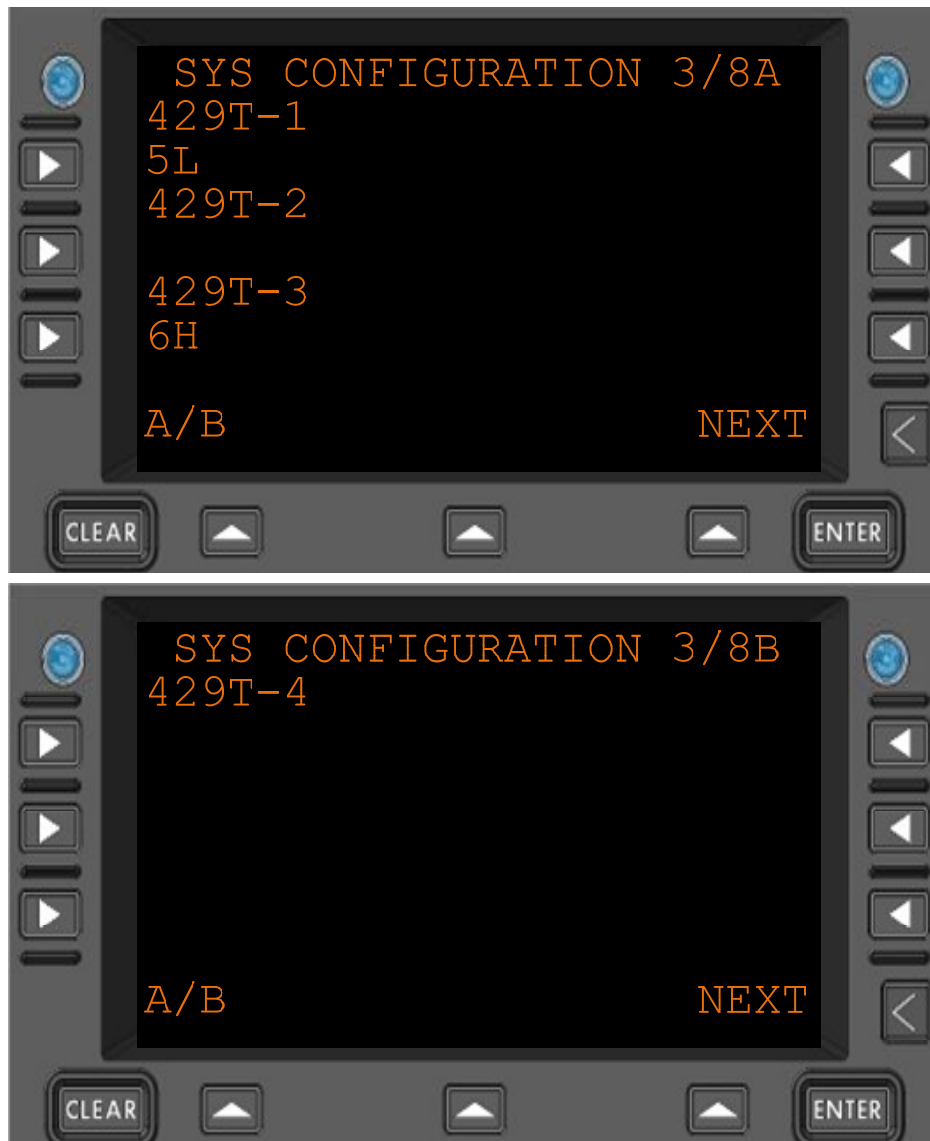


Figure 3.12.3-1 System Configuration Menu 3

- 429T-n** Software configuration for the ARINC 429 transmitter ports 1 - 4.
H – High speed
L – Low speed
Details are beyond the scope of this document. Please contact an authorized Spectralux maintenance representative for more information.

3.12.4 System Edit – System Configuration Menu Page 4

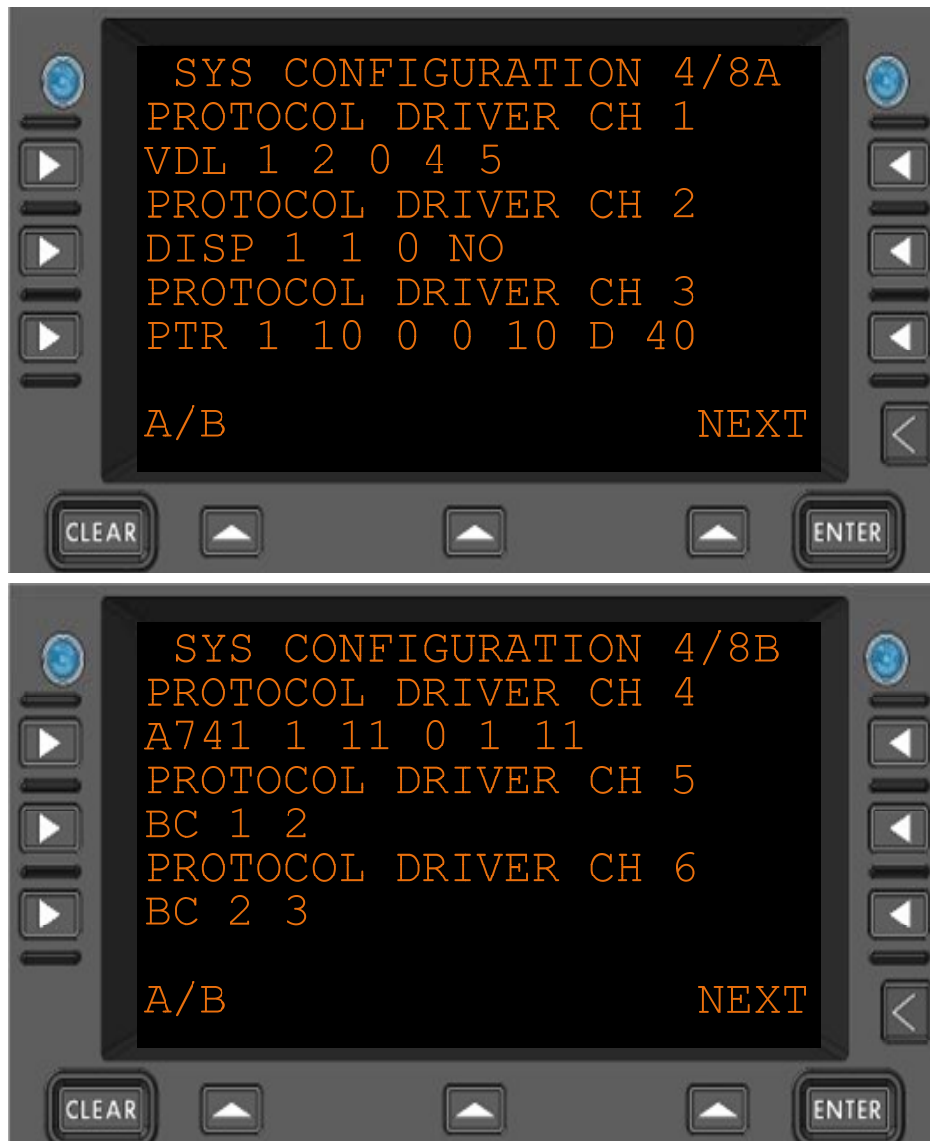


Figure 3.12.4-1 System Configuration Menu 4

Configuration information for the various installed systems.

Details are beyond the scope of this document. Please contact an authorized Spectralux maintenance representative for more information.

3.12.5 System Edit – System Configuration Menu Page 5

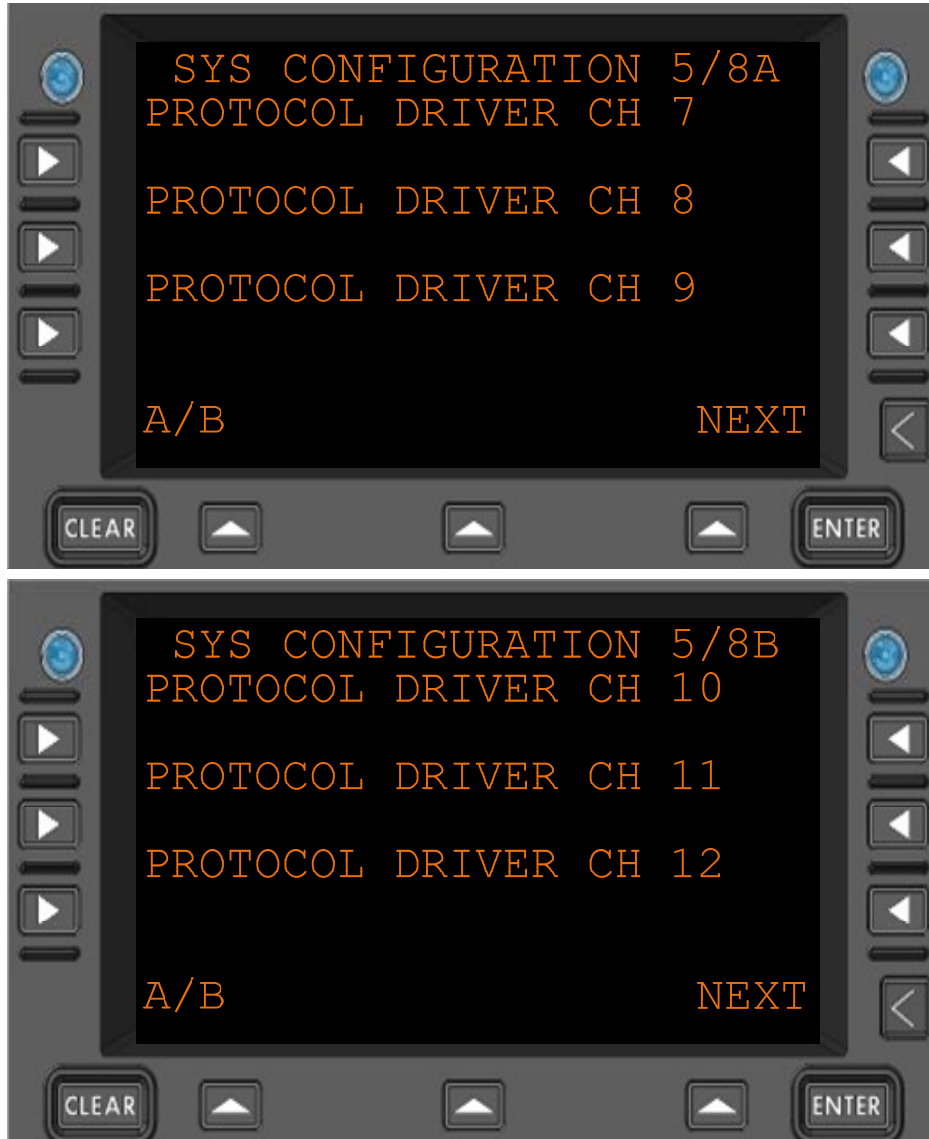


Figure 3.12.5-1 System Configuration Menu 5

Configuration information for the various installed systems.

Details are beyond the scope of this document. Please contact an authorized Spectralux maintenance representative for more information.

3.12.6 System Edit – System Configuration Menu Page 6

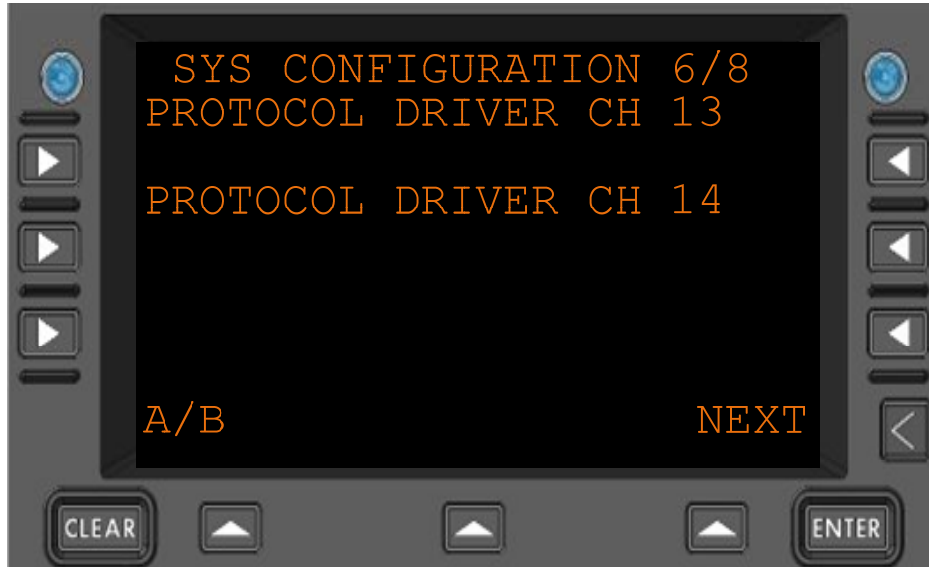


Figure 3.12.6-1 System Configuration Menu 6

Configuration information for the various installed systems.

Details are beyond the scope of this document. Please contact an authorized Spectralux maintenance representative for more information.

3.12.7 System Edit – System Configuration Menu Page 7

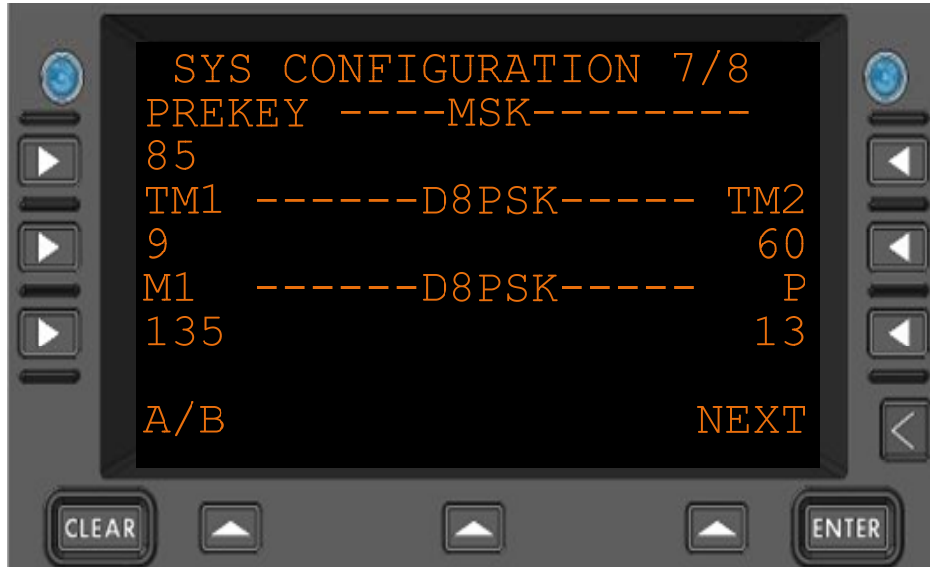


Figure 3.12.7-1 System Configuration Menu 7

Configuration information for the various installed systems.

Details are beyond the scope of this document. Please contact an authorized Spectralux maintenance representative for more information.

3.12.8 System Edit – System Configuration Menu Page 8

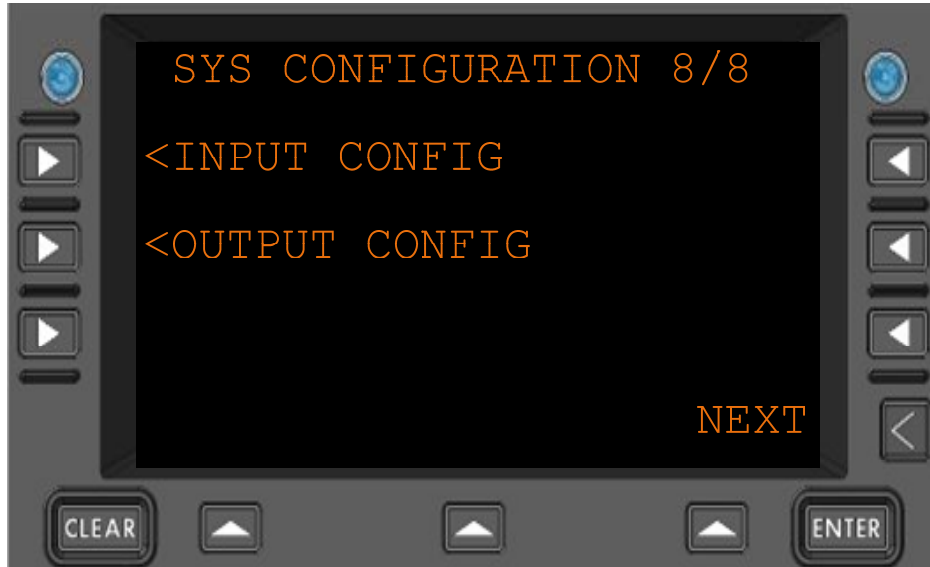


Figure 3.12.8-1 System Configuration Menu 8

**<INPUT
CONFIG** Navigate to the Input Configuration menu

**<OUTPUT
CONFIG** Navigate to the Output Configuration menu

3.12.9 System Edit – System Recall Information Menu

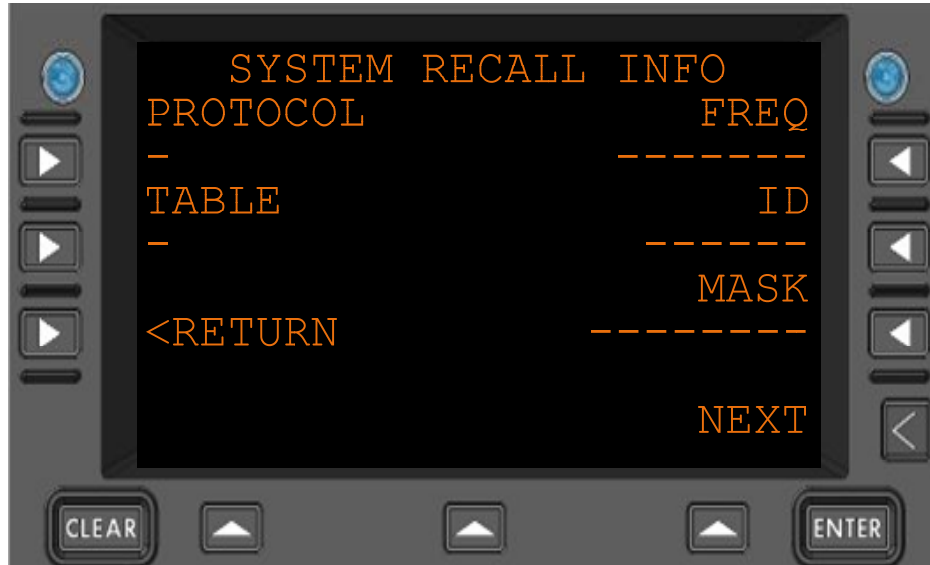


Figure 3.12.9-1 System Recall Information Menu

PROTOCOL What was the last protocol successfully used

TABLE Details used to recognize ground system

FREQ Last frequency successfully used

ID Details used to recognize ground system

MASK Details used to recognize ground system

<RETURN Return to previous page

3.12.10 System Edit – Analog Input Discrete Configuration Menu

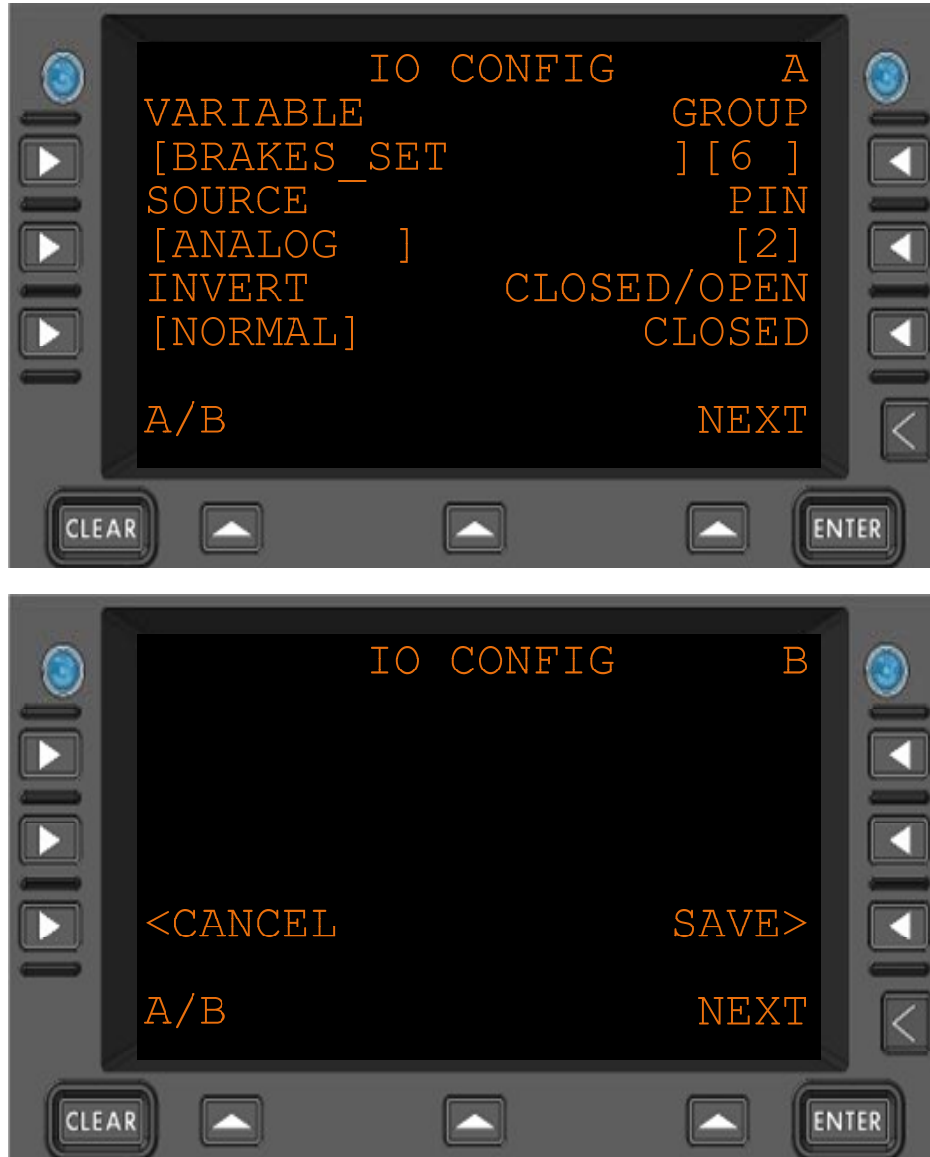


Figure 3.12.10-1 IO Configuration Menu – Analog Discrete

GROUP	Category from which to collect the variable from
VARIABLE	Specific data item to configure
SOURCE	The Analog discrete input is selected as the source.
PIN	Which analog discrete input pin to use as input.
INVERT	Change the 'sense' of the input; (NORMAL, INVERT) IF the OPEN/CLOSED indication is contrary to what is known, change the sense.
CLOSED/OPEN	Reflecting the current logical input, taking into account the INVERT option.
<CANCEL	Return to previous page – Do not save
SAVE>	Save the changes. Will cause the Dlink+ w/CPDLC to reboot after saving.

3.12.11 System Edit – Digital Input Discrete Configuration Menu

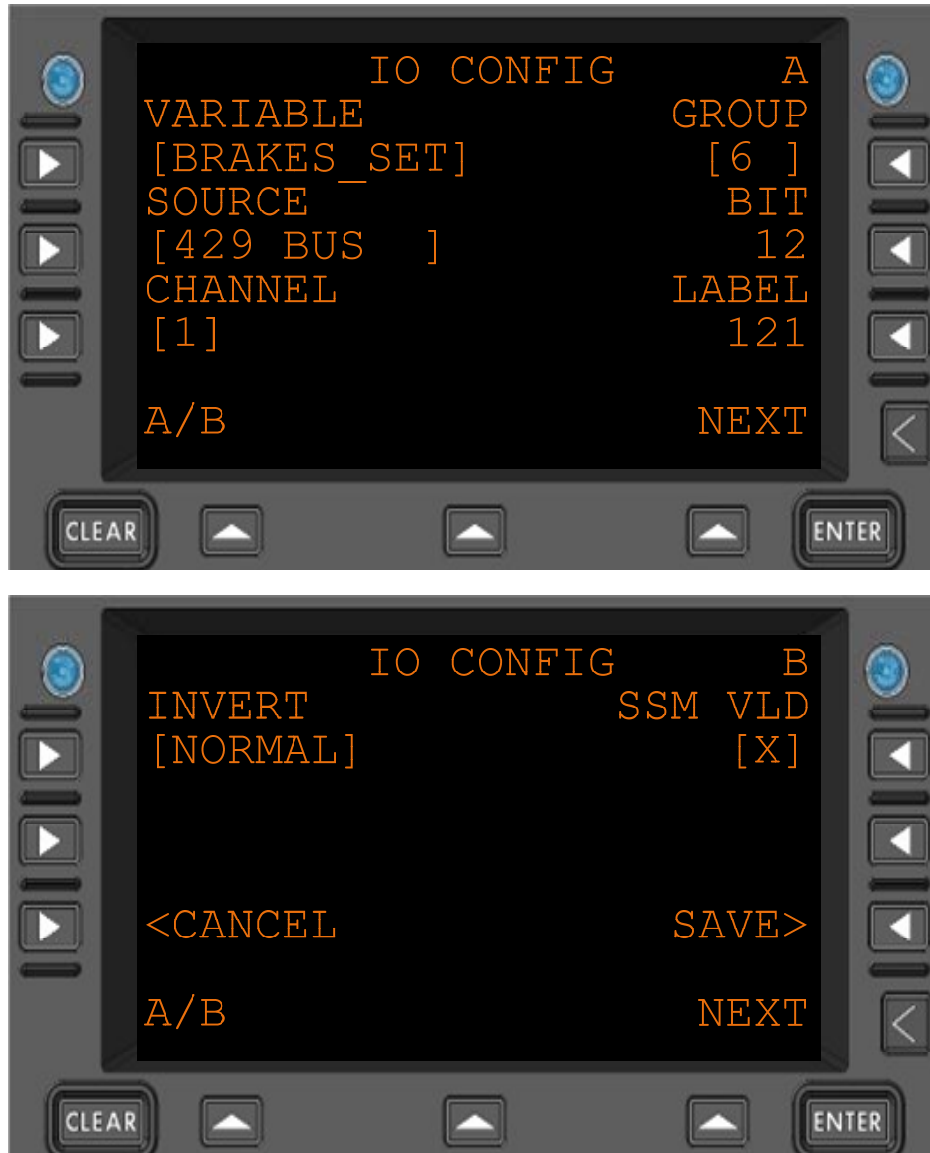


Figure 3.12.11-1 IO Configuration Menu – Digital Discrete

GROUP	Category from which to collect the variable from
VARIABLE	Specific data item to configure
SOURCE	The ARINC 429 input is selected as the source.
BIT	Which bit in the ARINC 429 to use.
LABEL	Which ARINC 429 label to use.
CHANNEL	Which ARINC 429 receiver to use.
INVERT	Change the 'sense' of the input; (NORMAL, INVERT) IF the OPEN/CLOSED indication is contrary to what is known, change the sense.
SSM VLD	If the in-coming discrete data validation logic shall use the SSM flags set by the equipment.
<CANCEL	Return to previous page – Do not save
SAVE>	Save the changes. Will cause the Dlink+ w/CPDLC to reboot after saving.

3.12.12 System Edit – Arinc 429 Input Configuration Menu

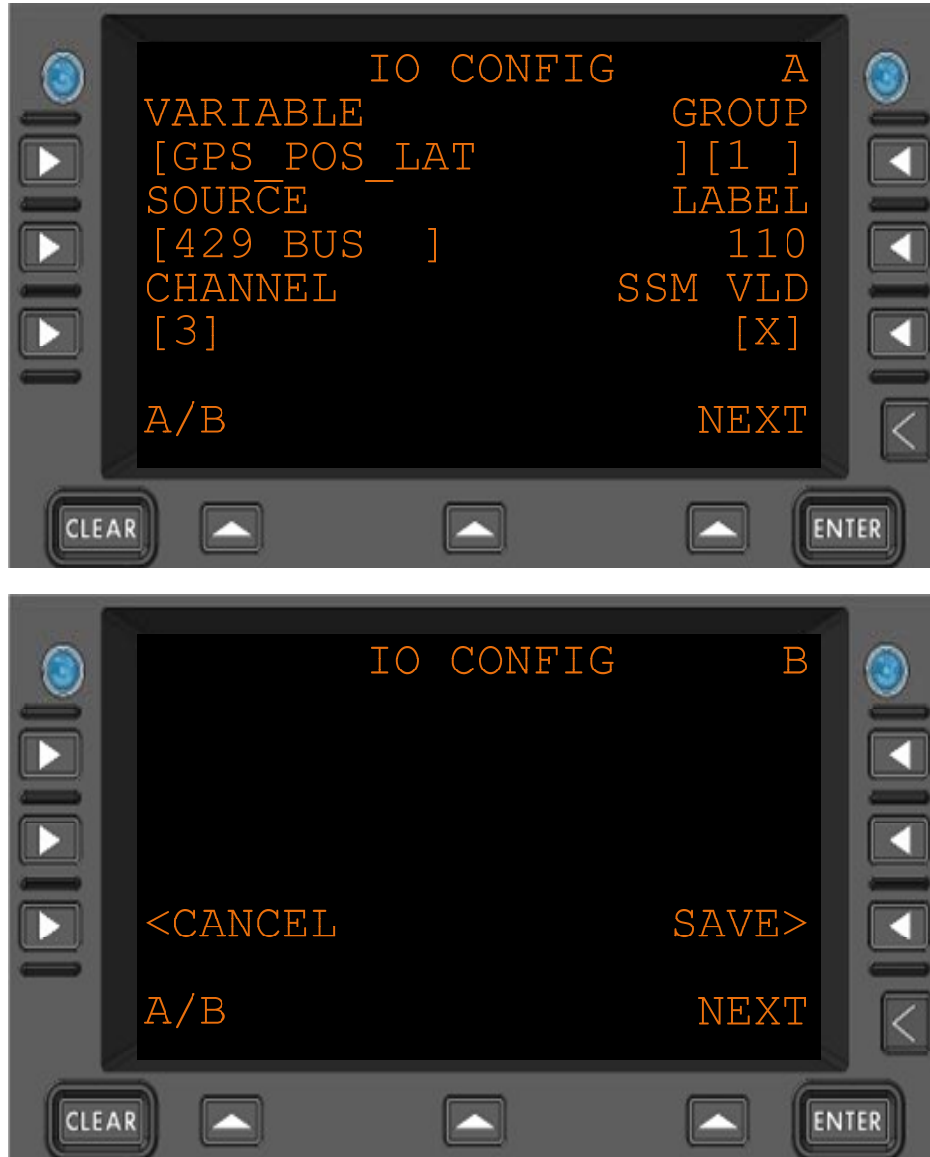


Figure 3.12.12-1 IO Configuration Menu – Arinc 429

GROUP	Category from which to collect the variable from
VARIABLE	Specific data item to configure
SOURCE	The ARINC 429 input is selected as the source.
BIT	Which bit in the ARINC 429 to use.
LABEL	Which ARINC 429 label to use.
CHANNEL	Which ARINC 429 receiver to use.
SSM VLD	If the in-coming discrete data validation logic shall use the SSM flags set by the equipment.
<CANCEL	Return to previous page – Do not save
SAVE>	Save the changes. Will cause the Dlink+ w/CPDLC to reboot after saving.

3.12.13 System Edit – Output Configuration Menu

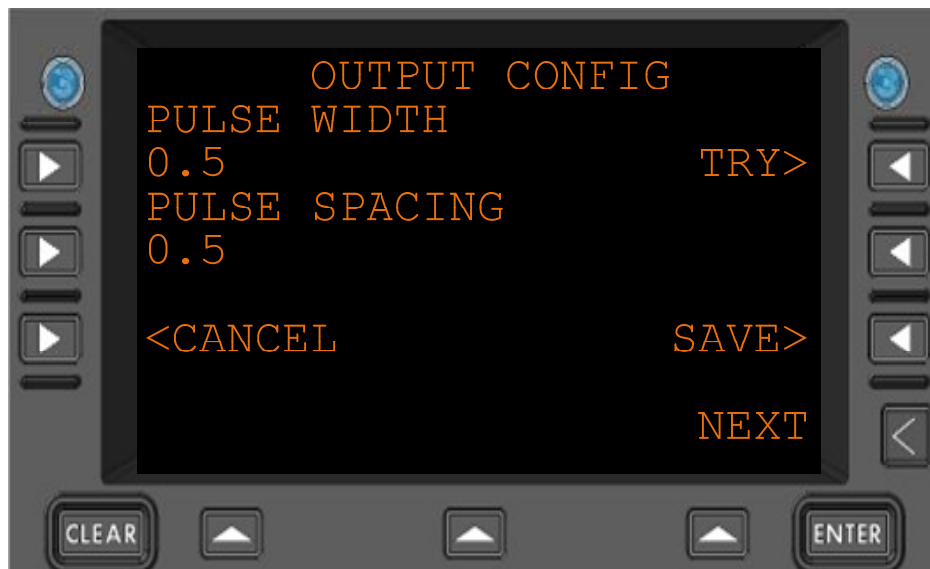


Figure 3.12.13-1 Output Configuration

PULSE WIDTH	Restricted to a float number between .1 second and 10.0 seconds
PULSE SPACING	Restricted to a float number between .1 second and 10.0 seconds
TRY>	The ARINC 429 input is selected as the source.
<CANCEL	Return to previous page – Do not save
SAVE>	Save the changes. Will cause the Dlink+ w/CPDLC to reboot after saving.

4 ACARS Menus

4.1 ACARS Index Menu



Figure 3.12.13-1 ACARS Index Menu

<SVC MSGS	Navigate to the Service Messages Menu
<ATS MSGS	Navigate to the ATS Messages Menu
<FLT INFO	Navigate to the Flight Info Menu
MSG LOG>	Navigate to the Message Log Menu
SYS CNTRL>	Navigate to the System Control Messages Menu
STA TABLE>	Navigate to the Station Table Menu
FREQ	The current frequency
STATUS	The current radio status
SQP	The current Signal Quality Parameter, VHF signal strength
<RETURN	Return to previous page

4.1.1 ACARS Index – Service Messages Menu

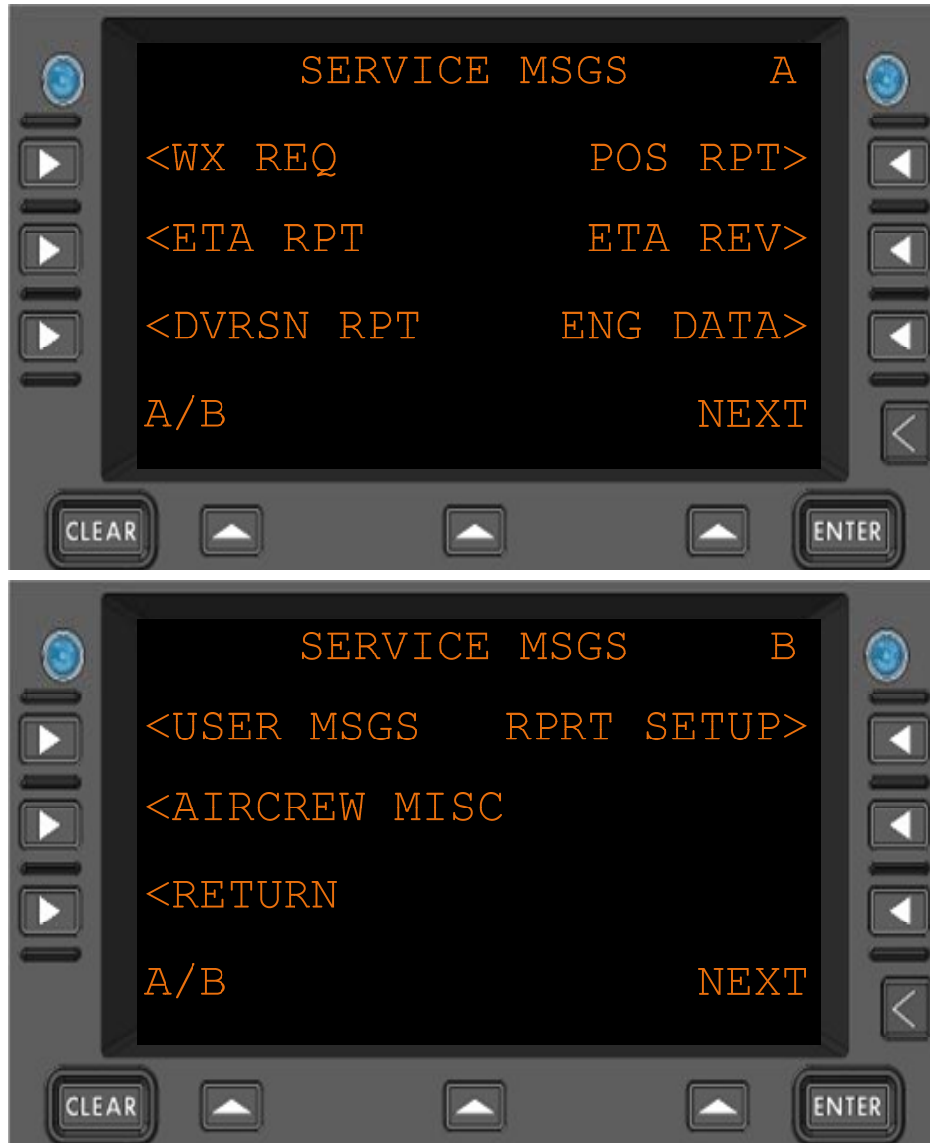


Figure 4.1.1-1 Service Messages Menu

<WX REQ	Navigate to the Weather Request Menu
<ETA RPT	Navigate to the ETA Report Menu
<DVRSN RPT	Navigate to the Diversion Report Menu
<USER MSGS	Navigate to the User Messages Menu
<AIRCREW MISC	Navigate to the Aircrew Miscellaneous Menu
POS RPT>	Navigate to the Position Report Menu
ETA REV>	Navigate to the ETA Revision Menu
ENG DATA>	Navigate to the Engine Data Menu
RPRT SETUP>	Navigate to the Report Setup Menu
<RETURN	Return to previous page

4.1.2 ACARS Index – ATS Requests Menu

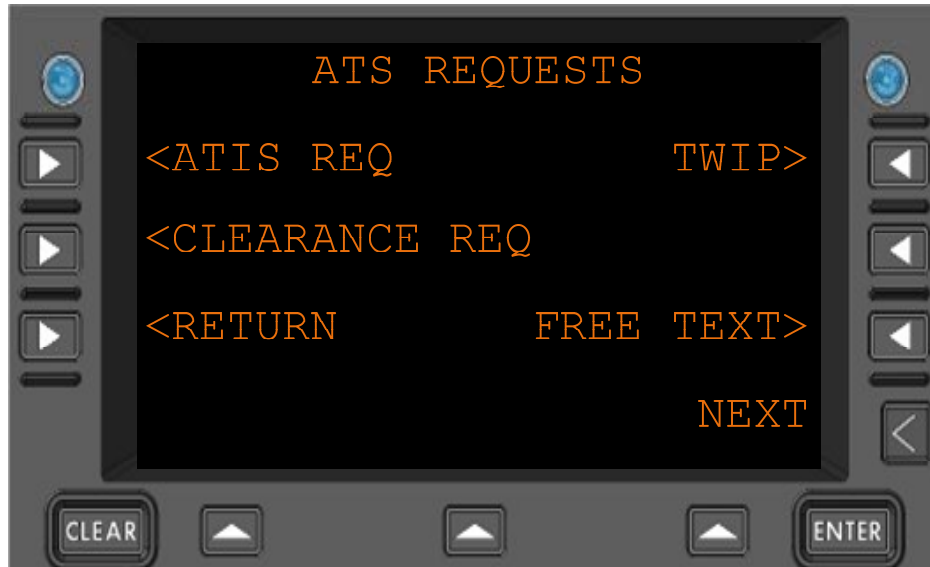


Figure 4.1.2-1 ATS Messages Menu

<ATIS REQ	Navigate to the ATIS Request Menu
<CLEARANCE REQ	Navigate to the Clearance Request Menu
TWIP>	Navigate to the TWIP Menu
FREE TEXT>	Navigate to the Free Text Menu
<RETURN	Return to previous page

4.1.3 ACARS Index – Message Log Menu

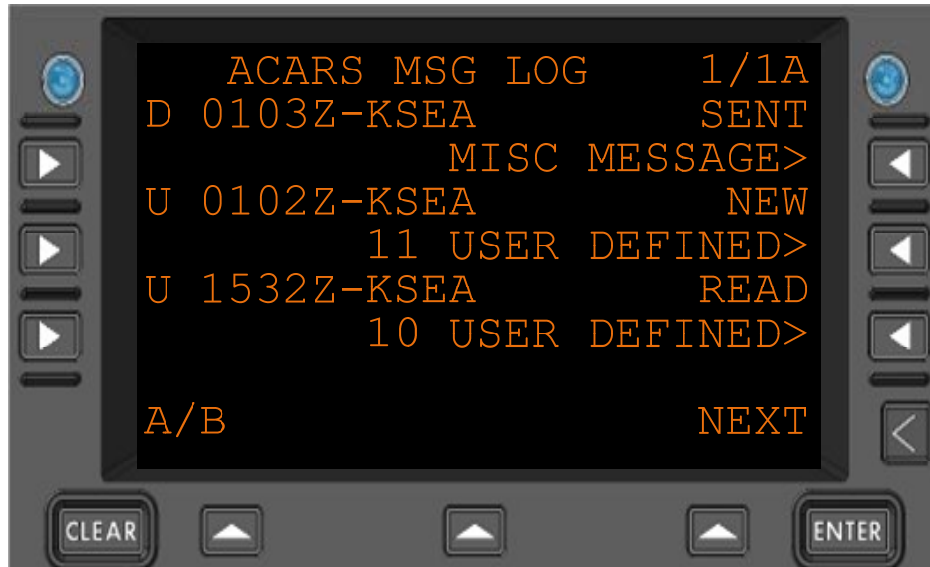


Figure 4.1.3-1 ACARS Message Log Menu

D or U	Uplink or Downlink
0103Z	Time referenced to Zulu when the message was sent or received. Varies with each message
SENT NEW READ	Status of the message. Will change from NEW to READ after viewing.
10 USER DEFINED>	Navigate to menu to display message. Text varies with message

4.1.3.1 ACARS Index – Message Log Viewing Menu

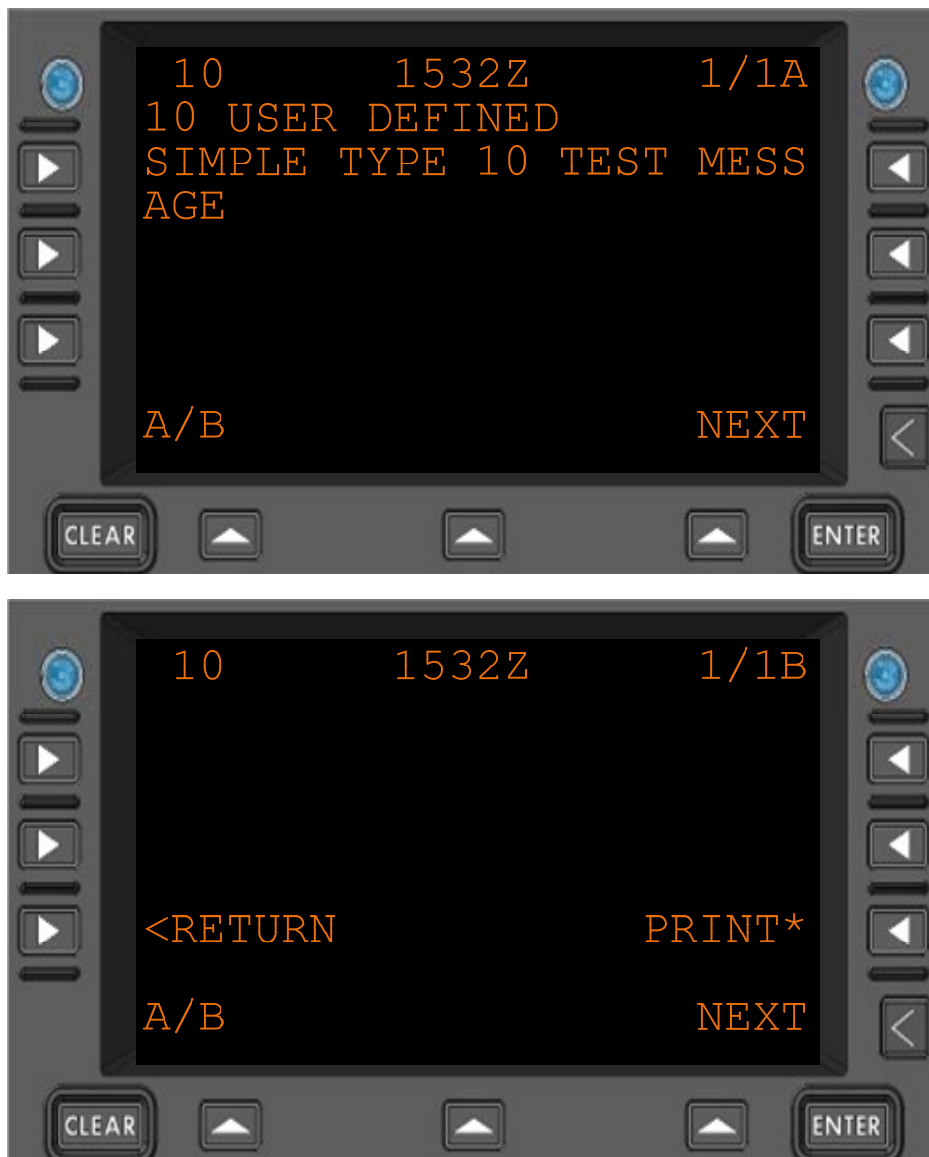


Figure 4.1.3-2 ACARS Message Log - View Message

- 10** Label associated with message

- 1532Z** Time referenced to Zulu when the message was sent or received.
Varies with each message

- Message text.
Varies

- PRINT*** Send the message to the printer.

- <RETURN** Return to previous page

4.1.4 ACARS Index – System Control Messages Menu

See Section System Control Messages Menu

4.1.6 ACARS Index – Station Table AOA Stations Menu



Figure 4.1.6-1 Station Table AOA Stations

- STA** Station identifier

- *** The asterisk signifies which is the currently linked station

- SQP** Signal Quality Parameter – VHF signal strength

- AIRPORT** Airport associated with the current station

4.1.7 ACARS Index – Flight Information Menu

See Main –

4.2 ACARS Service Messages Menus

4.2.1 ACARS Service Messages – Weather Request Menu



Figure 4.2.1-1 Weather Request Menu

FREE TEXT Free text to be sent with the Weather request

SEND* After free text has been entered the SEND prompt will allow it to be sent.

<RETURN Return to previous page

4.2.2 ACARS Service Messages – Estimated Time of Arrival Report Menu



Figure 4.2.2-1 ETA Report Menu

DEST STA	Destination station (AAA)
ETA	Estimated Time of Arrival (HHMM)
FUEL ON BOARD	Current fuel on board (ZZZZ)
FREE TEXT	Up to 24 characters of free text to be sent with the message
SEND*	When the DEST STA, ETA, and FUEL ON BOARD have been filled in the SEND prompt will appear.
<RETURN	Return to previous page

4.2.3 ACARS Service Messages – Diversion Report Menu

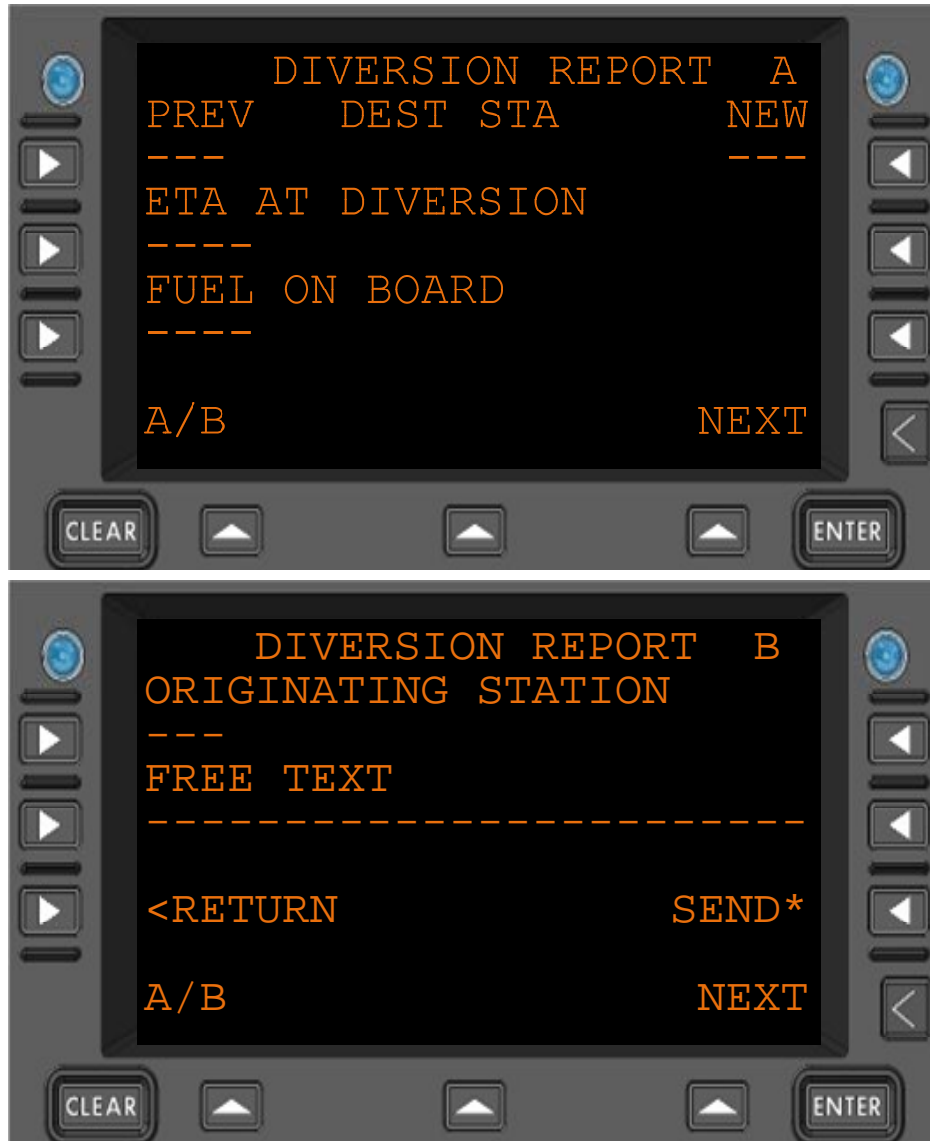


Figure 4.2.3-1 Diversion Report menu

PREV	The previous destination station. (AAA) 3 alpha-numeric characters
NEW	The new destination station. (AAA) 3 alpha-numeric characters
ETA AT DIVERSION	Estimated Time of Arrival at the new destination station (HHMM)
FUEL ON BOARD	Current quantity of fuel on board (ZZZZ) 4 digits, zero filled
ORIGINATING STATION	The originating station; take off (AAA) 3 alpha-numeric characters
FREE TEXT	Up to 24 characters of free text
SEND*	When the data items are filled in satisfactorily the SEND prompt will appear
<RETURN	Return to previous page

4.2.4 ACARS Service Messages – Position Report Menu Page 1

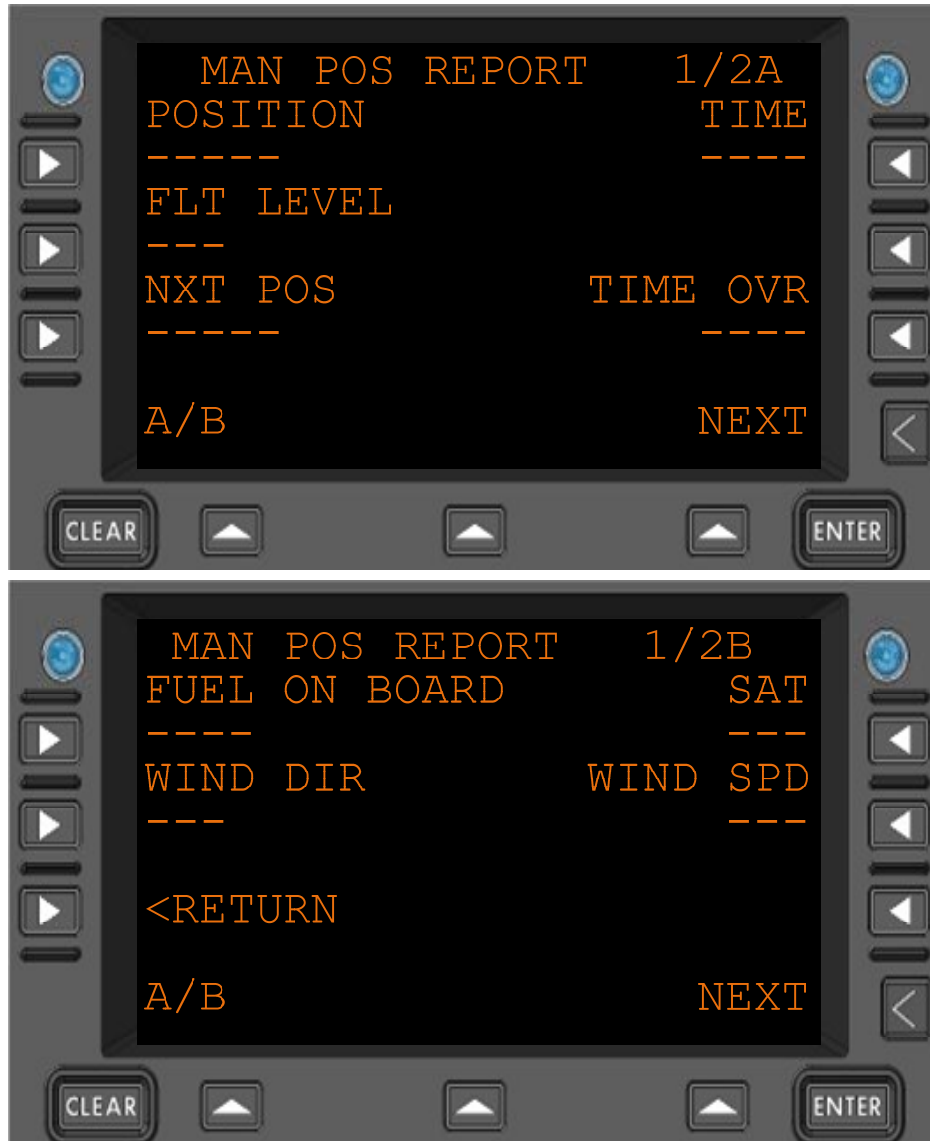


Figure 4.2.4-1 Manual Position Report Menu 1

POSITION	Current position. 1-5 alpha-numeric characters. May be a 3 character radio NAVID
FLT LEVEL	The current altitude. 3 digits zero-filled. Generally collected from 429 data.
NXT POS	Next position. 1-5 alpha-numeric characters. May be a 3 character radio NAVID
TIME	Current UTC (HHMM)
TIME OVR	Time estimated at Next Position (HHMM)
FUEL ON BOARD	Current fuel on board (ZZZZ)
SAT	Static Air Temperature (SNN) Where: "S" is "+" or "-". "NN" represents a 2 digit Temperature in Celsius, zero filled.
WIND DIR	Wind Direction (NNN) zero filled [000-359]
WIND SPD	Wind Speed (NNN) zero filled [000-999]
<RETURN	Return to previous page

4.2.5 ACARS Service Messages – Position Report Menu Page 2

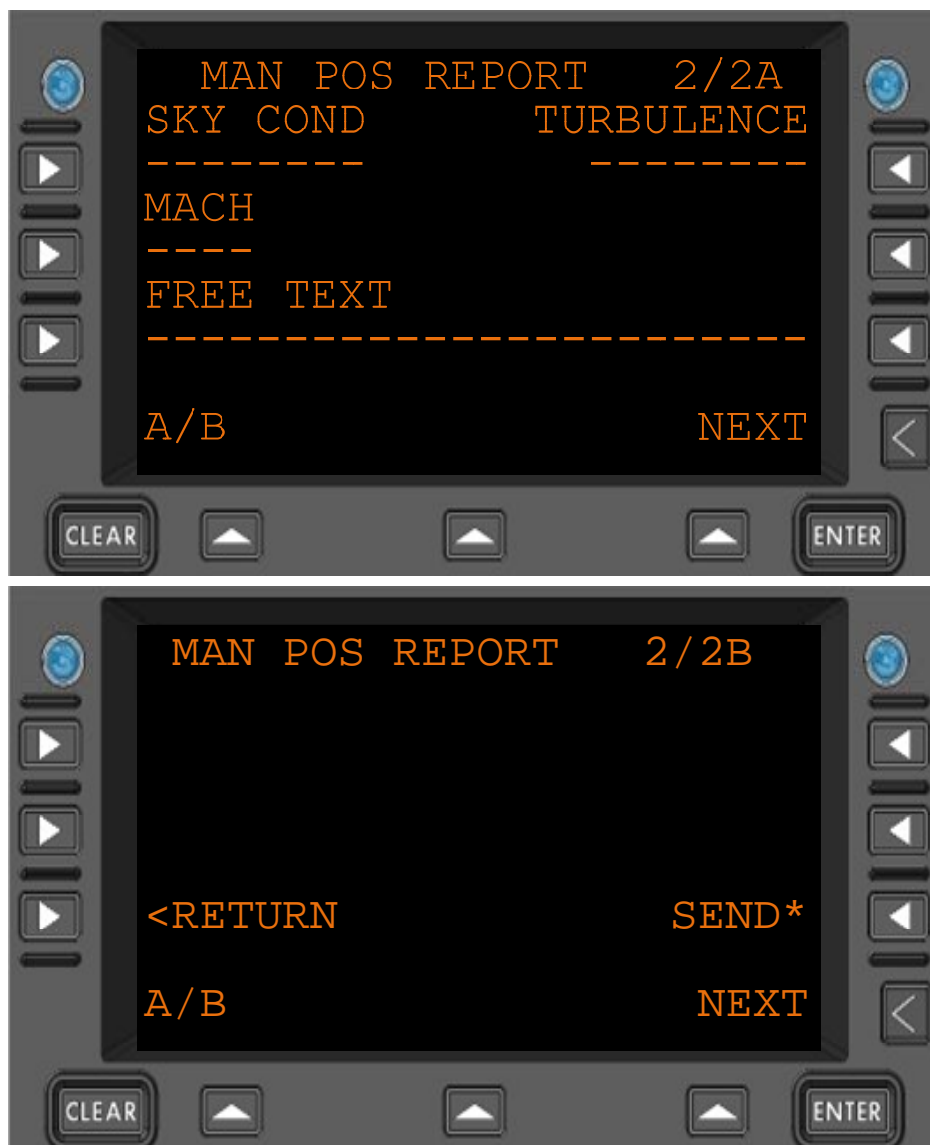


Figure 4.2.5-1 Manual Position Report Menu 2

SKY COND	Sky condition (AAAAAAAA). Ex: CLEAR, OVERCAST.
TURBULENCE	Turbulence (AAAAAAAA). Ex: LIGHT, MODERATE, SEVERE
MACH	The current mach speed of the aircraft (N.NN)
FREE TEXT	Up to 24 characters of free text
SEND*	If Pilot-entered and system data is compiled and formatted the SEND prompt will appear.
<RETURN	Return to previous page

4.2.6 ACARS Service Messages – Estimated Time of Arrival Revision Menu

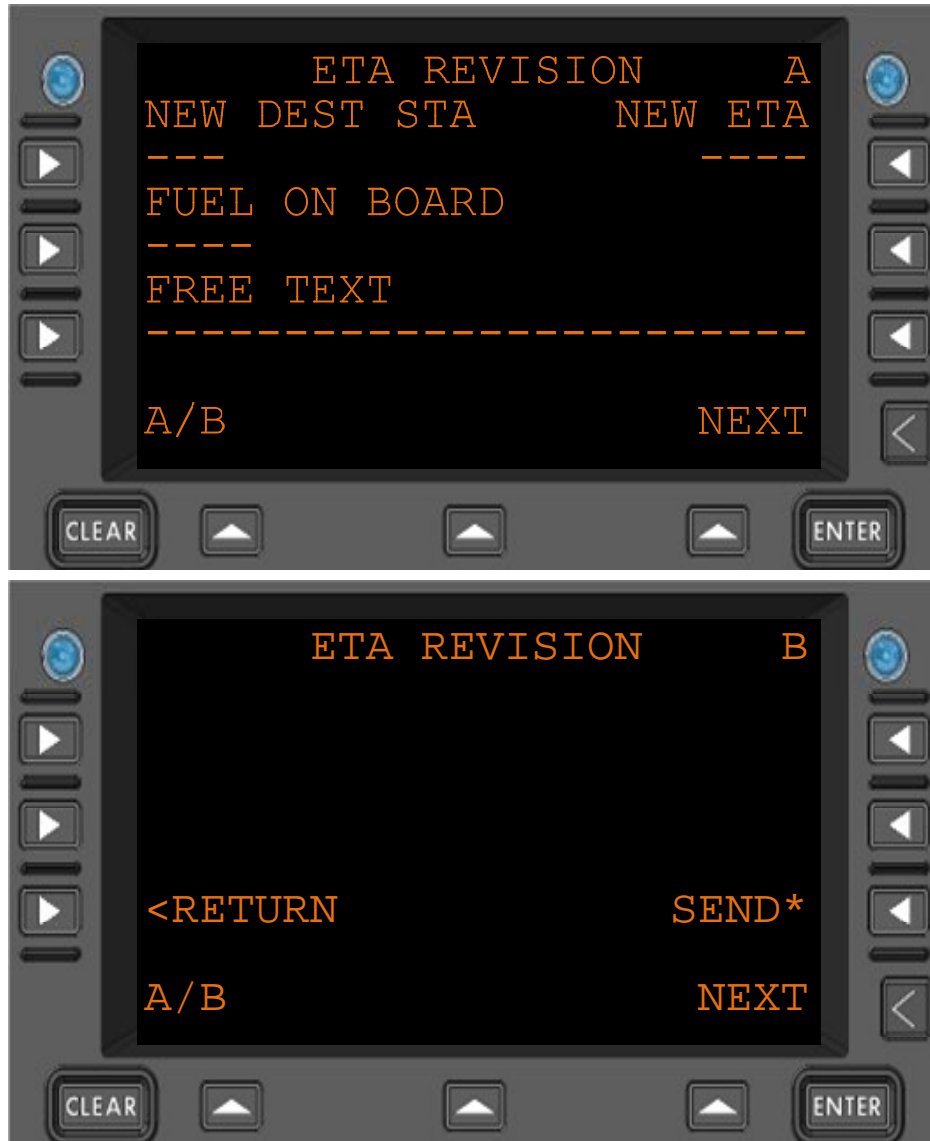


Figure 4.2.6-1 ETA Revision Menu

NEW DEST STA	New Destination Station (AAA)
NEW ETA	New Estimated Time of Arrival (HHMM)
FUEL ON BOARD	Current fuel on board (ZZZZ)
FREE TEXT	Up to 24 characters of free text
SEND*	If Pilot-entered and system data is compiled and formatted the SEND prompt will appear.
<RETURN	Return to previous page

4.2.7 ACARS Service Messages – Engine Data Menu

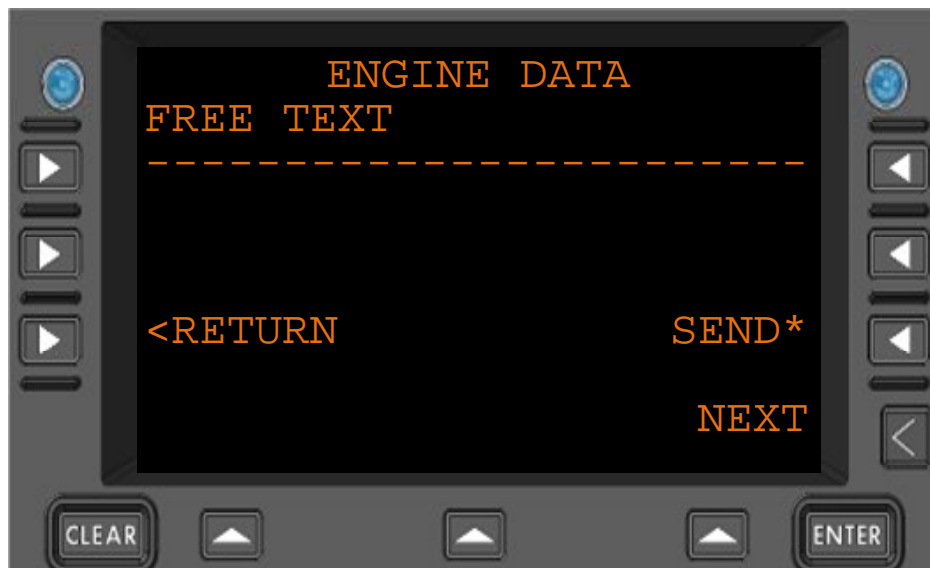


Figure 4.2.7-1 Engine Data Menu

FREE TEXT	Up to 24 characters of free text
SEND*	If Pilot-entered data is compiled and formatted the SEND prompt will appear.
<RETURN	Return to previous page

4.2.8 ACARS Service Messages – User Messages Menu

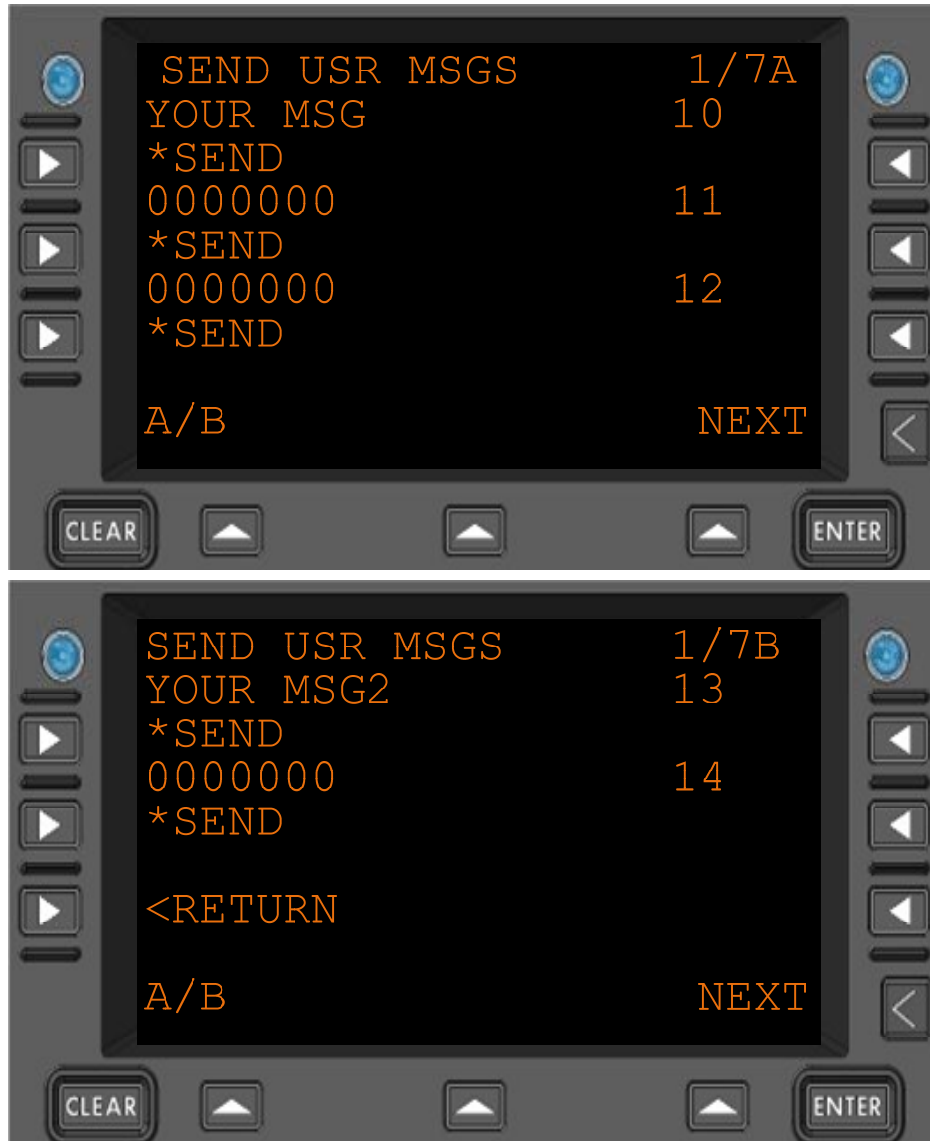


Figure 4.2.8-1 Send User Messages Menu

YOUR MSG	Title of User Defined Message. Example of "YOUR MSG" shown
0000000	Title, and content to be sent, for an undefined user message
*SEND	Send the associated User Defined Message
10	The label of the User Defined Message.
11	The range is from 10-49.
...	
49	
<RETURN	Return to previous page

4.2.9 ACARS Service Messages – Aircrew Miscellaneous Message Menu



Figure 4.2.9-1 Aircrew Miscellaneous Menu

FREE TEXT Up to 24 characters of free text.

SEND* If the free text has been entered the SEND prompt will appear.

<RETURN Return to previous page

4.2.10 ACARS Service Messages – Service Message Setup Menu

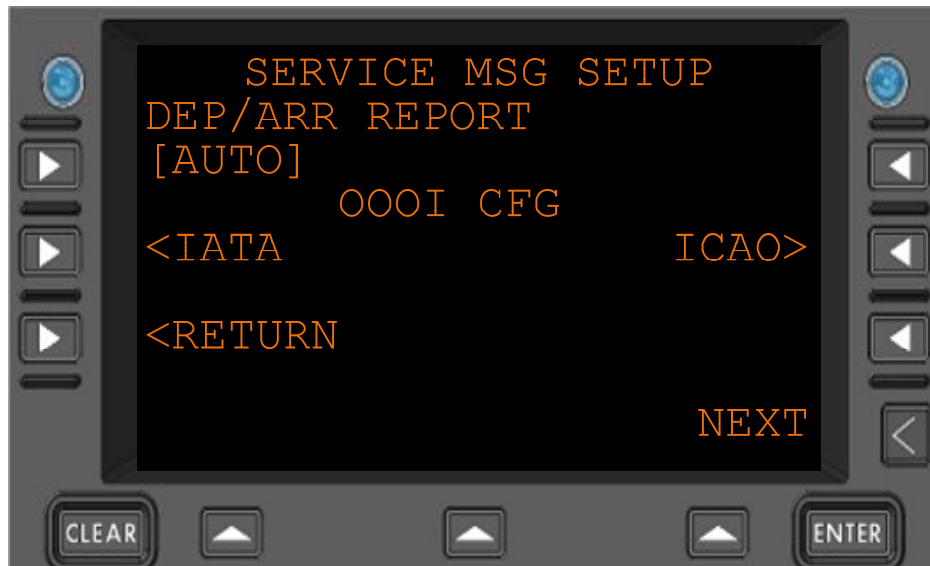


Figure 4.2.10-1 Service Message Report Setup Menu

DEP/ARR REPORT	This configuration item controls the automatic transmission of message Label Q1: "Departure/Arrival Report" in response to an OFF or IN Event. Select from: [AUTO] or [OFF]
<IATA	Navigate to the IATA Service Message Setup Menu
ICAO>	Navigate to the ICAO Service Message Setup Menu
<RETURN	Return to previous page

4.2.11 ACARS Service Messages – IATA Report Setup Menu Page 1

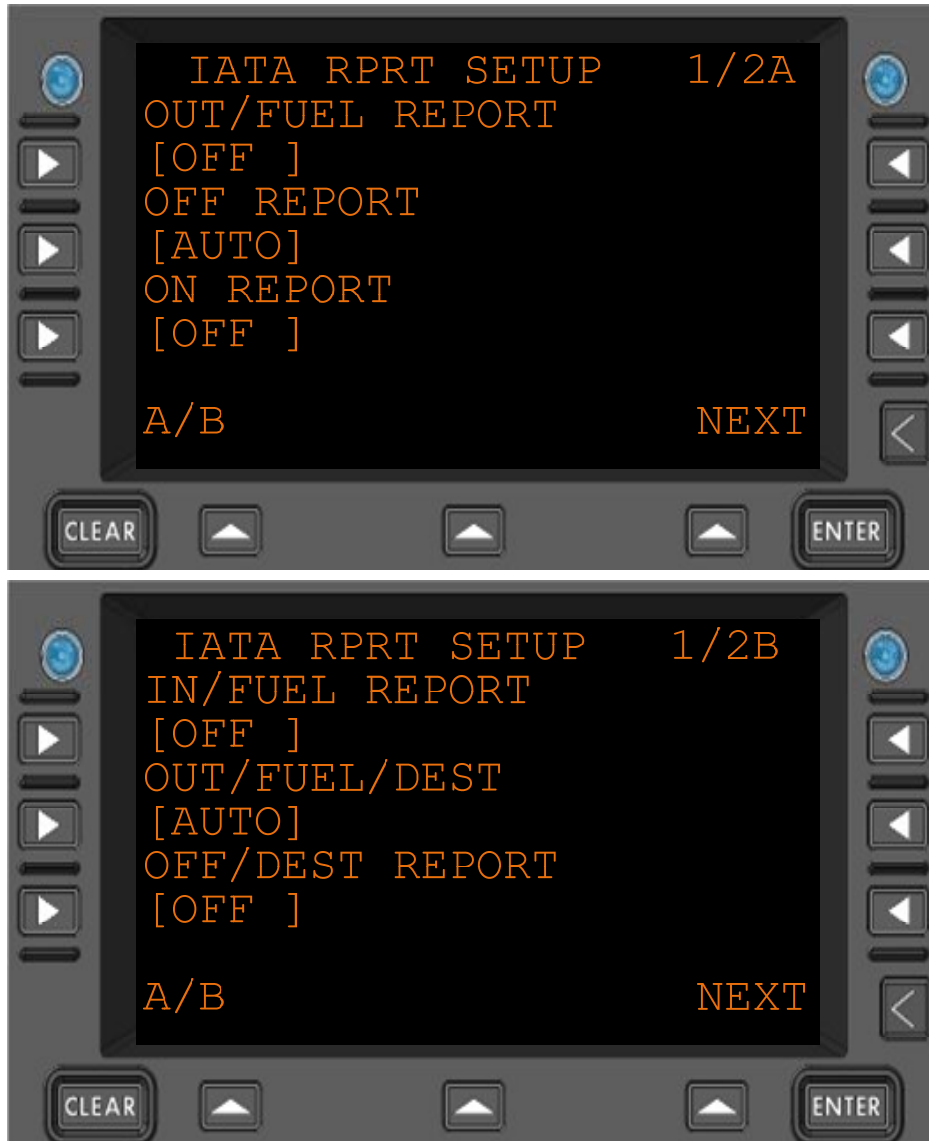


Figure 4.2.11-1 IATA Report Setup Menu 1

- OUT/FUEL REPORT** Controls the automatic transmission of message Label QA: "Out/Fuel Report" in immediately following an OUT event.
 - OFF REPORT** Controls the automatic transmission of message Label QB: "Off Report" in immediately following an OFF event.
 - ON REPORT** Controls the automatic transmission of message Label QC: "On Report" in immediately following an ON event
 - IN/FUEL REPORT** Controls the automatic transmission of message Label QD: "In Fuel Report" in immediately following an IN event.
 - OUT/FUEL/DEST** Controls the automatic transmission of message Label QE: "Out/Fuel/Destination Report" in immediately following an OUT event.
 - OFF/DEST REPORT** Controls the automatic transmission of message Label QF: "Off/Destination Report" in immediately following an OFF event
- All Select from: "[AUTO]" or "[OFF]"

4.2.12 ACARS Service Messages – IATA Report Setup Menu Page 2

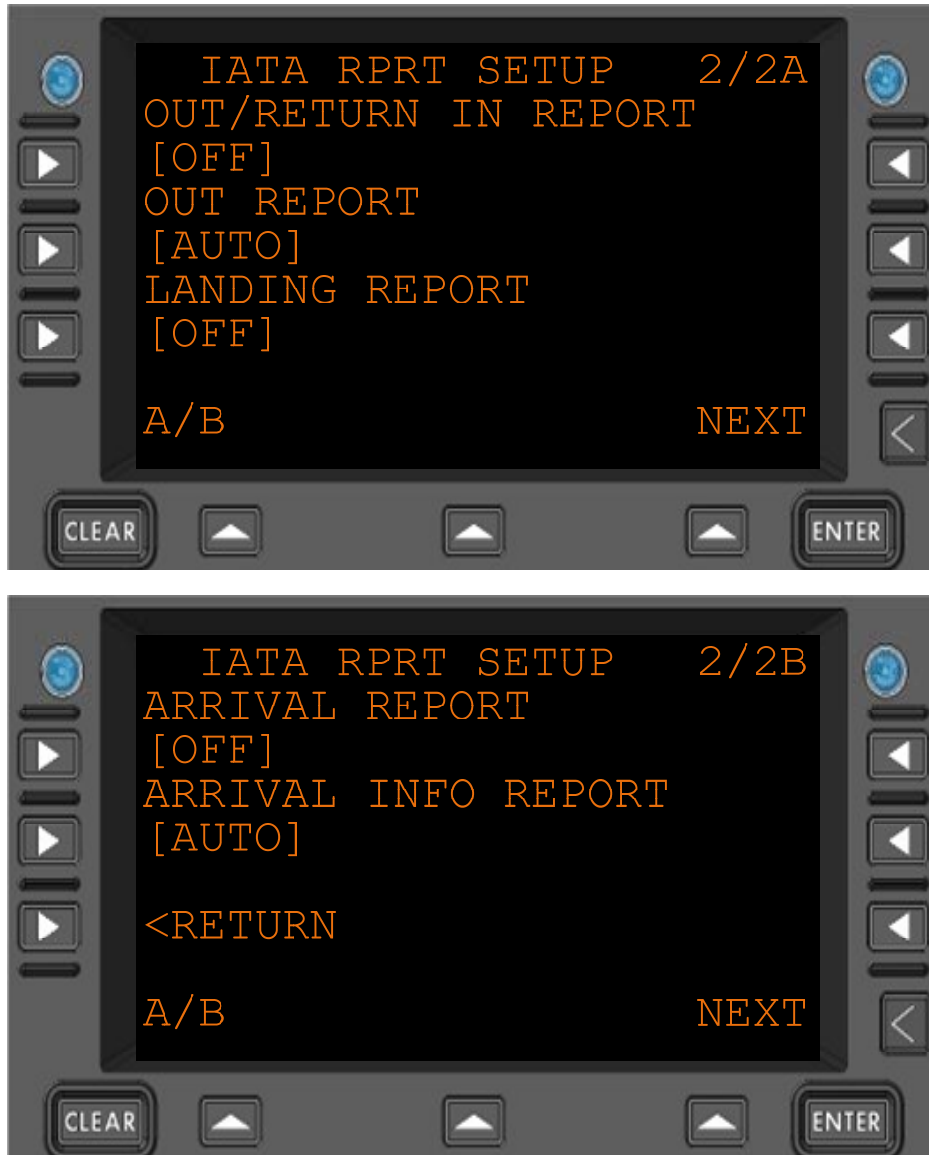


Figure 4.2.12-1 IATA Report Setup Menu Page 2

OUT/RETURN IN REPORT	Controls the automatic transmission of message Label QG: "Out/Return In Report" when an aircraft returns to the gate after an OUT event.
OUT REPORT	Controls the automatic transmission of message Label QH: "Out Report" immediately following an OUT event.
LANDING REPORT	Controls the automatic transmission of message Label QK: "Landing Report" immediately following an ON event.
ARRIVAL REPORT	Controls the automatic transmission of message Label QM: "Arrival INFORMATION Report" immediately following an IN event.
ARRIVAL INFO REPORT	Controls the automatic transmission of a message label QM shall be sent when an "In Event" has occurred.
<RETURN	Return to previous page
All Select from: "[AUTO]" or "[OFF]"	

4.2.13 ACARS Service Messages – ICAO Report Setup Menu

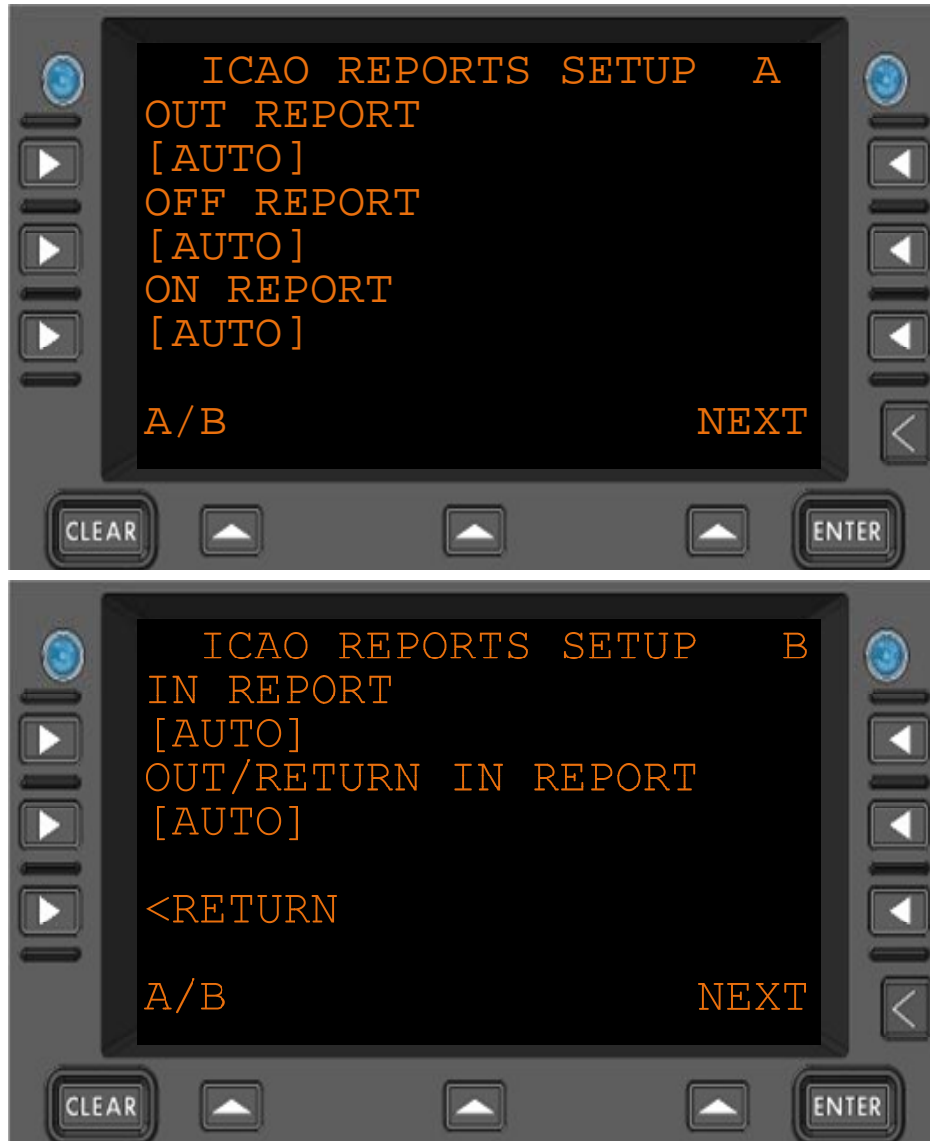


Figure 4.2.13-1 ACARS ICAO Reports Setup Menu

OUT REPORT	Controls the automatic transmission of message Label QP: "Out Report" immediately following an OUT event.
OFF REPORT	Controls the automatic transmission of message Label QQ: "Off Report" in immediately following an OFF event.
ON REPORT	Controls the automatic transmission of message Label QR: "On Report" in immediately following an ON event.
IN REPORT	Controls the automatic transmission of message Label QS: "In Report" in immediately following an IN event.
OUT/RETURN IN REPORT	Controls the automatic transmission of message Label QT: "Out/Return In Report" when an aircraft returns to the gate after an OUT event.
<RETURN	Return to previous page

4.3 ATS Requests Menu



Figure 4.2.13-1 ATS Requests Menu

<ATIS REQ	Navigates to the ATIS Request Menu
<CLEARANCE REQ	Navigates to the Clearance Request Menu
TWIP>	Navigates to the TWIP Request Menu
FREE TEXT>	Navigates to the Free Text Message Menu
<RETURN	Return to previous page

4.3.1 ATS Request – ATIS Report Request Menu

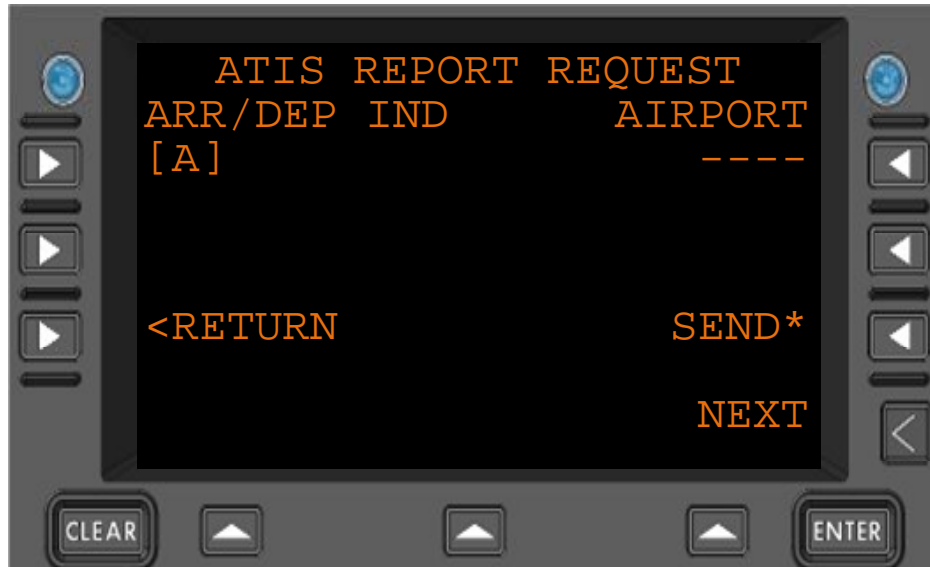


Figure 4.3.1-1 ATIS Report Request Menu

ARR/DEP IND

The Arrival/Departure Indicator

Selections:

"A" is Arrival ATIS

"D" is Departure ATIS

"C" is Arrival ATIS with Automatic update

"E" is Automatic Enroute Information Service (AEIS) or VOLMET

"T" is Terminate automatic update of ATIS

AIRPORT

The Airport ID field. (AAAA)

SEND*

If Pilot-entered and system data is compiled and formatted the SEND prompt will appear. If pressed the formatted message is sent.

<RETURN

Return to previous page

4.3.2 ATS Request – Clearance Request Menu

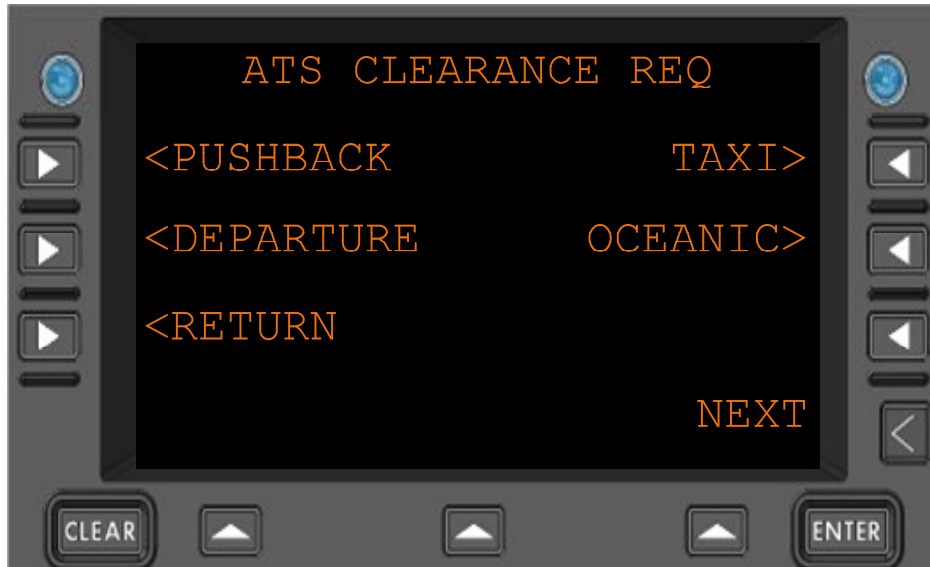


Figure 4.3.2-1 Clearance Request Menu

<PUSHBACK	Navigate to the Pushback Request Menu
<DEPARTURE	Navigate to the Departure Request Menu
TAXI>	Navigate to the Taxi Request Menu
OCEANIC>	Navigate to the Oceanic Clearance Request Menu
<RETURN	Return to previous page

4.3.2.1 Clearance Request – Request Pushback Clearance Menu



Figure 4.3.2-2 Request Pushback Clearance Request Menu

DEP	The origin airport (AAAA)
GATE	Departure gate (AAAAA)
DATE	Date, day, of departure (ZZ)
DEST	The Destination airport (AAAA)
TIME	Time of departure (HHMM)
FREE TEXT	Up to 24 characters of free text
SEND*	If the Pilot-entered and system data is formatted correctly the SEND prompt appears. Pressing SEND will transmit the formatted message
<RETURN	Return to previous page

4.3.2.2 Clearance Request – Request Departure Clearance Menu



Figure 4.3.2-3 Request for Departure Clearance Menu

DEP	The origin airport (AAAA)
GATE	Departure gate (AAAAA)
DEST	The Destination airport (AAAA)
ATIS ID	The ATIS ID (A)
FREE TEXT	Up to 24 characters of free text
SEND*	If the Pilot-entered and system data is formatted correctly the SEND prompt appears. Pressing SEND will transmit the formatted message
<RETURN	Return to previous page

4.3.2.3 Clearance Request – Request Taxi Clearance Menu



Figure 4.3.2-4 Request For Taxi Clearance Menu

DEP	The origin airport (AAAA)
DATE	Date, day, of departure (ZZ)
DEST	The Destination airport (AAAA)
TIME	Departure time (HHMM)
FIELD LOCATION	Location (AAAAA)
FREE TEXT	Up to 24 characters of free text
SEND*	If the Pilot-entered and system data is formatted correctly the SEND prompt appears. Pressing SEND will transmit the formatted message.
<RETURN	Return to previous page

4.3.2.4 Clearance Request – Request Oceanic Clearance Menu

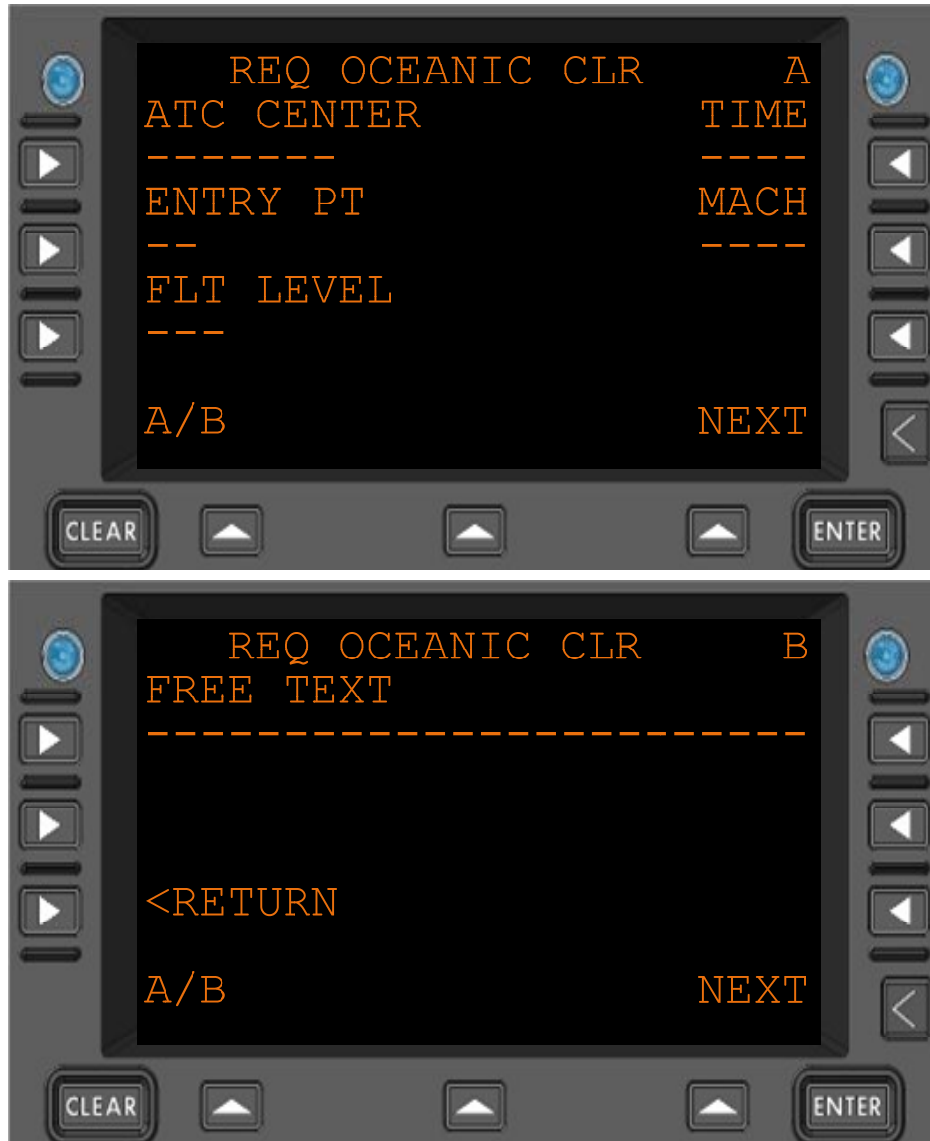


Figure 4.3.2-5 Request For Oceanic Clearance Menu

ATC CENTER	Identification of the ATC center. (AAAA) or (AAAAAAA)
ENTRY PT	Station or way point of entry (AAAAA)
FLT LEVEL	Altitude in thousands of feet (ZZZ)
TIME	Entry time (HHMM)
MACH	Mach speed (ZZZ)
FREE TEXT	Up to 24 characters of free text
SEND*	If the Pilot-entered and system data is formatted correctly the SEND prompt appears. Pressing SEND will transmit the formatted message.
<RETURN	Return to previous page

4.3.3 ATS Request – Terminal Weather Information for Pilots Request Menu



Figure 4.3.3-1 TWIP Request

TWIP CODE	Terminal Weather Information for Pilots. Selections: "N" is Single TWIP Report "C" is TWIP with Automatic update "T" is Terminate automatic update of TWIP
AIRPORT	Airport Identifier (AAAA)
SEND*	If the Pilot-entered and system data is formatted correctly the SEND prompt appears. Pressing SEND will transmit the formatted message.
<RETURN	Return to previous page

4.3.4 ATS Request – ATS Free Text Message Menu

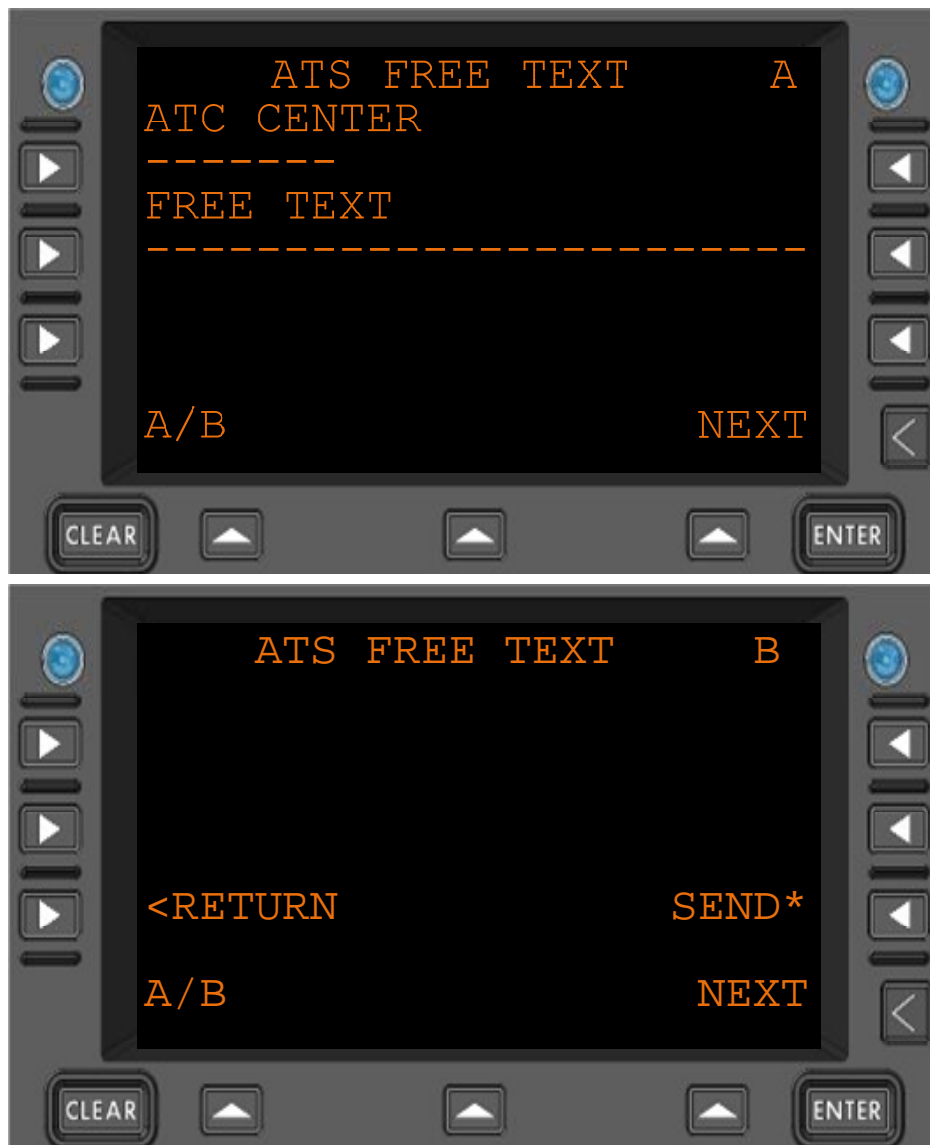


Figure 4.3.4-1 ATS Free Text Menu

ATC CENTER	Identification of the ATC center. (AAAA) or (AAAAAAA)
FREE TEXT	Up to 24 characters of free text
SEND*	If the Pilot-entered and system data is formatted correctly the SEND prompt appears. Pressing SEND will transmit the formatted message.
<RETURN	Return to previous page

4.4 System Control Messages Menu

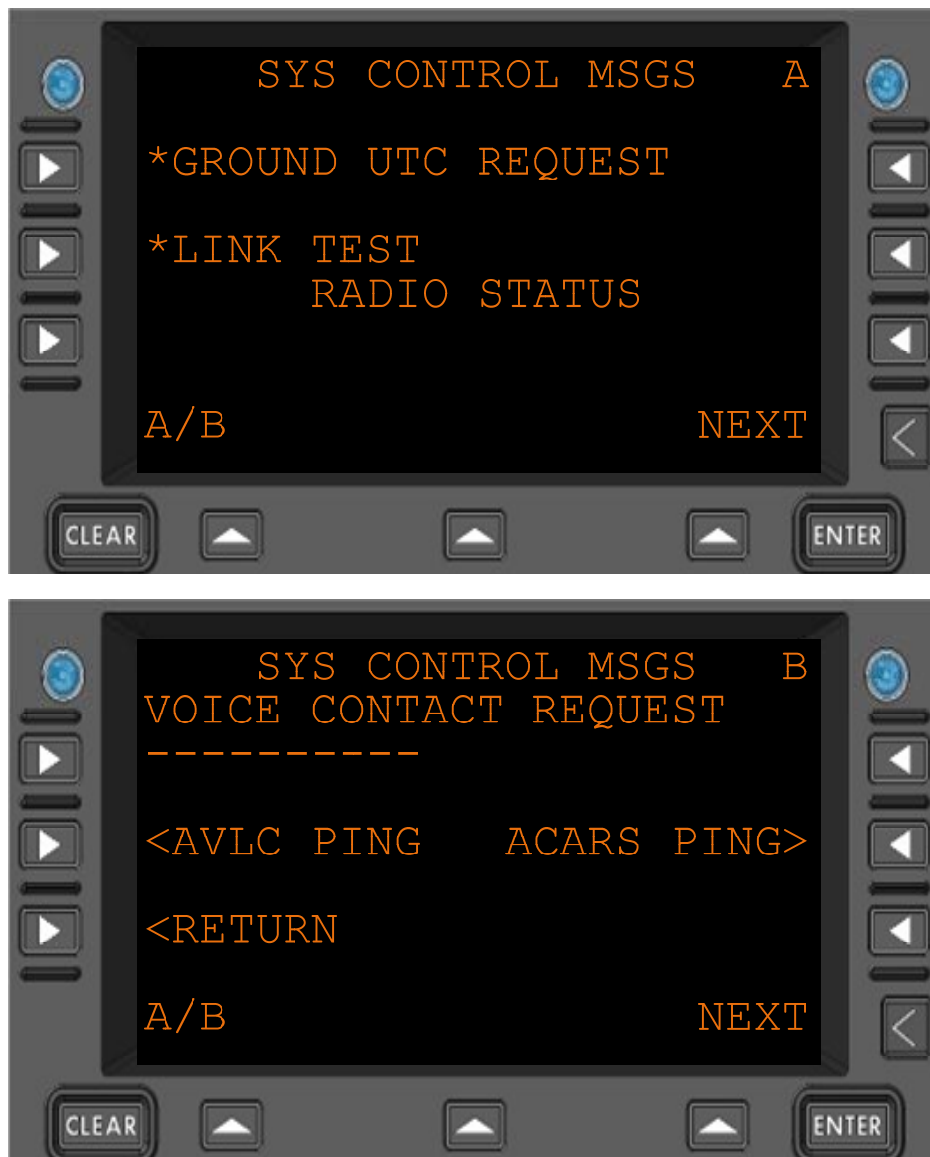


Figure 4.3.4-1 System Control Messages Menu

*GROUND UTC REQUEST	Send request for current UTC. Note Flight Number must be entered prior to message being sent.
*LINK TEST	Send link test message. Note Flight Number must be entered prior to message being sent.
RADIO STATUS	Shows current radio status
VOICE CONTACT REQUEST	Free text (AAAAAAAAAA)
<AVLC PING	Navigate to the AVLC Ping menu
ACARS PING>	Navigate to the ACARS Ping Menu
<RETURN	Return to previous page

4.4.1 System Control Messages – AVLC Ping Test Menu

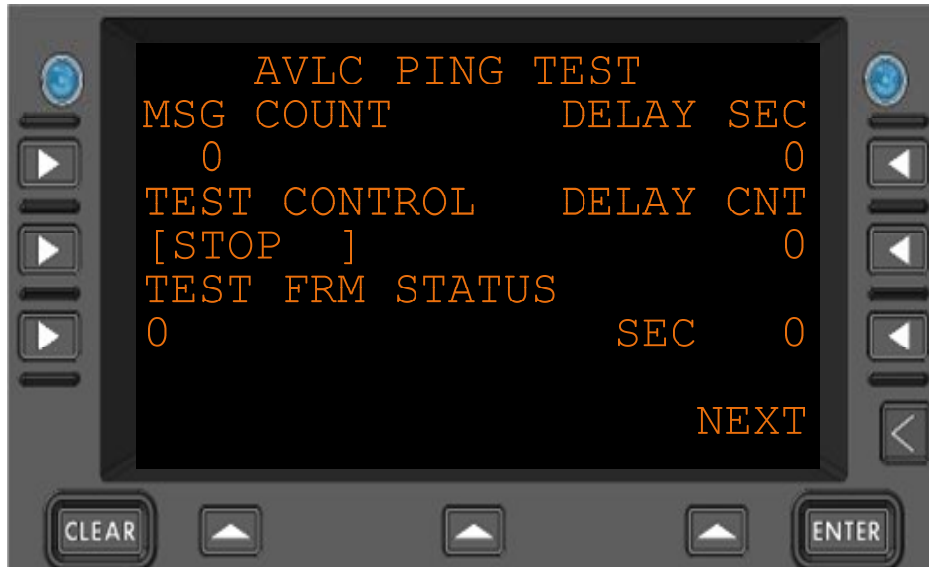


Figure 4.4.1-1 AVLC Ping Test Menu

MSG COUNT	How many test frames are to be sent.
DELAY SEC	How many seconds to wait between test frame transmissions.
TEST CONTROL	Instructions to the test function. Select from: STOP, GO, WAIT, FAIL, HOLD
DELAY CNT	Seconds to wait until the next transmission.
TEST FRM STATUS	Current testing status. 0 – Inactive 1 – Send message 2 – No Peer 3 – Not supported by peer 4 - Sending 5 – Contact Made.
SEC	Average response time in seconds.
<RETURN	Return to previous page

4.4.2 System Control Messages – ACARS Ping Test Menu

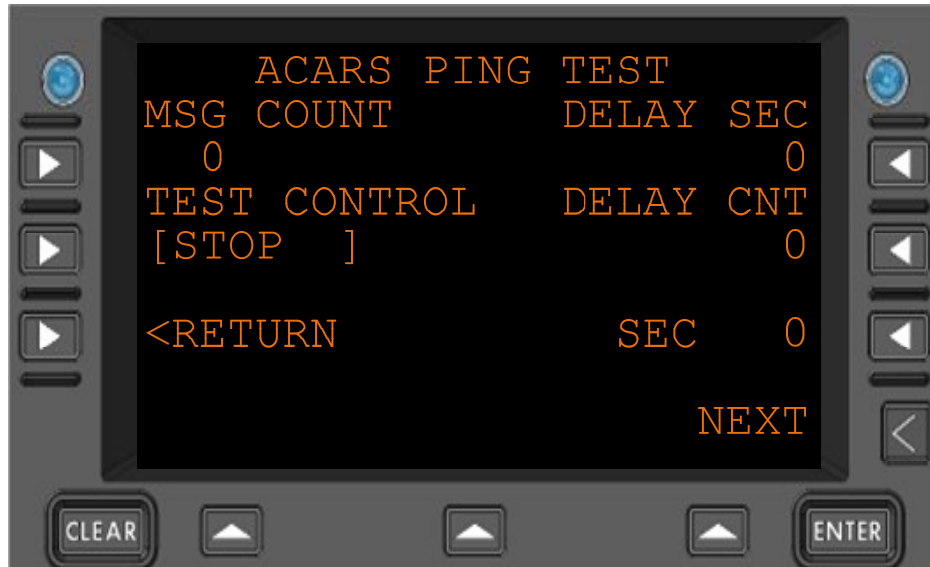


Figure 4.4.2-1 ACARS Ping Test Menu

MSG COUNT	How many test frames are to be sent.
DELAY SEC	How many seconds to wait between test frame transmissions.
TEST CONTROL	Instructions to the test function. Select from: STOP, GO, WAIT, FAIL, HOLD
DELAY CNT	Seconds to wait until the next transmission.
SEC	Average response time in seconds.
<RETURN	Return to previous page