COMMUNICATION PROCEDURE SIGNALS

- 1. When so ordered by the Chief of Naval Operations, this publication will become effective, superseding U. S. Naval Radio Operators' Signals No. 1, which shall be destroyed by burning; no destruction report is required.
 - 2. Exercise care to prevent loss of this publication.

WILLIAM D. LEAHY.

RECORD OF CHANGES			
CHANGE No.	Authority	Entered by—	DATE
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#### INSTRUCTIONS

- 1. These procedure signals are an essential part of communication procedure, and shall be always available to operators for use with Army, Navy, and Coast Guard stations. Instructions for their use are contained in Communication Instructions, U. S. Navy, and in Joint Army and Navy Radiotelegraph and Radiotelephone Procedure. THEIR USE MUST BE CAREFULLY SUPERVISED.
- 2. The signals are divided into two parts: "Joint (Army and Navy)"; and "Navy Use Only." The first part is for use between the Army, Navy, and Coast Guard and within these services; the second part is for use only within the Navy or Coast Guard.
- 3. Signals marked with an asterisk (*) shall be carried in aircraft; the entire list may be carried.
- 4. Procedure signals are messages and shall be used only when necessary. They shall be recorded in the log or on a message blank.
- 5. Plain language shall not be used with these signals. Where signals fail to convey the meaning desired, a properly released dispatch shall be used.
- 6. INT may be used preceding a signal to indicate an interrogatory sense when a signal with the desired interrogatory meaning is not listed. The signal "ZZB" may be used preceding a signal to give a negative sense in case a signal with the desired negative meaning is not listed. (See examples.)
- 7. All blanks, except those within parentheses, must be filled in; use of blanks in parentheses is optional. Data for blanks shall appear in the same order as the blanks in the signal. Stations, addresses, and locations shall be indicated by call signs and addresses from call books. Time shall be indicated by a four-numeral group. Dates may be indicated by numerals separated from the dispatch identification data by a slant (/) sign. Signals may be separated by space signs to prevent misinterpretation.

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### INSTRUCTIONS

(A) ANSWERING—AIRCRAFT

(C) CALLING—COMMUNICATION

(D) DIRECTION FINDER

(E) EQUIPMENT, ADJUSTMENTS OF EQUIPMENT

(F) FREQUENCY, FREQUENCY ADJUSTMENTS

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(L) LIST OF TYPES AND MEANS OF COMMUNICATION (M) MESSAGES, TRAFFIC

(N) STATION SERIAL NUMBERS

(O) OPERATING

(P) FACSIMILE

(R) RETRANSMISSION, ROUTING, RELAYING, AND DELIVERY

(S) SIGNALS, SIGNAL STRENGTH, READABILITY (T) TIME AND TRANS-MISSIONS

(W) WATCHES AND SCHEDULES

(X) AUTOMATICS

(Z) MISCELLANEOUS

READABILITY AND SIGNAL STRENGTH TABLES

- 8. Readability and signal strength tables. (See examples.)
- 9. Changes or additions to signals fc. only by the Chief of Naval Operations; ch for "Joint (Army and Navy)" use may be War and Navy Departments. Authorized recorded in the "Record of Changes."

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# (A) ANSWERING—AIRCRAFT

ZAA*	You are causing delay by slowness in answering.
ZAB*	You are causing confusion by answering out of order.
ZAC*	Answer in alphabetical order of call signs.
7.1D*	Answer me (or ) on $kc$ .
ZAE*	Am reeling in antenna (1. Before landing; 2. To rejoin formation).
ZAF*	Am forced to land (at or near) because of (1. Fire;
23122	2. Collision; 3. Engine failure; 4. Out of gas).
ZAG	
ZAH	
ZAI	
ZAJ	
ZAK	
ZAL	
	Navy Use Only
ZAM	I am using this transmitter to answer calls on two or more frequencies. Answer to calls may be delayed.
ZAN	
ZAO	
ZAP	
ZAQ	
$\mathbf{ZAR}$	
719	

# (C) CALLING—COMMUNICATION

ZCA	Are you (or is) in communication with (by)
	(1. Radio; 2. Wire; 3. Visual)?
ZCB	I am (or is) in communication with (by)
	(1. Radio; 2. Wire; 3. Visual).
ZCC	Call me again at (on kc).
ZCD	Following is what I (or) sent (at).
ZCE	I have (or has) been calling you (on kc).
ZCF	I (or) will call you again as soon as I (he) can (or at) (on ke).
ZCG	Inform that I have (or has) been calling him (on kc).
ZCH	Cease listening for messages from
ZCI	Listen in for messages from (on kc).
ZCJ	You were (or was) sending at the same time as
ZCK	Transmit message(s) without preliminary call-up.
ZCL	Make (or direct to make) preliminary call-up before transmitting traffic.
ZCM	Collective (or net) call sign for the present includes
ZCN	
ZCO	
ZCP	
	Navy Use Only
<b>7</b> 60	TVI
ZCQ	What is call sign of ship which is acting as flagship for?
ZCR	Call sign of ship acting as flagship for is
ZCS	Did you (or) hear(at)?
ZCT	I have (or has) been unable to communicate with (since).
ZCU	I (or) last heard at 4-7954

## (D) DIRECTION FINDER

ZDA*	Transmit "MO's" and call signs (on kc).
ZDB*	Report bearings by direction finder in plain English.
ZDC*	What is my bearing (code understood if not followed by ZDB)?
ZDD*	Your bearing in code was at
ZDE*	Your bearing in plain English was at
ZDF*	Your bearing from was (and distance from
	was) at
ZDG*	Bearing furnished you is (1. Bilateral; 2. Unilateral).
	I am unable to furnish you (or) bearing now. Call again
	in minutes.
ZDI*	I am (or is) now ready to furnish you (or) with
	radio direction-finder bearings.
ZDJ*	I am (or is) unable to furnish reliable bearings due to
	(1. Night effect; 2. Poor minimum; 3. Uncalibrated sector; 4. Weak
	signals; 5. Poor note; 6. Interference; 7. Uncalibrated frequency
	8. Poor cross).
ZDK*	What is my bearing and distance from you (or)?
ZDL*	What is reciprocal of bearing just furnished me by you (or)?
ZDM*	Reciprocal of bearing just furnished you by me (or) is
ZDN*	Bearings appear to be reliable.
ZDO	
ZDP	
ZDQ	
ZDR	
	Navy Use Only
ZDS	
ZDT'	
ZDU	
ZDV	

# (E) EQUIPMENT, ADJUSTMENTS OF EQUIPMENT

	I am (or is) going to use
	Use
!	I am (or is) unable to use
)	My (on kc) is out of commission.
l f	Repairs completed. Am in commission now.
	I have adjusted my
ŀ	Cease using
	I am (oris) using
	Your appears to be defective (on kc).
	Your key or relay appears to be sticking.
	Your speed key is improperly adjusted.
	Navy Use Only
	How is my note?
	Your note is (1. Good; 2. Poor; 3. Rising and falling;
	4. Over-modulated; 5. Under-modulated).
	Your dots are (1. Too heavy; 2. Too light).
	Tour dots are (r. Too heavy) = = = = = = = =

# (F) FREQUENCY, FREQUENCY ADJUSTMENTS

ZFA*	I must shift to work another station (or).
ZFB	Frequency mc.
ZFC	Frequencykc.
ZFD*	Send V's on this frequency (or kc).
ZFE*	I am (or is) shifting to transmit on kc (at).
ZFF*	I am (or is) shifting to receive on kc (at).
ZFG*	I am (or is) able to receive on kc.
ZFH*	I am (or is) able to transmit on kc.
ZFI*	Shift (or direct kc.
ZFJ*	Shift (or direct ) to transmit on kc.
ZFK*	Shift (or direct kc.
ZFL*	What frequency are you (or is)?
ZFM*	How does my frequency check?
ZFN*	Your frequency is correct.
ZFO*	Your frequency is too high (or is ke too high).
ZFP*	Your frequency is too low (or is ke too low).
ZFQ*	Your frequency is kc.
ZFR*	Adjust your transmitter frequency to zero beat with mine (or with
21 10	).
	Navy Use Only
ZFS	Adjust transmitter to proper frequency (or to kc).
ZFT	Transmit on kc. If I do not hear you within 20 minutes I
231: 1	will shift back to present frequency.
$\mathbf{ZFU}$	I am going to transmit on kc. If you do not answer within
	20 minutes I will shift back to present frequency.
ZFV	Measure your (or) frequency on this circuit (or on kc).

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# (G) NET CONTROL (ARMY), GUARDS (NAVY)

ZGA	Indicate ships or stations for which you are radio guard (net control station (on kc)).
70D	m 1 radio guard or net control for (until/
ZGB	Are you (or is) radio guard or net control station for
ZGC	( 1-0)9
700	I am (or is) radio guard or net control station for (on
ZGD	
ZOP.	kc).
ZGE	
ZGF	·
	·
ZGG	
ZGH	
ZGI	
	Navy Use Only
ZGJ	Guard (or direct to guard) intercept schedules for
ZGJ	1.1 from the one one one
7 CIZ	I am controlling (or will control) this frequency (or kc).
ZGK	1 am controlling (or
ZGL	
7016	
ZGM	
2037	
ZGN	
ZGO	
ZGP	
	4—7954

### (L) LIST OF TYPES AND MEANS OF COMMUNICATION

C	rw.
I	CW.
Ί	ype or model transmitter.
	ype or model receiver.
	andline or cable (1. Telegraph; 2. Telephone).
	isual.
F	Ladio (1. Radio beacon; 2. Aircraft radio; 3. Field radio; 4. Radiotelegraph; 5. Radiotelephone).
	Navy Use Only
g	upersonics.
A	utomatic (1. Recorder; 2. Perforator; 3. Keying head).
	ound.
	acsimile.
U	se visual method
<del>-</del> -	

4-7954

# (M) MESSAGES, TRAFFIC

ZMA	I have (or has) messages (numeral indicating number of messages may be followed by O or P to indicate precedence)
	for you (or).
ZMB	Following received from(at).
$\mathbf{ZMC}$	Fragments only received (from).
ZMD	Have you received SOS just made (or made byat)?
ZME	The following is heading of message as received. Check to station of origin if necessary and repeat.
$\mathbf{ZMF}$	Unable to locate message(s) Give better identification data.
ZMG	This message is in error—disregard it.
ZMH	How do you count following test group(s)?
	Word (or words) should be counted as group(s).
ZMI	Hold my message number until correctness is confirmed.
ZMJ	
<b>ZMK</b>	
ZML	
ZMM	
	***************************************
	Navy Use Only
ZMN	There (on hea) along managed to transmit
ZIVIIN	I have (or has) class messages to transmit on this frequency (or kc).
ZMO	
-	Inform me at what time and through what station messagewas passed.
ZMP	Pass this message (or message) to ships for which you are responsible (or to).
ZMQ	Repeat message (or portion indicated).
ZMR	Following is the answer to request for repetition.
ZMS	Spelling of group in message apparently incorrect,
	but message is being forwarded exactly as received.
ZMT	This message is retransmitted to you for (1. Action; 2. Information).
ZMU	Last word received from you (or) was
ZMV	Following is what I received from at
CALL I	4—7054

## (N) STATION SERIAL NUMBERS

ZNA	What was station serial number of last message received from this station (or from)?
ZNB	Station serial number of last message received from you (or from) was
ZNC	What was station serial number of last message you transmitted to me (or to)?
ZND	Station serial number of last message transmitted to you (or to)
ZNE	Number from is blank.
ZNF	Repeat all before group 1 of message number to number transmitted (or transmitted by) to straighten out confusion in serial numbers.
ZNG	Two messages, reference numbers and (or group counts and time of origin and), both received as serial number Designate correct serial number.
ZNH	Change serial number of message with reference numbers
	contain to serial number count and time of origin contains to serial number contains to serial n
ZNI	Prior to closing station records, last message transmitted to you (or to) was message number; last message received from you (or him) was message number  Note.—Repeat for as many stations as necessary to complete
ZNJ	check.
2110	
ZNK	
ZNL	
ZNM	
ZNN	
	Navy Use Only
ZNO	Your numbernot received; repeat or make blank.
ZNP	
ZNQ	
ZNR	
ZNS	
ZNT	
	4—7954

# (O) OPERATING

ZOA	Send at speed of words per minute.
ZOB	Your (1. Characters are indistinct; 2. Words are poorly spaced;
	3. Transmitter or key missing dots).
ZOC	Has executive sign (signal of execution) for last message (or for message
200	following) been made?
ZOD	Transmit your message in strings of
ZOE	I am going to transmit my messages in strings of
ZOF	Cease using speed key.
ZOG	
ZUG	
70IT	
ZOH	
ZOT.	
ZOI	
70 T	
ZOJ	
e o tř	
ZOK	
ZOL	
	Navy Use Only
ZOM	Use speed key if qualified to do so.
ZON	Last message did not require a signal of execution.
ZON ZOO	There is (are) message(s) on this circuit awaiting signal of
200	execution.
ZOP	Following is text of message addressed for action to which was executed at
ZOQ	Receipt through for traffic sent blind to you.
ZOR	You are (oris) causing interference by (1. Excessive
2010	testing; 2).
zos	Who is interfering with you (or with)?
200	4—7954

### (P) FACSIMILE

Navy Use Only
Use synchronizing speed of
Your speed is (1. Too fast; 2. Too slow; 3. (Motor) out of control).
Transmit
I am going to re-run picture.
Re-run last transmission.
Reception
I am receiving you with slant to the right; adjust your alignment control to the right.
I am receiving you with slant to the left; adjust your alignment control to the left.
Alignment correct.
Your residual too strong.
Answer only by facsimile.
Your (or) transmitter is not keying (blocking) properly.
Cease facsimile transmission and stand by to receive traffic on this circuit.
Use hand key on facsimile circuit.
Pictures (1. Too heavy; 2. Too light).

#### (R) RETRANSMISSION, ROUTING, RELAYING, AND DELIVERY Forward this message (or message _____) by visual to _____ ZRA Deliver (or direct _____ deliver) message(s) _____ via ____ ZRB (to _____). Act as relay between me (or _____) and _____ ZRC Give me your message(s) for _____; I will forward. ZRD Forward this message by wire _____ (1. Collect; 2. Paid). ZRE Take no further action with regard to forwarding message _____ (to ZRF _____). Transmit this message now (or at _____) by _____ (1. I method; ZRG 2. F method). Inform me when this message (or message.....) has been received ZRH by addressee(s) (or by .....). Message has been received by the addressee (or by _____) ZRI Pass following message to destination by............ (1. Hand; 2. U. S. ZRJ Postal Service; 3. Dispatch Mail). Distribute this message by dispatch where no charges are involved and ZRK to all others by mail. How route traffic for ____? ZRL Route traffic for _____ kc). ZRM Have been unable to relay (or deliver) message..... to ...... ZRN (1. Will continue efforts to effect relay (or delivery); 2. Advise disposition). **ZRO** ZRP ZRQ ZRR Navy Use Only ZRS Station called (or station whose call sign precedes this signal) pass this message (or message.....) by dispatch mail to destination (or to station(s) whose call sign(s) follow(s) this signal). Route traffic for me (or for .....) via shore station "F" or "I" ZRT method. ZRUZRV

## (S) SIGNALS, SIGNAL STRENGTH, READABILITY

Can you receive? If so, what is his readability?
I can receive Readability
Your signals fade (from strength to).
Decrease strength of signals.
Increase strength of signals.
What is my signal strength?
What is my readability?
·
Navy Use Only
Navy Use Only

# (T) TIME AND TRANSMISSIONS

ZTA*	I am (or is) going to make a timing signal for correcting clocks. The numerals indicating the time (and time zone
	plus or minus understood) will be followed by the executive sign—
	the 5-second dash—terminating exactly at the time indicated.
<b>a</b> mn	
ZTB	What is your time and time zone?  **The class or minus understood**
ZTC	My time is zone time (plus or minus understood).
ZTD	From to
ZTE*	Until further orders (or until).
ZTF	Established at (by).
ZTG*	At
ZTH	Did you (or) transmit anything for me? If so, please repeat.
$\mathbf{Z}\mathbf{T}\mathbf{I}$	Transmit traffic blind (or broadcast traffic) to me (or to on
	kc). I (or) will receipt for traffic later (on kc).
$\mathbf{Z}\mathbf{T}\mathbf{J}$	Transmit only urgent or priority messages.
ZTK	Routine messages may be transmitted now.
ZTL	
ZTM	
ZTN	
	•
ZTO	•
ZTP	
	Navy Use Only
ZTQ	Transmit only class traffic on this frequency (or kc)
•	until further orders.
ZTR	Transmit by simultaneous keying on (,)
13	and kc.
ZTS	
210	
ZTT	
211	
ZTU	
210	
	· 4—7954

## (W) WATCHES AND SCHEDULES

ZWA*	Close or secure (or direct to close or secure) your (his) station or watch (on kc).
ZWB*	Are you (or is) maintaining continuous watch on kc?
ZWC*	I am (oris) maintaining a continuous watch on kc.
	Request (or requests) permission to secure watch (or close
2112	station) on kc.
ZWE*	I am (oris) securing watch (or closing station) onkc.
ZWF	What stations are keeping watch on kc (or are in net)?
ZWG	Following stations are keeping watch on kc (or are in net).
ZWH	
Z/	
77 XX T	
ZWI	
77 W T	
ZWJ	
(23377)	
ZWK	
	Navy Use Only
ZWL	Set (or direct to set) a continuous watch on kc.
ZWM	Set (or direct to set) an intercept watch(es) on kc
	(and kc).
ZWN	I am (or is) standing a split fone watch on and
	kc.
ZWO	Did you (or) observe schedule with at?
ZWP	I (or at at
ZWQ	Observe (or direct to observe) schedule with
	on kc.
ZWR	
<b>ZWS</b>	***************************************
ZWT	
ZWU	
	4-7954

### (X) AUTOMATICS

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	······································
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•	
•	·
	Navy Use Only
	Your tape is reversed.
	I am unable to record due to (1. Weak signals; 2. Noise level,
	3. Echo; 4. Interference).
-	Your relays appear to be (1. Too light; 2. Too heavy;
	3. Sticking).
	Re-run number
A	Automatic keying (machine transmission).
	Your perforator is making letter combinations.
	Cut me through to in minutes.
1	Unable to cut you through for minutes.
	[ am going to transmit to (via you or). Will run call tape; cut me through to him. Using automatic retransmission.
]	Increase speed
	Decrease speed W. P. M.
	Transmit at W. P. M.
	***************************************
	***************************************

## (Z) MISCELLANEOUS

ZZA*	Stand by.
ZZB*	Negative, no, not.
ZZC*	Affirmative, yes.
ZZD*	Meaning of your (or's) procedure signal (or procedure sign) is not understood.
ZZE	
ZZF	
770	
ZZG	
<i></i>	
ZZH	<b></b>
777	
ZZI	
ZZJ	1
ZIZI	
	Navy Use Only
ZZK	Via.
ZZL	Number of speed-key certificate held by operator on this circuit (or onkc) is
ZZM	Your (or's) attention is invited to article, Naval Communication Instructions.
ZZN	What are charges on this message (or my message)?
ZZO	Charges on your message are cents.
ZZP	This is a test message. Mail copy as received to office of origin.
ZZQ	Forward to me (or to) on kc (1. Late press news; 2. Orders to officers).
ZZR	is (are) in company with
ZZS	Report when you are (or is) in communication with
	by (1. Radio; 2. Visual).
ZZT	I will relay your call to S. O. P. A., whose call sign is
ZZU	Call sign of incoming vessel is

#### READABILITY TABLE

Readability of signals is indicated after the procedure signs "K" and 'R" by means of the readability table, as follows:

- 1. Unreadable.
- 2. Poor, but readable—make plain language messages through twice, code unreadable.
- 3. Fair—readable—plain language once slowly; make code messages through twice.
- 4. Good—readable—plain language or code once.
- 5. Perfectly readable.

Examples: AB v BC R4 or

AB v BC K5 (or as appropriate).

#### SIGNAL-STRENGTH TABLE

Signal strength may be indicated, when necessary, after the procedure sign "S" by means of the signal-strength table, as follows:

- 1. Very weak—hardly audible.
- 2. Moderately weak.
- 3. Medium strong.
- 4. Moderately strong.
- 5. Strong.

Examples: AB v BC S4 K or AB v BC S3 AR

These numerals may be used, if necessary, to indicate strength of interference or static, following the procedure signs "W" or "X."

#### **EXAMPLES**

- 1. Use of "INT" and "ZZB":
  - (A)—(a) To express "I have been calling you on 2980 kc", the transmitting station sends "ZCE 2980."
  - (b) To express "Have you been calling me on 2980 kc", the transmitting station sends "INT ZCE 2980."
  - (c) To express "I have not been calling you on 2980 kc", the transmitting station sends "ZZB ZCE 2980."
  - (B)—(a) To express "Collective (or net) call sign AB includes for the present AX, AY, and AZ", the transmitting station sends "ZCM AB AX AY AZ" or "ZCM AB—AX AY AZ."
  - (b) To express "What stations does collective (or net) call sign AB include for the present", the transmitting station sends "INT ZCM AB."
  - (c) To express "Collective (or net) call sign AB for the present does not include AW", the transmitting station sends "ZZB ZCM AB AW" or "ZZB ZCM AB—AW."
  - (C)—(a) To express "Make preliminary call-up before transmitting traffic", the transmitting station sends "ZCL."
  - (b) To express "Shall I make preliminary call-up before transmitting traffic", the transmitting station sends "INT ZCL."
  - (c) To express "Do not make preliminary call-up before transmitting traffic", the transmitting station sends "ZZB ZCL."
- 2. Use of slant (/) sign:
  - To express "What are charges on my message 1130 of the twelfth", the transmitting station sends "ZZN 1130/12." (Note: Dates refer only to current month, or to preceding month when date signified is later than current date.)