

COMMUNICATION INSTRUCTIONS RADIO TELEGRAPH PROCEDURE

ACP124 (D)



OCTOBER 1983

FOREWORD

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LETTER OF PROMULGATION
FOR ACP124 (D)**

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3. All proposed amendments to the publication are to be forwarded to the national coordinating authorities of the CCEB or NAMILCOM.

For the CCEB Principals

N. CRAM
Squadron Leader
Permanent Secretary to CCEB

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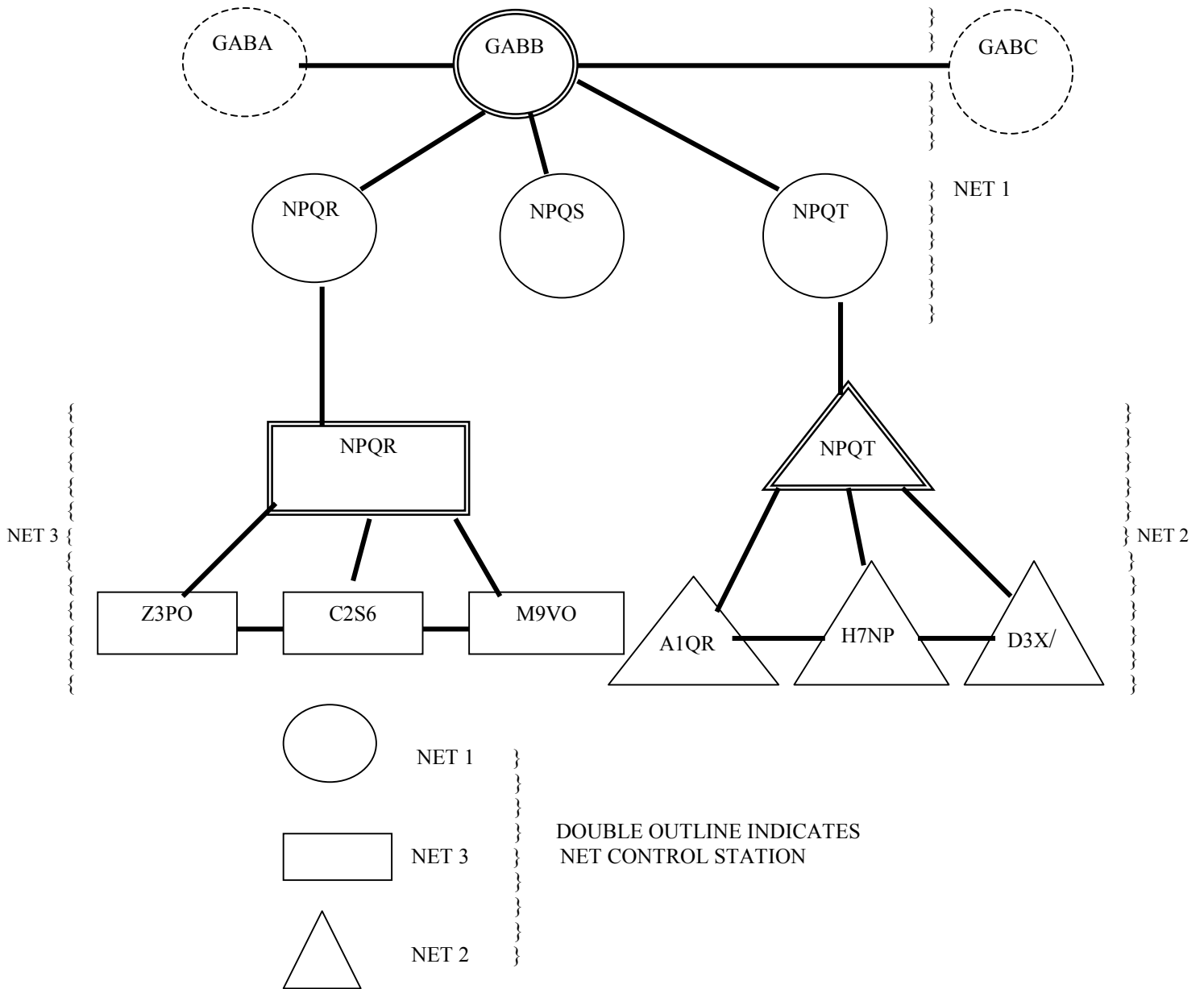
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RADIO ORGANIZATION CHART

The organization shown is used as a basis for the majority of examples shown in this ACP. The call signs used bear no relationship to actual call sign systems which may be in use and are used merely to illustrate station identities or address groups which could represent fixed stations, ships, aircraft, military formations or units, wheeled/tracked vehicles or manpacked sets.

FIGURE 1



COLLECTIVE CALL SIGNS

NET 1	K498	GABB NPQR NPQS NPQT
NET 2	ODP1	H7NP A1QR NPQT D3X/
NET 3	2SN7	NPQR Z3PO M9VO C256

NET COMPOSITION

CHAPTER 1INTRODUCTIONSECTION I – GENERAL101. PURPOSE

The procedure prescribed herein is designed to provide a concise and definite language whereby radiotelegraph communications may be conducted accurately, rapidly and with the maximum security obtainable on radio circuits.

102. RADIO OPERATORS – CIRCUIT DISCIPLINE

a. The attainment of reliability, speed and security depends, to a large extent, upon the operator. It is essential that he be well trained, maintain circuit discipline and understand thoroughly his responsibilities.

b. Adherence to prescribed procedure is mandatory. Unauthorized departures from or variations to prescribed procedure are prohibited. If the procedure prescribed herein does not cover a specific operating requirement, the matter should be brought to the attention of the supervisor.

c. Transmission security is dealt with fully in ACP 122 which should be read in conjunction with this publication.

d. The following basic rules are essential to transmission security and shall be strictly enforced on all military radiotelegraph circuits.

(1) No transmission shall be made which has not been authorized by proper authority.

(2) The following practices are specifically forbidden:

(a) Violation of radio silence

(b) Unofficial conversation between operators

(c) Transmitting in a directed net without permission

(d) Excessive tuning and testing

(e) Transmitting the operator's personal sign

(f) Unauthorized use of plain language

(g) Use of other than authorized prosigns

(h) Unauthorized use of plain language in place of applicable prosigns or operating signals.

(i) Linkage or compromise of classified call signs and address groups by plain language disclosures or association with unclassified call signs

(j) Profane, indecent or obscene language

(3) The following practices are to be avoided:

(a) Excessive time consumed in tuning, changing frequency or adjusting equipment

(b) Transmitting at speeds beyond the capabilities of receiving operators

103. BEADWINDOW PROCEDURES

a. "BEADWINDOW" is a simple, rapid procedure for use to police the security of insecure networks. It brings to the immediate attention of operators the fact that an Essential Element of Friendly Information (EEFI) has been disclosed on the circuit. Additionally the "BEADWINDOW" report serves to alert other operators on the net of the EEFI disclosure and thus acts as an educational aid, producing increased security awareness among operators and an overall improvement in the security of insecure CW communications.

b. Use of BEADWINDOW in operations and exercises is not mandatory but its use is encouraged.

c. The BEADWINDOW procedure uses a code word (BEADWINDOW) and a number combination which is transmitted immediately to the station disclosing an EEFI. When a station on the net transmits information listed in an EEFI the net control operator (or any operator on the net in the event the net control operator fails to take action) transmits the OPSIG ZNX (ACP 131) followed by the number of the EEFI which has been disclosed. Example: If an operator discloses a ship's position the net control operator will call the offending station and transmit "ZNX 1 K". The only authorized reply to a BEADWINDOW report is the prosign R AR.

d. Approved broad EEFI's for general use are listed below. An appropriate keyword or key phrase has been assigned to each EEFI for ease of training and rapid understanding of BEADWINDOW reports. Additional EEFI's for specific operations or exercises may be developed and broad EEFI's expanded by individual nations or by operational commanders and included in operations plans or orders. This may be accomplished by adding new EEFI categories (i.e. 8, 9, 10) or by expanding existing categories (e.g. 21-force composition, 22-force capabilities, 23-force limitations etc). The EEFI list should be posted in clear sight of the operator for rapid reference.

e. EEFI LIST

<u>Key No. and Key Word</u>	<u>Definition</u>
1 – POSITION	Friendly or enemy position, movement or intended movement, position, course, speed, altitude or destination or any air, sea or ground element, unit or force.
2 – CAPABILITIES	Friendly or enemy capabilities or limitations. Force compositions or significant casualties to special equipment, weapons systems, sensors, units or personnel. Percentages of fuel or ammunition remaining.
3 – OPERATIONS	Friendly or enemy operation – intentions progress, or results. Operational or logistic intentions; mission participants flying programmes; mission situation reports; results of friendly or enemy operations; assault objectives.

4 – EW	Friendly or enemy EW/EMCON – intentions, progress, or results. Intention to employ ECM; results of friendly or enemy ECM; objectives TF ECM; results of friendly or enemy ECCM; results of ESM; present or intended EMCON policy; equipment affected by EMCON policy.
5 – PERSONNEL	Friendly or enemy key personnel. Movement or identity of friendly or enemy officers, visitors, commanders; movement of key maintenance personnel indicating equipment limitations.
6 – COMSEC	Friendly or enemy COMSEC breaches. Linkage of codes or codewords with plain language; compromise of changing frequencies or linkage with line number/circuit designators; linkage of changing call signs with previous call signs or units; compromise of encrypted/classified call signs; incorrect authentication procedure.
7 – WRONG CIRCUIT	Inappropriate transmission. Information requested, transmitted or about to be transmitted which should not be passed on the subject circuit because it either requires greater security protection or it is not appropriate to the purpose for which the circuit is provided.
8 – SPARE	For assignment as required.
9 - SPARE	For assignment as required.
10 – SPARE	For assignment as required.

104. USE OF RADIO TELEGRAPH PROCEDURE

a. The Radiotelegraph Procedure prescribed herein shall be used in all transmissions over military radio and line circuits which employ International Morse Code. When messages in commercial form are handled by military systems, the procedure contained herein shall be used in the calling and routing instructions.

b. When communicating with non-military ships or stations, International Telecommunications Union (ITU) or International Civil Aviation Organization (ICAO) procedure, as appropriate, will be used. These procedure are contained in the ITU Radio Regulations and the appropriate ICAO publications.

105. DEFINITION OF A RADIO NET

a. A RADIO NET is an organization of radio stations capable of direct communication on a common frequency.

b. NET CONTROL STATION: A station designated to control traffic and endorse circuit discipline within a given net.

c. FREE NET: A net in which any station may communicate with any other station in the same net without first obtaining permission from the NET CONTROL STATION to do so.

d. DIRECTED NET: Where the NET CONTROL STATION considers that because of special conditions it is necessary to regulate flow or, for reasons of discipline, it is necessary that he has a stricter control over the passing of traffic over the net for which he is responsible, he can designate his net a DIRECTED NET by use of the operating signal ZKB meaning "IT IS NECESSARY TO OBTAIN THE PERMISSION OF THE CONTROLLING STATION (NET CONTROL STATION) BEFORE TRANSMITTING MESSAGES". In these circumstances the NET CONTROL STATION may also indicate a specific sequence of answering. ZKB may be preceded by ZKA meaning "I AM NET CONTROLLING STATION".

e. NET CONTROL STATION may lift the restrictions of a DIRECTED NET by use of the operating signal ZUG meaning "NEGATIVE" in conjunction with ZKB.

EXAMPLE 1 : (Making a FREE NET a DIRECTED NET)

2SN7 DE NPQR ZKA ZKB K
 DE C2S6 R AR
 DE M9VO R AR
 DE Z3PO R AR

EXAMPLE 2: (Making a DIRECTED NET a FREE NET)

2SN7 DE NPQR ZUG ZKB K
 DE C2S6 R AR
 DE M9VO R AR
 DE Z3PO R AR

f. Occasions may arise when, after a station has been given permission to transmit in a directed net and commences his transmission, another station may require to break in with higher precedence traffic. Should this happen, the original transmitting station is not to resume transmission of his message until directed to do so by NET CONTROL STATION.

106. PRINCIPAL OPERATING METHODS

The use of the three principal operating methods available for passing messages from one station to another are determined by operational requirements. They are:

- a. Receipt method (see CHAP 3)
- b. Broadcast method (see CHAP 4)
- c. Intercept method (see CHAP 5)

107. INTERNATIONAL MORSE CODE

a. All transmissions over military telegraphic systems, except teletypewriter, are made by use of the International Morse Code. The characters used are shown in the following table:

LETTERS

A .-	E .	I ..	M --	Q --.-	U ..-	Y -.-
B -...	F ..-	J .---	N -.	R .-	V ...-	Z --..
C -.-.	G --.	K -.-	O ---	S ...	W .--	
D -..	H	L -..	P .--.	T -	X -..	

FIGURES

1 .----	4-	7 ---..	0 -----
2 ..---	5-	8 ---..	
3 ...--	6 -....-	9 ----.	

(NOTE: The figure zero is to be written with a slant superimposed unless the entire text consists entirely of figures. The letter Z may be written with a horizontal line superimposed in order to distinguish between 2 and Z. When this figure occurs in the text of messages which consist entirely of figures or in weather messages which use the number of code, it may be transmitted as "T" ("-"). On all other occasions the figure 0 is to be transmitted as "-----". Transmission of 0 as the letter "O" is expressly forbidden.)

PUNCTUATION AND OTHER SIGNS

BLOCK (capital letters or underline) ...--

FRACTION BAR (slant) -.-.

PERIOD (full stop) .-.-.

HYPHEN or DASH -....-

PARENTHESIS

Left hand bracket -.-.

Right hand bracket -.-.-

COMMA --..--

QUESTION MARK ...--.

COLON ---...

APOSTROPHE .----.

ACCENTED e ..-.

ACCENTED a ..-.-

ACCENTED ä ..-.

b. CHARACTER FORMULATIONS

- (1) A dot is used as the unit of duration
- (2) A dash is equal to three units
- (3) An element is either a dot or a dash
- (4) The space between elements is one unit
- (5) The space between characters is three units
- (6) The space between groups is seven units

108. TRANSMISSION TECHNIQUES AND TRANSMISSION SPEEDS

a. Each character shall be transmitted clearly and distinctly. The speed of transmission shall be governed by the prevailing conditions and the capability of the receiving operation(s).

b. Accuracy in transmission is far more important than speed. The difference in time required to send a message at 18 words per minute and that required to transmit it at 25 words per minute is slight. Even this slight gain in time may be nullified by any added time required for repetitions.

(1) The speed at which the receiving operator can copy without having to obtain repetitions is the speed at which the transmitting operator will transmit. When transmitting to more than one station in a net, the governing speed of the transmitting operator is that of the slowest receiving operator, but see (4) below.

(2) The speed of transmitting headings on manually operated circuits should be slower than the speed of transmission of texts.

(3) Speed of transmission on automatic circuits is governed by traffic conditions and the reliable capacity of the equipment. Headings of messages are to be transmitted using words twice method.

(4) If advisable, the NET CONTROL STATION should prescribe the speed of transmission on a circuit, or the qualifications of the operators to be employed during specific periods.

(5) When authorized by the NET CONTROL STATION, speed keys may be employed on manually operated circuits if traffic conditions warrant and operator capabilities permit.

109. OPERATING SIGNALS

OPERATING SIGNALS consisting of the "Z" and "Q" signals, with amplifying information as required, will be used in accordance with instructions contained in ACP 131.

110. PROCEDURE SIGNS (PROSIGNS)

PROSIGNS are one or more letters, characters or combinations thereof used to facilitate communication by conveying, in a condensed standard form, certain frequently used orders, instructions, requests, and information relating to communications.

111. LIST OF PROSIGNS

Following is a complete list of PROSIGNS which are authorized for military use on radiotelegraph circuits. An overscore (a line over two or more letters) indicates that the letters overscored are to be transmitted as a single character; that is, without pause between letters. The description and use of the PROSIGNS are set forth in the paragraph numbers shown after each meaning.

RADIOTELEGRAPH PROSIGNS

PROSIGN

MEANING

<u>AA</u>	Unknown station (308)
AA	All after (323)
AB	All before (323)
<u>AR</u>	End of transmission (222)
<u>AS</u>	Wait (307, 313)
B	More to follow (314, 315)
<u>BT</u>	Long break (312)
C	Correct (or correction) (206c)
CQ	May be used as ALL station call when no other call sign available (408b)
DE	From (202)

EEEEEEEE	Error (317)	
F	Do not answer (205, 207)	
FM	Originators designator follows (217)	
G	Repeat back (205, 206)	
GR (numeral)	Group count (219)	
GRNC	Groups not counted (219)	
—		
HM (three times)	Emergency Silence (331)	
II	Separative sign (201)	
—		
IMI	Repeat (316, 324)	
INFO	Information addressee (s) designator(s) follow (217)	
—		
INT	Interrogative (335)	
—		
IX	Execute to follow (602)	
—		
IX (5 second dash)	Executive signal (602)	
J	Verify with originator and repeat (326)	
K	Invitation to transmit (222)	
NR	Number (204)	
O	Immediate (213, 305)	
P	Priority (213, 305)	
—		
PT	Call sign follows (302c)	
R	Receipt (318)	
R	Routine (213, 305)	
T	Transmit to (205, 208)	
TO	Action addressee (s) designator(s) follow (217)	
WA	Word after (323)	
WB	Word before (323)	
XMT	Exempted addressee(s) designator(s) follow	(202, 217)
Z	Flash (213, 305)	

SECTION II – MESSAGES AND BASIC MESSAGE FORMAT

112. GENERAL

a. Message handled by radiotelegraph will be prepared for transmission in either PLAINDRESS, ABBREVIATED PLAINDRESS or CODRESS form except when commercial or ICAO procedure is authorised.

b. Each message prepared in either PLAINDRESS, ABBREVIATED PLAINDRESS or CODRESS will have three PARTS:

- (1) Heading
- (2) Text
- (3) Ending

c. Each message PART has certain COMPONENTS which are broken down into ELEMENTS and CONTENTS.

(1) All message PARTS and a majority of the COMPONENTS and ELEMENTS have a standard arrangement or sequential order of appearance.

(2) The BASIC MESSAGE FORMAT is the basis for the procedure contained in this publication.

(3) In Table 1-1, format lines 2, 3, 4, 14, 15 and 16 identify the procedural portion of the basic message format as designed for radiotelegraph operation. Format lines 5 through 13 are the non-changeable components of the basic message format. All format lines do not necessarily appear in every message; however, when used they will be in the order shown.

113. DIAGRAM

In Table 1-1, it should be noted that every element is indicated in the order of appearance in the message, but the contents of the various elements are not necessarily indicated as they will appear. The use of routing indicators in format lines 4, 6, 7 and 8 is limited to the extent authorized by paragraph 901b.

RADIOTELEGRAPH MESSAGE FORMAT				TABLE 1-1
PARTS	COMPONENTS	ELEMENTS	FORMAT LINE	CONTENTS
↑ H E A D I N G ↓ Cont'd	↑ ↓ PROCEDURE ↓ Cont'd	Called Station(s)	1	Not used.
			2	Station(s) called, prosign XMT and exempted call signs.
		Calling Station	3	Prosign DE and call sign of station calling: Serial number (Transmission Indetification). Prosign NR followed by a number or a combination of letters and numbers.

RADIOTELEGRAPH MESSAGE FORMAT (Continued)				TABLE 1-1
PARTS	COMPONENTS	ELEMENTS	FORMAT LINE	CONTENTS
H E A D I N G	↑ PROCEDURE ↓	Transmission Instructions	4	Prosigns F, G, T; operating signals; call signs, address groups, plain language address designators, AIGs, routing indicators.
		↓ PREAMBLE ↓	Precedence	5
	Date-time group		Date and time expressed in digits, and zone suffix followed by month indicated by first 3 letters, and if required by National instructions, the year indicated by the last 2 digits.	
	Message Instructions		Operating signals and prosign \overline{IX}	
	↑ ADDRESS ↓	Originator's Prosign	6	Prosign FM
		Originator		Originator's designator (call sign, address group, plain language address designator, routing indicator).
		Action addresses prosign	7	Prosign TO.
		Action addressees		Action addressee designators (call signs, address groups, plain language address designators, AIGs, routing indicators).
		Information addressees prosign	8	Prosign INFO.
	Information addressees	Information addressee designators (call signs, address groups, plain language address designators, routing indicators)		
Cont'd	Cont'd			

RADIOTELEGRAPH MESSAGE FORMAT (Continued)				TABLE 1-1
PARTS	COMPONENTS	ELEMENTS	FORMAT LINE	CONTENTS
↓ H E A D I N G ↓	↑ ADDRESS ↓	Exempted addressees prosign	9	Prosign XMT
		Exempted addressees		Exempted addressee designators (call signs, address groups, plain language address designators).
	PREFIX	Accounting Information Group Count	10	Accounting symbol, prosign GR (No. of groups), GRNC.
	SEPARATION		11	Prosign \overline{BT}
↓ TEXT ↓	TEXT	Subject Matter	12	UNCLAS, or appropriate classification, SVC, internal instructions and appropriate textual matter.
↑ E N D I N G ↓	SEPARATION		13	Prosign \overline{BT}
	↑ PROCEDURE ↓	Time Group	14	Hours and minutes expressed in digits and zone suffix.
		Final Instructions	15	Prosigns \overline{AS} , B, C, \overline{IMI} , \overline{IX} 5 sec dash Operating signals, station designators.
		Ending sign	16	\overline{K} , AR.

NOTES FOR TABLE 1-1

- Line 2: This line will contain, as required and in the following order, the call signs of the stations called; the prosign XMT and exempted call signs.
- Line 3: This line will contain the prosign DE followed by call sign of calling station, prosign NR followed by a number, or, in the case of broadcast stations, a letter or letters followed by a number.

3. Line 4: This line may contain the prosign F, G and T: operating signals, call signs, address groups, plain language address designators, AIGs, routing indicators (where authorized by paragraph 901b).
4. Line 5: This line will contain the appropriate precedence prosign (in the case of dual precedence, both prosigns will be shown separated by a separative sign); the originator's date time group zone suffix and month indicated by first 3 letters, and, if required by National Instructions, the year indicated by the last 2 digits message instructions in the form of operating signals, and the prosign as necessary.
IX
5. Line 6: This is identified by the appearance of the prosign FM and contains the designator of the originator which may be a call sign, address group, plain language address designator or routing indicator (where authorized by paragraph 901b).
6. Line 7: This line is identified by the prosign TO and contains the designators of the ACTION addressees in the form of call signs, address groups, plain language address designators, AIGs, routing indicators (where authorized by paragraph 901b).
7. Line 8: This line is identified by the prosign INFO and contains the designators of the INFO addressees in the form of call signs, address groups, plain language address designators, and routing indicators (where authorized by paragraph 901b).
8. Line 9: This line is identified by the prosign XMT and contains the designators of addressees exempted from the collective designator when such designator is used in format line 7.
9. Line 10: This line is identified by the appearance of the group count prosign and contains accounting symbols (as required) which precede the group count prosign.
10. Line 11: This line contains the $\overline{\text{BT}}$ separating text from the heading.
11. Line 12: This is the text of the message and may contain internal instructions as well as the basic idea of the originator. It will be preceded by the abbreviation UNCLAS or appropriate classification and by SVC, if required.
12. Line 13: This line contains the prosign $\overline{\text{BT}}$ separating the text from the message ending.
13. Line 14: This line, when used, will contain the time group expressed in hours and minutes, plus the zone suffix. (Used only in abbreviated plaindress). NOTE Expression of year in record communications – until 31 December 2005, when record communications contain a year in the header, it will be assumed that where the year is expressed in two digits of 06 – 99 the digits 19 precede, i.e., 1906 – 1999, and where the two digits 00 – 05 appear it will be assumed that digits 20 precede, i.e. 2000 – 2005. Effective January 2006, record communications will contain a four digit year in the header, i.e., date time group will be expressed at 011500z JAN 2006. Within the body of a message, the established standards for character based messaging will be followed, e.g., The United States Message Text Formats (USMTFS), Allied Data Publication – 3 (ADATP – 3), Australian Defence Formatted Message Standard (ADFORMS). These standards have adopted a four digit year for date data transmission.
14. Line 15: This line is identified by the appearance of the prosigns $\overline{\text{AS}}$, B, C, IMI, IX _____, operating signals; station designators as required.
5 sec

15. Line 16: This line is identified by the appearance of the prosign K or AR as appropriate.

SECTION III – FORMS OF MESSAGES

114. GENERAL

Messages transmitted over military radiotelegraph circuits shall be prepared in PLAINDRESS, ABBREVIATED PLAINDRESS or CODRESS form except when commercial or ICAO procedure is authorized.

115. PLAINDRESS

a. A PLAINDRESS message is one in which the originator and addressee designators are indicated externally of the text.

b. A PLAINDRESS message contains all the components as shown in the Basic Message Format with the following exceptions:

(1) The prefix may be omitted.

(2) When the call serves as the address, lines 6, 7, 8 and 9 may be omitted.

c. The precedence and date-time group must be included.

d. The group count PROSIGN will always be included when the accounting symbol is employed or the message is encrypted.

116. ABBREVIATED PLAINDRESS

Operational requirements for speed of handling may require abbreviation of PLAINDRESS message headings. In such cases any or all of the following may be omitted:

a. Precedence.

b. Date.

c. Date-time group.

d. Group count (except for encrypted messages, or when the accounting symbol is employed).

117. CODRESS

A CODRESS message is one in which the entire address, i.e. originator and all addressees (or AIGs when used), is encrypted within the text. The heading of such a message contains only information necessary to enable communications personnel to handle it properly. It may contain all the components shown in the schematic diagram external of the text except the address. The general rules for the preparation and transmission of codress messages are given in ACP 121.

118. SERVICE MESSAGE

a. A service message is one between communication personnel pertaining to any phase of traffic handling, communication facilities or circuit conditions.

b. Service messages are identified by the abbreviation SVC immediately following the security classification or the abbreviation UNCLAS, as appropriate.

c. Service messages are prepared and transmitted using PLAINDRESS, ABBREVIATED PLAINDRESS or CODRESS procedure. They generally concern messages originated at, destined for, or refiled by that station and normally will be assigned a precedence equal to that of the message to which they refer.

119. ABBREVIATED SERVICE MESSAGE

An abbreviated service message is one in which the text contains only prosigns, operating signals, address designators, identification of messages, parts of messages and amplifying data as necessary. It may be originated by operators, and may contain any of the components shown in the Basic Message Format except that:

a. The long break is used only if the data-time group/time group is used.

b. The date-time group/time group is to be employed only when it is necessary to indicate the time at which the message was originated or when it is considered that further reference may be made to the message.

120. CLASSIFICATION OF SERVICE MESSAGE

a. An unclassified service message may be used when referring to a classified message if only operating signals, prosigns and message or transmission identifications from format lines 2, 3, and 4 are used.

b. An unclassified service message referring to a message received in CODRESS format or using encrypted call signs or address groups shall use only those message or transmission identifications which were contained in the external message heading as received.

CHAPTER 2MESSAGE PREPARATIONSECTION I – USE OF PROSIGNS AND OPERATING SIGNALS IN PROCEDURE COMPONENT201. USE OF SEPARATIVE SIGN (PROSIGN II)

The Separative Sign (Prosign II), written as a short dash is used to avoid mistakes in reception which might occur if letters or figures of adjacent groups are run together. The separative sign is used in messages as follows:

- a. Before and after all prosigns in the procedure and preamble components of the heading, except DE, \overline{AA} , NR and \overline{IX} . The separative sign after a prosign is omitted when the prosign is followed by the \overline{BT} .
- b. To separate each element of the Address component i.e., preceding the prosigns FM, TO, INFO and XMT.
- c. To separate the address component from the prefix when an accounting symbol is used. (See Example para 219c).
- d. To separate, in the preamble components, the date-time group from the message instructions.
- e. Between the call and the beginning of the repetition of a message to be repeated back.
- f. To separate call signs belonging to adjacent multiple transmission instructions as in para 208c. Example.
- g. To separate portions of an abbreviated service message.

202. THE CALL (PROSIGNS XMT AND DE)

- a. The call (fully described in Chapter 3 Section II – Calling and Answering) is a means of establishing communication.
- b. In the call, the prosign XMT is used to indicate that stations whose designators follow are not required to respond.
- c. This is followed by prosign DE and the designator of the calling station. DE is used only in the call and means "This transmission is from the station whose designator follows".

EXAMPLE:

A complete preliminary call to a collective call sign to establish communication, and exempting one station NPQS.

K49B – XMT-NPQS DE GABB K

203. SERIAL NUMBER

The Serial Number is a number allocated by stations to identify a message. In certain circumstances it is used as transmission identity.

204. TRANSMISSION IDENTITY (PROSIGN NR)

a. Transmission identification may be employed to provide a means of assisting the receiving station in ascertaining that it has received all messages sent to it by a particular transmitting station. When messages are transmitted by broadcast method, the call sign of the transmitting station or the broadcast identifying letter and figures (the broadcast designator) is also used. The prosign NR is not normally used in connection with broadcast designators.

EXAMPLE 1: (Station to Station)

NPQR DE GABB NR172 – etc.

EXAMPLE 2: (Broadcast)

NAWS DE GYE X42N O69 – etc.

b. In a multiple call the station serial number applicable to each called station is given in the same sequence as the call signs in the call.

EXAMPLE:

NPQT NPQR DE GABB

NR148 – NR371 – etc.

205. TRANSMISSION INSTRUCTIONS

Transmission instructions concern the actual transmission of a message and are appended by communications personnel. They include the prosigns G,F and T, and the operating signal ZWL, described in the following paragraphs.

206. PROSIGN G (REPEAT BACK)

a. The prosign G, meaning "REPEAT BACK THE ENTIRE TRANSMISSION", is used by the transmitting station to ensure that the receiving station received the message as transmitted. It may be ordered by either the originator or the circuit operator and may apply to the station called, all stations called, or stations designated before the prosign G in the transmission instructions. The instruction to repeat back applies to the whole TRANSMISSION.

EXAMPLE 1: (Station called to repeat back.)

M9VO DE NPQR

-G

BT

TEXT

BT

1415Z

K

M9VO complies as follows:

EXAMPLE 1: (Contd)

DE M9VO
 - M9VO DE NPQR
-G
 BT
TEXT
 BT
 1415Z
 K

EXAMPLE 2: (The instructions to repeat back given to one station of a collective or multiple call.)

2SN7 DE NPQR
 - C2S6
 BT
TEXT
 BT
 K

C2S6 complies:

DE C2S6
 - 2SN7 DE NPQR
 - C2S6 - G
 BT
TEXT
 BT
 K

b. When the prosign G is used with collective or multiple calls, designated stations repeat back, stations receiving are to wait until the completion of the repeat back, irrespective of answering sequence.

EXAMPLE: (After C2S6 repeats back, in Example 2 above, the response is given by NPQR.)

DE NPQR C AR

Other stations then receipt:

DE M9VO R AR
 DE Z3PO R AR

c. If the transmission is incorrectly repeated back, a correction will be initiated by the transmitting station. When the correction has been given, this must be repeated back, but without using prosign C.

EXAMPLE:

GABA DE GABB

-G

BT

REJOIN CONVOY NOT LATER THAN 1200Z

BT

K

GABA repeats back incorrectly:

DE GABA

-GABA DE GABB

-G

BT

REJOIN CONVOY NOT LATER THAN 1300Z

BT

K

GABB corrects this:

DE BAGG C WA THAN - 1200Z K

GABB shows that this is now correct:

DE GABB C AR207. PROSIGN F (DO NOT ANSWER)

F means "STATIONS CALLED ARE TO MAKE NO TRANSMISSIONS IN RESPONSE TO, NOR IN CONNECTION WITH, THIS MESSAGE".

Messages containing the prosign F are to be made twice through, each transmission being separated by the prosign IMI.

EXAMPLE: (NPQS has a message for GABB, which GABB is not to answer.)

GABB DE NPQS - F -

R - 211627Z JUL 83

GR16

BT

TEXTBT

IMI

GABB DE NPQS - F -

R - 211627Z JUL 83

GR16

BT

TEXT

BT AR

208. PROSIGN T (TRANSMIT TO)

a. In messages other than codress, prosign T may only be used if lines 6, 7 and/or 8 are used (9.e. the call may not serve as the address). T alone means "STATION CALLED TRANSMIT THIS MESSAGE TO ALL ADDRESSEES".

EXAMPLE: (GABB directs NPQT to transmit to all addressees.)

NPQT DE GABB -
T -
R - 211629Z JUL 83 -
FM GABB --
TO ALQR
BT etc

b. T followed by call signs or address designators, means "STATION CALLED TRANSMIT TO ADDRESS DESIGNATORS FOLLOWING THIS PROSIGN".

EXAMPLE 1: (GABB directs NPQR to transmit to M9VO.)

NPQR DE GABB -
T - M9VO
- R - 211631Z JUL 83 -
FM GABB -
TO GABA
M9VO
BT etc

EXAMPLE 2: (GABB directs NPQR to transmit to C2S6 and M9VO.)

NPQR DE GABB
-T- C2S6 M9VO
-R- 211634Z JUL 83
-FM GABB
-TO CS26 GABA M9VO
BT etc

c. T preceded by a call sign and followed by call signs or address designators means "STATION WHOSE DESIGNATOR PRECEDES THIS PROSIGN TRANSMIT TO ADDRESS DESIGNATORS FOLLOWING THIS PROSIGN".

EXAMPLE: (GABB directs NPQR to transmit to M9VO and NPQT to transmit to H7NP)

NPQR NPQT DE GABB
- NPQR -T- M9VO -
NPQT - T - H7NP
-R- 211633Z JUL 83
-FM GABB
-TO H7NP M9VO
BT etc

d. The operating signal ZXY may be used instead of 'T' where it is quicker or more expedient to enumerate the addressee designations, ZXY means "Transmit this message to the addressee(s) indicated by the numeral(s) following". Addressees will be counted consecutively as they appear; conjunctive addressee designations will each be counted as one designation. ZXY is not to be used to denote individual designations in AIGs and collective addressee designations.

EXAMPLE: (H7NP directs NPQT to transmit to GABB, NPQR and NPQS)

A1QR NPQT DE H7NP
 - NPQT ZXY 2-3-4
 -R- 211634Z JUL 83
 -FM H7NP

 -TO A1QR GABB NPQR NPQS BT etc

209. OPERATING SIGNAL ZWL

Transmission instructions may be modified by use of the operating signal ZWL to denote that no forwarding action is required to the addressee designators which immediately follow ZWL. ZWL will normally be used to prevent forwarding action to:

- a. addressees of a collective address
- b. any addressees of a large address
- c. addressees of an AIG
- d. exempted addressees indicated by XMT in Format Line 9

EXAMPLE 1: (NPQT directs NPQR to pass to collective call sign 2SN7, less C2S6.)

NPQR DE NPQT
 - T - ZWL C2S6
 -R- 211635Z JUL 83
 -FM NPQT
 -TO 2SN7
BT etc

EXAMPLE 2: (BABC directs GABB to pass to all except NPQS.)

GABB DE GABC
 -T- ZWL NPQS
 -R- 211637Z JUL 83
 -FM GABC
 -TO A1QR
 GABB
 NPQR
 NPQS

BT etc

210. TRANSMISSION INSTRUCTIONS IN CODRESS MESSAGES

a. Where a message requires transmission over more than one circuit, the communication center will prepare a separate heading for each transmission, containing only those call signs or address groups necessary to route the message to the addressees served by that link. External transmission or message handling instructions are to be kept to a minimum.

b. A station transmitting a codress message to another station or in the case of ships via a shore radio station, shall insert appropriate transmission instructions in the heading. Shore radio stations normally are not required to decrypt the text in order to effect further routing. If an activity has to relay the message and to decrypt it as well, the address group or call sign of both the activity and the station to which the message is to be relayed must be included in the transmission instructions. When the station called is known to be crypto-guard for all addressees, transmission instructions are not required.

c. When AIGs are used as transmission instructions in the external heading of codress messages, they will be expressed as address groups.

d. Examples of codress headings (In these examples, call signs and address groups are used unencrypted. When call sign encryption is in effect, encrypted call signs and indefinite call signs where applicable will be used.):

EXAMPLE 1: (In direct communication with the only addressee.)

GABB DE NPQR -
P - 201314Z JUL 83
GR71 BT TEXT BT AR

EXAMPLE 2: (One station called, who is to relay and also to decrypt the message.)

NPQR DE GABB -
T - C2S6 NPQR
- P - 201317Z JUL 83
GR73 BT TEXT BT AR

EXAMPLE 3: (Two stations called, one to decrypt, the other to relay without decrypting.)

NPQR NPQT DE GABB -
NPQT - T - D3X/ -
- P - 201317Z JUL 83
GR51 BT TEXT BT AR

EXAMPLE 4: (Two stations called, both to decrypt and one also to relay.)

NPQR NPQT DE GABB -
NPQT T - M9VO NPQT -
- P - 201407Z JUL 83
GR64 BT TEXT BT AR

EXAMPLE 5:

(The following is an example of a multiple-address codress message originated by YUCR for transmission to the following addressees: BZOC, BZOE, ESCJ, OMZF, XYAQ and YJVO.

In this example three transmissions are necessary from YURC. The heading of each transmission shows only those call signs necessary to effect delivery.)

Transmission to BZOC:

BZOC DE YUCR
- P - 271015Z JUL 83

GR58 BT TEXT BT AR

Transmission to GZP for relay to BZOE and YJVO (GZP to relay without decrypting):

GZP DE YUCR -
T - BZOE YJVO -
- P - 271025Z JUL 83
GR58 BT TEXT BT AR

Transmission to MTP, for relay to ESCJ, OMZF and XZYAQ (MTP who is crypto-guard for OMZF is to relay and also decrypt):

MTP DE YUCR -
T - ESCJ MTP XYAQ -
- P - 271025Z JUL 83
GR58 BT TEXT BT AR

GZP's transmission to BZOE and YJVO:

BZOE YJVO DE GZP -
- P - 271025Z JUL 83
GR58 BT TEXT BT AR

MTP's transmission to ESCJ and XYAQ:

GZP DE YUCR -
- P - 271025Z JUL 83
GR58 BT TEXT BT AR

SECTION II – USE OF PROSIGNS AND OPERATING SIGNALS IN PREAMBLE211. RESPONSIBILITY FOR PRECEDENCE

The assignment of precedence to a message is the responsibility of the originator and is determined by the subject matter of the text and the time factor involved.

212. SIGNIFICANCE OF PRECEDENCE

Precedence designations are employed to indicate the relative order in which a message of one precedence designation is handled with respect to all other precedence designators. Precedence designation indicate:

- a. To the Originator – The required speed of delivery to the addressee.
- b. To Communications Personnel – The relative order of handling or delivery.
- c. To the Addressee – The relative order in which he should note the message.

213. PRECEDENCE DESIGNATIONS AND COMMUNICATIONS HANDLING

Messages will be handled in accordance with the precedence explained below:

a. FLASH precedence will be indicated by the prosign "Z". Flash messages will be hand carried, processed, transmitted and delivered in the order received and ahead of all other messages. Messages of lower precedence will be interrupted on all circuits involved until handling of a Flash message is completed.

b. IMMEDIATE precedence will be indicated by the prosign "O". Immediate messages are processed, transmitted and delivered in the order received and ahead of all messages of lower precedence. Processing and transmission of lower precedence messages already in progress will be interrupted unless interrupting and cancelling the lower precedence transmission will take longer than completing it.

c. PRIORITY precedence will be indicated by the prosign "P". Priority messages are processed, transmitted and delivered in the order received and ahead of all messages of lower precedence. Routine messages being transmitted should not be interrupted unless they are extra long.

d. ROUTINE precedence will be indicated by the prosign "R". Routine messages are processed, transmitted and delivered in the order received and after all messages of higher precedence.

214. SINGLE PRECEDENCE

The precedence shall be indicated by the appropriate prosign and will appear as the first element of the preamble.

EXAMPLE: (Routine to all addressees.)

NPQT DE GABB
-R- 051811Z JUL 83
-FM GABB
-TO H7NP
-INFO NPQT
BT etc.

215. DUAL PRECEDENCE

Multiple address messages having both action and information addressees may either be assigned a single precedence, in which case it indicates the precedence for all addressees, or they may be assigned two precedences, one precedence for all action addressees and a lower precedence for all information addressees. The procedure for indicating dual precedence in the heading of plaindress and codress messages is as follows:

a. Plaindress. Both precedence prosigns, separated by the separative sign, will appear as the first element of the preamble; the higher precedence will appear first.

EXAMPLE: (Immediate to action addressees and Routine to information addressees.)

NPQR DE GABB
 -O-R-061217Z JUL 83
 -FM GABB
 - TO NPQR
 - INFO M9VO
 NPQT
 Z3P0

BT

b. Codress. Both precedence prosigns, separated by the separative sign, will appear as the first element of the preamble; the higher precedence will appear first. However, when a message is routed to a crypto guard which serves all the addressees, the higher precedence prosign only will be included in the preamble. The lower precedence will be included in the encrypted text in the form "... (lower precedence) for information addressees".

c. Codress Transmission Instructions. A separate heading will be prepared for each transmission of a dual precedence codress message in accordance with subparagraph 210a. Any station(s) or addressee(s) included in the heading of the message who is/are to receive the message at the lower precedence (i.e. information addressees or stations having to serve information addressees) will be indicated in the transmission instructions by means of an operating signal ZOT "Transmit or handle this message at the lower precedence to the station(s)/address designator(s) which follow"), followed by the identification of the station(s)/addressee(s) concerned. The absence of the operating signal automatically indicates that the message is to be handled at the higher precedence by all stations. If T instructions are specifically included and the transmission instructions become long or complicated, those stations for whom the message is intended at the lower precedence may be collated and shown together after operating signal ZOT. ZOT will then be inserted after the last T addressee designation.

EXAMPLE 1: (GABB directs NPQR to transmit the message at the lower precedence to C2S6.)

NPQR DE GABB
 -ZOT C2S6
 - P - R - 141816Z JUL 83
GR71
 BT etc.

EXAMPLE 2: (GABB calls K49B. He directs NPQR to decrypt at the lower precedence and pass to Z3PO at the higher precedence and to M9VO at the lower precedence; NPQS to decrypt at the higher precedence; NPQT to pass without decrypting to D3X/ at the higher precedence, and to H7NP at the lower precedence.)

K49B DE GABB
 - NPQR - T - Z3PO - ZOT M9VO NPQR
 - NPQT - T - D3X/ - ZOT H7NP
 - P - R - 271733Z JUL 83
GR68
 BT etc.

EXAMPLE 3: (GABB directs NPQR to decrypt at the higher precedence and to pass to C2S6 at the lower precedence.)

NPQR DE GABB
 - T - NPQR-ZOT C2S6
 - P - R - 231617Z JUL 83
GR71
 BT etc.

EXAMPLE 4: (GABB directs NPQR to decrypt at the lower precedence.)

NPQR DE GABB
 -ZOT
 - P - R - 211139Z JUL 83
GR22
 BT etc.

216. MESSAGE INSTRUCTIONS – USE OF OPERATING SIGNALS

The message instructions are normally ordered by communications centers or originators to express handling and delivery instructions and follow the date-time group. These message instructions are to remain unchanged.

EXAMPLE 1: (GABB transmits a drill message to NPQS.)

NPQS DE GABB
P - 071513Z JUL 83 - ZEU*
 BT etc.

* ZEU means "Exercise (drill) message".

EXAMPLE 2: H7NP transmits a suspected duplicate message to NPQT).

NPQT DE H7NP
-R- 071754Z JUL 83 - ZFD*
-FM H7NP
-TO NPQT
-INFO GABB
BT etc.

* ZFD means "This message is a suspected duplicate".

SECTION III – EXPRESSING THE ADDRESS217. USE OF PROSIGNS FM, TO, INFO AND XMT

The prosigns FM, TO, INFO and XMT are used to indicate the originator, action addressees, information addressees and exempted addressees as required.

EXAMPLE 1: (Action addressees only.)

NPQR DE GABB
-R- 081514Z JUL 83
-FM GABB
-TO GABA
 NPQR
BT etc

EXAMPLE 2: (Action and Information addressees.)

NPQR DE GABB
-R- 081516Z JUL 83
-FM GABB
-TO GABA
-INFO NPQR
 NPQS
BT etc

EXAMPLE 3: (Action, Information and Exempted addressees.)

NPQR DE GABB
-T- 2SN7 - ZWL C2S6
-R- 082117Z JUL 83
-FM GABB
-TO ODP1
-INFO 2SN7
-XMT C2S6
 H7NP
BT etc

EXAMPLE 4: (Information addressees only.)

NPQS DE GABB
-R- 081613Z JUL 83 - ZEX
-FM GABB
-INFO NPQS
BT etc

218. CALL SERVING AS THE ADDRESS

In plaindress messages when the originator is in direct communication with the addressees the call will serve as the address.

EXAMPLE 1: (When all addresses are action.)

A1QR H7NP DE NPQT
-R- 082253Z JUL 83
BT etc

EXAMPLE 2: (When there are both action and information addressees.)

The information addressees must be indicated additionally in the transmission instructions by use of the operating signal ZFH2, followed by the designation of the information addressee:

A1QR H7NP DE NPQT
-ZFH2 H7NP
-R- 082310Z JUL 8
BT etc

EXAMPLE 3: (When all addressees are information.)

This is indicated by the inclusion of the operating signal ZFH2 in the transmission instructions with no address designations following:

A1QR H7NP DE NPQT
-ZFH2*
-R- 082359Z JUL 83
BT etc

* ZFH2 means "This message is passed to you for information".

SECTION IV – PREFIX219. GR (GROUP COUNT), GRNC (GROUPS NOT COUNTED), AND ACCOUNTING SYMBOLS

a. GR followed by numerals means "THIS MESSAGE CONTAINS THE NUMBER OF GROUPS INDICATED". It must be included in the prefix of all messages containing countable coded groups.

EXAMPLE: (M9VO transmits a message of 8 groups to C2S6)

```
C2S6 DE M9VO
-R- 300200Z JUL 83
GR8
BT
KAHO TUON GREU AHID XOYO DEAK FOLB DUTA
BT
K
```

b. GRNC means "THE GROUPS IN THIS MESSAGE HAVE NOT BEEN COUNTED". This prosign is included in the prefix if it is necessary to indicate that groups have not been counted. It must be included in messages bearing an accounting symbol if the groups are not counted.

c. Accounting symbols are a combination of letters used to indicate the agency, service or activity which assumes financial responsibility for the message. Whenever accounting symbols are used, a Group Count or GRNC must be inserted.

EXAMPLE:

```
-R- 281633Z JUL 83
-FM NBS
-TO GABC
-*WD GRNC
BT
TEXT
BT
K
```

*(For this example, WD is considered to be an accounting symbol.)

SECTION V – USE OF PROSIGNS AND OPERATING SIGNALS IN MESSAGE ENDING220. TIME GROUP

In the final procedure component, the time group, if used with abbreviated format, must follow immediately after the final BT.

221. FINAL INSTRUCTIONS

a. The message authentication, if used, will immediately follow the time group. Prosign, call signs and other operating signals may then follow.

EXAMPLE: (Ending of message in abbreviated format to K49B, being authenticated, and indicating further traffic for NPQR).

TEXT
BT
0108Z
ZNB *
-B P NPQR
K

* ZNB means "Authentication is"

b. To correct errors made during transmission of a message, the prosign C followed by identification data may be used in final instructions.

EXAMPLE:

H7NP DE A1QR
-R- 151320Z JUL 83
GR6
BT
STAK V1AZ TKCN QDFR RPMP LASK
BT
C 3 - TXCN
K

222. TRANSMISSION ENDING

Every transmission shall end with either the prosign K (invitation to transmit) or the prosign AR (end of transmission).

223. READDRESSING MESSAGES (DOUBLE HEADING)

a. Circumstances may arise in which it becomes necessary to readdress a message to additional authorities not originally included in the address.

b. The readdressing authority must originate a message which will accomplish delivery of the previously transmitted message to the desired additional authorities. Thereafter, the readdressed message is handled in the same manner as other messages.

(1) The readdressing authority will initiate a request to the appropriate authority for readdressal, identifying the message he wishes readdressed by indicating the originator, date-time group and internal reference number (if any). He will also specify the additional addressees to whom the message is to be delivered, and will indicate whether it is for their action or information.

(2) If the communication center no longer holds a copy of the message in question, the readdressing authority will either furnish a copy of the message to be readdressed or will accomplish the readdressal by originating a new message.

c. The following general rules for readdressing messages apply:

(1) If the message being readdressed is held in the files of the communication centers serving the additional addressees, the readdressal may be accomplished by a procedure message containing appropriate operating signals. (See third example paragraph d(2) below.)

(2) If the message being readdressed is not held in the files of the communication center serving the additional addressees, it will be processed as follows: (See example paragraph d(1) and second example, paragraph d(2) below.)

(a) A supplementary heading is inserted in front of the original preamble. The supplementary heading will include all procedure lines, one through ten, as required.

(b) All parts of the original message heading preceding the preamble are omitted. It will be insured that under no circumstances is the original date-time group either omitted or altered.

(c) The precedence indicated by the readdressing authority will be used in the supplementary heading.

(d) A new date-time group will be assigned by the readdressing authority and will appear in format line five of the supplementary heading. NOTE Expression of year in record communications – until 31 December 2005, when record communications contain a year in the header, it will be assumed that where the year is expressed in two digits of 06 – 99 the digits 19 precede, i.e., 1906 – 1999, and where the two digits 00 – 05 appear it will be assumed that digits 20 precede, i.e. 2000 – 2005. Effective January 2006, record communications will contain a four digit year in the header, i.e., date time group will be expressed at 011500z JAN 2006. Within the body of a message, the established standards for character based messaging will be followed, e.g., The United States Message Text Formats (USMTFS), Allied Data Publication – 3 (ADATP – 3), Australian Defence Formatted Message Standard (ADFORMS). These standards have adopted a four digit year for date data transmission.

(e) The designation of the readdressing authority (new originator) will appear in format line six of the supplementary heading.

(f) The addressee(s) to whom the message is readdressed will appear in format lines seven and/or eight as appropriate.

(g) The accounting symbol of the readdressing authority will appear in the supplementary heading in procedure line ten.

(3) A message cannot be readdressed if any alteration is made to its original preamble, address, prefix or text, except when addressees not pertinent to a transmission at hand may be deleted, as when readdressing "book" messages.

(4) Encrypted messages will not be readdressed without prior reference to the crypto center. Nations, Services or Allied Commanders may prohibit the practice by issuing instructions to their crypto centers specifying that such messages must be re-encrypted.

(5) If the readdressing authority determines that certain of the original addressees or the originator should be informed of the additional addressees, notification may be accomplished as follows:

(a) In the case of plaindress, notification may be accomplished through use of the operating signal ZFH (and appropriate numeral) or by use of a separate message, according to National, Service or Command procedure.

(b) In the case of codress, the originator and/or other addressees of the message may be informed of the readdressal by a separate codress message or by being included as information addressees in the message which accomplished the readdressal.

d. Examples of Readdressed Messages:

(1) Example A:

Original message received by NPQR from GABB:

NPQR DE GABB -
P - 221400Z JUL 83
FM GABB -
TO NPQR
GR16 BT

Same message readdressed by NPQR to C2S6 for action:

C2S6 DE NPQR -
P - 221445Z - JUL 83
FM NPQR -
TO C2S6 -
P - 221400Z JUL 83
FM GABB -
TO NPQR
GR16 BT

(2) Example B:

Original message in codress format received by NPQR from GABB:

NPQR DE GABB
R - 012345Z JUL 83
GR71 BT

Same message readdressed in plaindress format by NPQR to Z3PO for action and M9VO for information:

M9VO Z3PO DE NPQR -
R - 0200100Z JUL 83
FM NPQR -
TO Z3PO -
INFO M9VO -
R - 012345Z JUL 83
GR71 BT

Same message readdressed by using operating signal ZFH:

M9VO Z3PO DE NPQR -
R - 020100Z JUL 83 - ZFH1 Z3PO ZFH2 M9VBO -
R - 012345Z JUL 83
GR71 BT

(3) Where National, Service or Command instructions prohibit use of either of the above methods, the readdressal may be effected by use of a separate classified message as follows:

Message as readdressed in codress format by NPQR to Z3PO for action and M9VO for information:

M9VO Z3PO DE NPQR -
R - 020100Z JUL 83
R - 012345Z JUL 83
GR71 BT

Followed by a message:

M9VO Z3PO DE NPQR -
R - 020109Z JUL 83
GR23 BT etc

Encrypted text which when decrypted reads:

SECRET GABB MSG DTG 012345Z JUL 83 READDRESSESSED TO Z3PO
FOR ACTION AND TO M9VO FOR INFORMATION BT K

CHAPTER 3RECEIPT METHOD – PROCEDURESSECTION I – RECEIPT METHOD301. RECEIPT METHOD

a. The receipt method requires the receiving station to give a receipt for each message to the transmitting station; thus there is certainty of reception. It may be accomplished by stations transmitting on the same frequency, or on different frequencies. It is normally used when passing messages:

- (1) Between fixed stations.
- (2) From a mobile to a fixed station.
- (3) From a mobile or fixed station to an aircraft.
- (4) Between mobile stations.

b. Under difficult conditions, when no answer to a call can be obtained, a message may be transmitted in the hope that it may be received. Subsequent to this blind transmission every effort should be made to obtain a receipt (see para 319).

c. For passing messages from shore stations to ships, methods are preferred which do not entail the ship breaking radio communications silence (see para 401).

SECTION II – CALLING AND ANSWERING302. CALL SIGNS

a. Only the following call signs are authorized for use in calling and answering: INTERNATIONAL, TACTICAL, COLLECTIVE, NET and INDEFINITE (See ACP 167 for definitions).

b. When radio call signs are not assigned, address groups may be used as call signs in military communications.

c. When any form of call sign or address group occurs in the text of a message, each occurrence of the call sign is to be immediately preceded by the prosign \overline{PT} .

303. THE CALL

a. In establishing communications a call is required. This will consist of the call sign(s) of stations called, the prosign DE and the call sign of the calling station. The call may contain:

- (1) INDIVIDUAL CALL SIGN: identifying a single station.
- (2) COLLECTIVE CALL SIGN: identifying a pre-determined group of stations.
- (3) NET CALL SIGN: identifying all stations on that net.

b. The call may be of two types:

- (1) SINGLE CALL: whereby only one call sign precedes the prosign DE.

EXAMPLE

K49B DE GABB K

(2) MULTIPLE CALL: whereby two or more call signs precede the prosign DE. These may be individual, net, and/or collective call signs.

c. Under difficult operating conditions, the call signs in the call may be transmitted twice.

NOTE: See para 202 for method of exempting stations from the call.

304. SEQUENCE OF CALL SIGNS AND/OR ADDRESS GROUPS

Call signs and/or address groups used in the call should be arranged in alphabetical order in the form in which they are to be transmitted, whether plain or encrypted. The slant sign (/) and figures 1 through 0 will be considered as the twenty-seventh through thirty-seventh letters of the alphabet. Care must be exercised to avoid separating call signs and/or address groups which are interdependent.

305. INDICATING PRECEDENCE IN A PRELIMINARY CALL

- a. Precedence may be indicated in a preliminary call as follows:

<u>PROSIGNS</u>	<u>MEANING</u>
Z	I have flash traffic to transmit.
O	I have immediate traffic to transmit.
P	I have priority traffic to transmit.
R	I have routine traffic to transmit.

EXAMPLE: (NPQT tells A1QR that he has priority traffic to transmit.)

A1QR DE NPQT P K

- b. To indicate a number of messages of one or more precedences in a preliminary call the operating signal ZBO shall be used.

EXAMPLE 1: (Free or Directed Net.)

GABB DE NPQS ZBO 3P 2R K

EXAMPLE 2: (Directed Net. NPQS tells GABB that he has two priority messages for NPQT)

GABB DE NPQS ZBO 2P NPQT K

EXAMPLE 3: (Directed Net. NPQS tells GABB that he has 7 routine messages for GABB and 2 priority and 4 routine messages for NPQT)

GABB DE NPQS ZBO 7R - 2P 4R NPQT K

306. ANSWERING

- a. To answer a preliminary call, stations will transmit the identification of the calling station, the prosign DE, the identification of the answering station and the prosign K.

EXAMPLE:

GABB DE NPQS K

- b. After good communication has been established an answer may consist of the prosign DE, the identification of the answering station and the prosign K. This is an ABBREVIATED ANSWER.

EXAMPLE

DE NPQS K

- c. Stations will respond to a preliminary call in:
- (1) The order called.
 - (2) Alphabetical/numerical sequence.
 - (3) The order directed by the Net Control Station.
- d. If any station fails to answer in proper sequence, the next station waits 5 seconds and answers. The station which fails to answer in proper order and must wait until all other stations have answered or have had time to answer.
- e. If a station called fails to answer, the Net Control Station will wait 5 seconds after the last response received, then initiate a new preliminary call specifically to that station. When an answer cannot be obtained from a station, messages may be transmitted blind (see para 319).

307. PROSIGN \overline{AS}

When the called station is not prepared to accept traffic, the prosign \overline{AS} may be used as follows:

- a. If the delay will be of a few seconds only, \overline{AS} will be made after the identity of the responding station. This transmission must then be followed within a few seconds by a normal response.

EXAMPLE:GABB DE NPQS \overline{AS}

after a few seconds

DE NPQS K

- b. \overline{AS} followed by \overline{AR} means "YOU ARE TO WAIT" or "I AM OBLIGED TO WAIT". It applies only to and between the stations designated in the cell.

EXAMPLE:GABB DE NPQS \overline{AS} \overline{AR}

- c. \overline{AS} followed by a numeral and the prosign \overline{AR} means that the expected delay in minutes is represented by the numeral following the prosign AS.

EXAMPLE:GABB DE NPQS \overline{AS} 5 \overline{AR} 308. UNKNOWN STATION – PROSIGN \overline{AA}

When a station hears a call without being certain that the call is intended for it, it shall not answer until the call has been repeated and is understood. When a station is called, but is uncertain of the call

sign of the calling station, it shall answer immediately by transmitting the prosign \overline{AA} followed by DE, its own call sign and prosign K.

EXAMPLE: (NPQS hears its own call sign but misses the call sign of the calling station.)

NPQS transmits:

\overline{AA} DE NPQS K

309. TUNING STATIONS ON A NET

a. Tuning several stations when establishing a net, or tuning one or more stations joining a net, is known as "NETTING". Ordering and controlling NETTING is a responsibility of the Net Control Station.

b. The type of procedure required to establish a net varies with the type of radio equipment used on the net. Types may fall into various categories which may include:

(1) Self-tuning sets

(2) Sets requiring a tuning signal from the Net Control Station.

c. The operating signals ZRF, ZRC, ZGE and ZRA are used for tuning (see ACP 131 for meanings).

d. Self-tuning sets. At the appointed time all stations on the net prepare their equipment for use and select the specified frequency. Net Control Station then calls all stations, instructing them to tune antennae, and, after a pause to allow stations to tune their equipment, ascertains the strength of signals and readability of the net.

e. The Net Control Station is responsible for having its transmitter accurately turned to the assigned frequency. Each subordinate station must tune to the Net Control Station even if the Net Control Station is off frequency. If this is the case, the subordinate station(s) should inform the Net Control Station, using appropriate operating signals.

f. Prior to opening a net, preliminary adjustment to transmitter and receiver can be made, using a dummy or phantom antenna on the assigned frequency. Then, at the appropriate time, the receiver can be zero beat with the Net Control Station and the transmitter tuned to the receiver in a minimum amount of time on the assigned frequency, taking care that there is no possibility of infringing the emission policy in effect.

EXAMPLE: (NPQR (THE Net Control Station) wishes to tune 2SN7.)

He transmits:

2SN7 2SN7 DE NPQR NPQR ZRF ZRC2 -NPQR NPQR (repeated for
20 secs, then depress key for 10 secs) \overline{AR}

After a pause to allow stations to tune their equipment:

2SN7 DE NPQR ZGE2 K

Stations answer:

NPQR DE C2S6 - CS26 C2S6 K
 NPQR DE M9VO - M9VO M9VO K
 NPQR DE Z3PO - Z3PO Z3PO K

All prove to be on the correct frequency except Z3PO who is 10 kHz low. NPQR transmits.

C2S6 M9VO DE NPQR ZRA1 K

After receipts from C2S6 and M9VO, NPQR transmits:

Z3PO DE NPQR ZRA3 10 K

Z3PO receipts, readjusts his transmitter and asks how his frequency checks:

NPQR DE Z3PO $\overline{\text{INT}}$ ZRA K

NPQR replies giving further training instructions if necessary or frequency correct.

310. SIGNAL STRENGTH AND INTELLIGIBILITY

a. A station assumes it has an intelligibility of "good" unless otherwise notified. Signal strength and intelligibility reports will not be exchanged unless communication is unsatisfactory. Intelligibility is the ease with which the incoming signals can be received. This depends on the relative strength of desired versus the undesired signal (interference, static, inherent receiver noises, etc.) and on the capabilities of the receiving operator.

b. Signal strength and intelligibility are indicated by means of the operating signals QSA and QRK (see ACP 131 for meanings).

311. TEST SIGNALS

When it is necessary for a station to initiate test signals, whether for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such signals will consist of not more than three series of three V's followed by the call sign of the station and the prosign AR.

EXAMPLE:

VVV VVV VVV NPQT $\overline{\text{AR}}$

312. MESSAGE TRANSMISSION

a. Message shall be transmitted exactly as written. Abbreviations shall not be substituted for plain language or plain language substituted for abbreviations.

b. Numerals in date-time groups, serial numbers, call signs and those used with operating signals and prosigns shall be written and transmitted as digits. NOTE Expression of year in record communications – until 31 December 2005, when record communications contain a year in the header, it will be assumed that where the year is expressed in two digits of 06 – 99 the digits 19 precede, i.e., 1906 – 1999, and where the two digits 00 – 05 appear it will be assumed that digits 20 precede, i.e. 2000 – 2005. Effective January 2006, record communications will contain a four digit year in the header, i.e., date time group will be expressed at 011500z JAN 2006. Within the body of a message, the established

standards for character based messaging will be followed, e.g., The United States Message Text Formats (USMTFS), Allied Data Publication – 3 (ADATP – 3), Australian Defence Formatted Message Standard (ADFORMS). These standards have adopted a four digit year for date data transmission.

c. Separations of parts: The prosign \overline{BT} is to be transmitted immediately following the last element of the heading and of the text of all messages, except abbreviated service messages in which a date-time group/time group is not used. NOTE Expression of year in record communications – until 31 December 2005, when record communications contain a year in the header, it will be assumed that where the year is expressed in two digits of 06 – 99 the digits 19 precede, i.e., 1906 – 1999, and where the two digits 00 – 05 appear it will be assumed that digits 20 precede, i.e. 2000 – 2005. Effective January 2006, record communications will contain a four digit year in the header, i.e., date time group will be expressed at 011500z JAN 2006. Within the body of a message, the established standards for character based messaging will be followed, e.g., The United States Message Text Formats (USMTFS), Allied Data Publication – 3 (ADATP – 3), Australian Defence Formatted Message Standard (ADFORMS). These standards have adopted a four digit year for date data transmission.

313. PAUSE IN TRANSMISSION (PROSIGN \overline{AS})

a. \overline{AS} made during a transmission and without an ending sign indicates a short pause.

EXAMPLE:

DX3/ DE NPQT -R- 102030Z JUL 83 \overline{BT} UNCLAS. Join convoy at point \overline{AS}

When ready to resume, NPQT completes the transmission commencing with a repetition of the last word, group or prosign transmitted.

b. \overline{AS} followed by \overline{AR} means "YOU ARE TO WAIT", or "I AM OBLIGED TO WAIT", as applicable.

EXAMPLE:

\overline{NPQT} DE D3X/ -P- 111732Z JUL 83 \overline{BT} UNCLAS Rendezvous will
AS AR

c. A station having received \overline{AS} shall wait for K before transmitting, unless in the meantime he has been given a message of higher precedence to transmit or it appears he has been overlooked.

d. A station resuming transmission of a message after a pause as in b. above will, after the call, identify the message, transmit the prosign AA, the last word, group or prosign transmitted, the separate sign, and resume transmission of the original message.

EXAMPLE:

NPQT DE D3X/ 111732Z JUL 83 – AA will – be arranged \overline{BT} K

314. TRANSMISSION OF MESSAGES CONTAINING MORE THAN 100 GROUPS – PROSIGN B

a. When a group count is used messages containing more than 100 groups shall be transmitted in portions of 100 with the last portion only containing additional groups. A receipt shall be given for each portion.

EXAMPLE:

NPQS, transmitting a message containing 160 groups to GABB, stops after transmitting the 100th group, indicates that there is more to follow and requests a receipt for the portion transmitted, as follows:

GABB DE NPQT -
R - 231610Z JUL 83
GR 160
BT
(. . . FIRST 100 groups) -
B 100
K

GABB, having received the portion, transmits:

DE GABB R K
NPQT resumes transmission after a short pause

GABB DE NQQT 101 -
(101 to 160 inclusive)
BT
K

b. In the above example, should GABB have required any repetitions, they would have been asked for and given prior to receipting for the portion.

c. Messages without group counts shall be transmitted as above but without GR and number of groups. A new portion will start with the last word or group of the previous portion..

315. TRANSMITTING MESSAGES IN STRINGS – PROSIGN B

a. When radio communication is good, frequently it facilitates the handling of traffic for one station to send several messages to another station without interruption. The receiving station will indicate the number of messages to be transmitted in a given sequence.

EXAMPLE:

NPQR has ten messages for GABB. NPQR transmits:

GABB DE NPQR ZBO 6P 4R K

GABB transmits:

NPQR DE GABB QSG5 K

b. When messages are to be sent in sequence, the transmitting station shall indicate immediately after the prosign B at the end of each message in the sequence the precedence prosign of the message to follow. Upon transmitting the last message in a sequence a receipt is requested before continuing with another sequence. Therefore, the last message of each sequence will be terminated with

prosign B, precedence prosign and K, meaning "THERE IS MORE TO FOLLOW; RECEIPT FOR WHAT I HAVE SENT".

EXAMPLE: (NPQR transmits the first of a string of five messages.)

GABB DE NPQR -
P - 160237Z JUL 83
GR23
BT
TEXT
BT
B P

(NOTE: There is a short pause to allow any station to break in to transmit traffic of higher precedence. If no station interrupts, NPQR proceeds)

GABB DE NPQR

(NOTE: The call is optional. If the call is eliminated the separative sign (II) must be transmitted.)

-P- 160242Z JUL 83 -
FM NPQR - etc

NPQR transmits the ending of the fifth message:

BT B P K

GABB requests the needed repetitions if break-in procedure has not been employed. Otherwise, GABB receipts for the string:

NPQR DE GABB R K

316. REPETITION OF DIFFICULT PORTIONS (PROSIGN IMI)

In the text of a plain language message, difficult portions may, at the discretion of the transmitting operator, be repeated. For this purpose, the prosign IMI is used, and means "I AM GOING TO REPEAT THE DIFFICULT PORTION JUST TRANSMITTED".

EXAMPLE:

A1QR DE D3X/ -
R - 171953Z JUL 83
BT
UNCLAS. Your 121212Z. Replacement part No. 23A/MB6/M/47
IMI 23A/MB6/M/47 being dispatched
BT
K

317. ERRORS DURING TRANSMISSION AND CANCELLING TRANSMISSION (PROSIGN EEEEEEEE)

a. The error posign will be of not less than eight (8) Es. It should not be unduly prolonged. It may be used to correct errors and to cancel transmissions in progress.

b. Correction of Errors. If an error is made during transmission, the error prosign will be transmitted, followed by the repetition of the last word, group or prosign correctly transmitted.

EXAMPLE:

GABB DE NPQS -
 T -
 R-172137Z JUL 83 -
 FM NPQS -
 TO GABC -
INFO GADC EEEEEEEEE GABB
 BT
 UNCLAS. MY 160603Z. DETAILS WILX EEEEEEEEE DETAILS WILL
FOLLOW
 BT
 K

c. Cancelling transmissions in progress. The error prosign when use for cancellation of transmission, may be used only for the transmission in progress. Cancellation of messages already received for must be effected by means of a separate message. When used, the prosign will be followed by the prosign AR and means "THIS TRANSMISSION IS IN ERROR, DISREGARD IT".

EXAMPLE:

M9VO DE C2S6 -
R- 222337Z JUL 83
 BT
 UNCLAS. RETURN TO EEEEEEEEE AR

318. RECEIPTS (PROSIGN R)

- a. The prosign R will be used to indicate receipt of messages or portions thereof.
- b. After a call, R means "I HAVE RECEIVED YOUR LAST TRANSMISSION".

EXAMPLE:

NQPT DE NPQS R AR

c. After a call, R preceded by INT means, "HAVE YOU RECEIVED MY LAST TRANSMISSION OR HAVE YOU RECEIVED _____".

EXAMPLE:

NPQT DE NPQS INT R K or NPQT DE NPQS INT R GABC
 121753Z JUL 83 K

SECTION IIITRANSMITTING IN SPECIAL CIRCUMSTANCES319. TRANSMITTING MESSAGE BLIND

When an answer cannot be obtained from a station called, messages may be transmitted blind at the discretion of a responsible officer. Each message will be transmitted twice, with IMI separating the first and second transmission. Subsequent efforts must be made to obtain a receipt.

320. WORDS TWICE (OPERATING SIGNAL QSZ)

During periods of poor or difficult reception conditions the receiving operator may request to have messages sent "WORDS TWICE". This is accomplished using the operating signal QSZ

EXAMPLE:

GABB DE NPQT QSZ K
NPQT NPQT DE DE GABB GABB
- RR - 141418Z 141418Z JUL JUL 83 83
BT BT
UNCLAS UNCLAS YOUR YOUR 131313Z 131313Z APR APR 83 83
APPROVED APPROVED
BT BT
KK

321. SPARE

SECTION IVIDENTIFICATIONS FOR QUESTIONS, CORRECTIONS, REPETITIONS, VERIFICATIONS,
CANCELLATIONS322. IDENTIFICATION MESSAGES

Messages are identified by date-time group. Additional data such as transmission identity, designator of the originating station, group count, preamble and partial or complete text may be used when absolutely necessary. In all cases, the data used to identify a message must be as brief as practicable, consistent with positive identifications. Care should be exercised when identifying messages that no plain language reference is made to address or text portions which were encrypted. NOTE Expression of year in record communications – until 31 December 2005, when record communications contain a year in the header, it will be assumed that where the year is expressed in two digits of 06 – 99 the digits 19 precede, i.e., 1906 – 1999, and where the two digits 00 – 05 appear it will be assumed that digits 20 precede, i.e. 2000 – 2005. Effective January 2006, record communications will contain a four digit year in the header, i.e., date time group will be expressed at 011500z JAN 2006. Within the body of a message, the established standards for character based messaging will be followed, e.g., The United States Message Text Formats (USMTFS), Allied Data Publication – 3 (ADATP – 3), Australian Defence Formatted Message Standard (ADFORMS). These standards have adopted a four digit year for date data transmission.

323. IDENTIFICATION OF PARTS OR PORTIONS OF MESSAGES

The following rules for identifying the parts or portions of messages are to be followed:

- a. The heading – identify by:
 - (1) All before Prosign
 - (2) Prosign to Prosign
 - (3) All after Prosign
- b. Plain language texts - identify by:
 - (1) $\overline{\text{BT}}$ to word.
 - (2) Word to word
 - (3) Prosign WA and/or WB.
 - (4) Prosign AA and/or AB.
 - (5) $\overline{\text{BT}}$ to $\overline{\text{BT}}$.
 - (6) Word to $\overline{\text{BT}}$.

(NOTE: When a word appears more than once, that would used as an identity applies to the first appearance. Reference to subsequent appearance of the word must be further identified by means of adjacent words.)

- c. Code groups – identify by:
- (1) $\overline{\text{BT}}$ to group number.
 - (2) Group numbers individually.
 - (3) Group number to group number.
 - (4) All after group number.
- d. Executive method messages – See Chapter 6.
- e. Sequence of Dealing with Queries

When a message is transmitted to a multiple or collective call, stations with answer in sequence. However, should any station have any question concerning the message, this will be dealt with by the transmitting station, and a receipt obtained from the receiving station concerned before the next station in sequence transmits.

EXAMPLE:

NPQT transmits a message to ODP1.

ODP1 DE NPQT
 $\overline{\text{-R-}}$ 132056Z AUG 83
 BT
UNCLAS. Units will rendezvous at 2308Z
 BT
 K

The stations respond in sequence

DE A1QR $\overline{\text{IMI}}$ WA AT K
 A1QR DE NPQT WA AT - 2308Z K
 DE A1QR R AR
 DE D3X/ R AR
 DE H7NP R AR

324. QUESTIONS, CORRECTIONS AND REPETITIONS

During transmission corrections are made in accordance with paragraph 317 and repetitions of difficult portions, paragraph 316. After transmission and before a receipt is obtained, the receiving operator will, before receipting for a message, check his copy and ensure that it is, as far as he can see, correct and complete. If it is not, he must:

- a. Either request repetitions of the whole message, or portions thereof, by means of prosign IMI, with identifying data as shown in paragraph 323.
- b. Or question his reception of doubtful portions of the message by means of prosign $\overline{\text{INT}}$, with identifying data as shown in paragraph 323.

Assume the following message has been transmitted:

NPQR DE NPQS -
 P - 231427Z AUG 83 -
 FM XAGP -

TO BZQM -
INFO NPQR
 BT
 UNCLAS
 My 222300Z AUG 83. Proceed on assigned movements. Make reports
on circuit O3A.
 BT K

EXAMPLE 1: (NPQR missed the entire message.) He transmits:

NPQS DE NPQR IMI K

NPQS replies:

NPQR DE NPQS (transmits entire message as previously transmitted)

EXAMPLE 2: (NPQR misses the action addressee and the word "circuit".) He transmits:

NPQS DE NPQR IMI TO TO INFO - WB 03A K

NPQS replies:

NPQR DE PNQS TO TO INFO - TO BZQM - INFO - WB 03A – circuit K

NPQR then receipts for the message.

EXAMPLE 3: (NPQR questions his doubtful reception of the word "proceed".) He transmits:

NPQS DE NPQR
 INT WA 68 - PROCEED
 K

NPQS replies:

NPQR DE NPQS C K

NPQR then receipts for the message.

325. REQUESTS FOR REPETITION AFTER RECEIPT

After receipt has been obtained for a message, all requests for repetition must be in the form of a new message. When in direct communication, this may be accomplished by use of an abbreviated service message. If not in direct communication, a service message must be used.

EXAMPLE 1: (Repetition of complete message required.)

NPQS DE NPQR
 INT ZDK 231427Z AUG 83 K

EXAMPLE 2: (Repetition of portion of message required.)

NPQS DE NPQR
-R
BT
 INT ZDK 231427Z AUG 83
-WA MY
 BT
 1500Z
 K
 REPLY

NPQR DE NPQ
 ZDK 231427Z AUG 83 - WA MY
 -222300Z AUG 83
 K

326. VERIFICATIONS

The prosign J means "VERIFY WITH ORIGINATOR AND REPEAT". Requests for verifications are initiated by addressees only, and may be made in any of the forms described in Chapter 1, Section III.

a. The prising J may be used to request verifications of messages or portions thereof using identification data as shown in paragraphs 322 and 323.

b. J may be used to request verification of the whole or portions of encrypted messages only when the crypto system employed permits.

c. J after a call without identifying data means "VERIFY WITH ORIGINATOR AND REPEAT YOUR LAST MESSAGE".

d. J after a call and followed by identification data means "VERIFY WITH ORIGINATOR AND REPEAT MESSAGE OR PORTION THEREOF AS INDICATED."

e. In some circumstances, the addressee may be alongside the circuit operator and able, therefore, to initiate a request for a verification before a receipt is given.

f. The answer to a request for a verification will be initiated by the originator of the original message, and will take the form of prosign C, followed by the original identifying data (as shown in the request for verification) followed by the portion requested, except when a cancellation is initiated.

EXAMPLES:

NPQR requires a verification of the entire message shown in paragraph 324.
 NPQR transmits:

NPQS DE NPQR - T - R - 231550Z AUG 83 - FM NPQR - TO XAGP
 BT J 231427Z AUG 83 BT K

Note that in the example, NPQR is not in direct communication with the originator, therefore relay instructions must be included.

The response from XAGP as relayed by NPQS would be:

NPQR DE NPQS - R - 231604Z AUG 83 - FM XAGP - TO NPQR BT C

23142Z AUG 83 - R - 231427Z AUG 83 - FM XAGP - TO (remainder of messages as previously transmitted)

NPQR requires a verification of the time quoted in the text:

NPQS DE NPQR - T - R 231607Z AUG 83 - FM NPQR - TO XAGP
BT J 231427Z AUG 83 - WA MY BT K

Response from XAGP as relayed by NPQS:

NPQR DE NPQS - R - 231610Z AUG 83 - FM XAGP - TO NPQR
BT C 231427Z AUG 83 - WA MY - 222300Z AUG 83 BT K

(NOTE: Had the original message contained an error, a correction would be issued to all of the original addressees by the originator.)

327. CANCELLATIONS

During transmission, cancellations are in accordance with paragraph 317. To cancel a message after receipt has been obtained, a new message properly authorized must be sent. Cancellations of transmissions may be accomplished by the transmitting station by the use of appropriate operating signals or prosigns. A station cancelling a transmission is responsible for further handling of the contents of the transmission if such further handling is required.

(NOTE: The foregoing does not apply to cancellation of Executive Messages. See Chapter 6.)

328. RULES FOR COUNTING GROUPS

Groups are counted in accordance with the following rules:

- a. Count text groups only.
- b. Punctuation and symbols are not counted unless spelled out or abbreviated.
- c. Sequence of characters not interrupted by a space is counted as one group.
- d. The proper names of countries, cities or streets consisting of two or more separate words should be written and counted as one group; e.g. SanSalvador, SanDiego, SaltLakeCity, but when written separately, they will be transmitted and counted as separate groups; i.e. Fifth Avenue.

EXAMPLE:

The following text is counted as twelve groups:

YOUR 231917Z NOV 83. PERMISSION GRANTED (NON-INTERFERING BASIS). J F ADAMS SENDS

329. CHECKING GROUP COUNT

- a. GR preceded by INT and followed by a numeral means "It is the number of groups as indicated correct?" When the number of groups received does not correspond with the group count

transmitted, the receiving station will immediately question the transmitting station by using INT GR followed by a numeral.

EXAMPLE:

NPQS DE NPQT INT GR8 K

After checking the message, the transmitting station finds that the receiving station is correct, he transmits:

NPQT DE NPQS C K

b. In all messages where words or groups are counted and the count is 50 or less, the transmitting station, if it considers the receiving station to be incorrect after it has questioned the group count, repeats the original group count, the prosign BT, and then transmits the first character of each word or group in the text in succession, and then repeats the prosign BT in its proper position.

EXAMPLE: (GABB transmits a message to GABA.)

GABA DE GABB -
R - 272113Z OCT 83
GR10
BT
RECEIVED SHIPMENT TWO TRUCKS FROM PARIS PAREN FRANCE
PAREN
TODAY
BT K

GABA questions the group count:

GABB DE GABA INT GR11 K

GABB checks and finds the group count correct as transmitted, then transmits:

GABA DE GABB GR10 BT R S T T F P P F P T BT K

c. In all messages with a group count exceeding 50 groups, if the receiving station is considered to be incorrect, the transmitting station repeats the original group count and transmits the identity of the first, eleventh, and every subsequent tenth group followed by the initial letter of that group (the identify of the group will be separated from the initial letter of that group by a separative sign).

EXAMPLE: (GABB transmits a message containing 76 groups to GABA.
GABA questions the group count.)

GABB DE GABA INT GR75 K

GABB checks and finds the group count correct as transmitted, then transmits:

GABA DE GABB GR76 BT 1-D 11-L 21-H 31-I 41-Q 51-M 61-W 71-F
BT K

GABA then requests a repetition of the ten groups in which it has a miscount.

d. In the case of long messages sent in parts the number of groups sent is to be checked at the end of each part. For parts of 100 see subparagraph c, for final part if 50 or less see subparagraph b. See also paragraph 314.

SECTION VBREAKING IN ON TRANSMISSION330. BREAK-IN PROCEDURE

a. Break-in procedure is the method whereby a receiving station may interrupt a transmission to request the transmitting station to wait, shift frequency, repeat, etc. Break-in procedure will not be used to obtain repetitions when more than one station is involved in the reception of a message.

b. The receiving station desiring to break-in on a transmission makes a succession of dashes. When the transmitting operator hears these dashes he stops transmitting to ascertain the reason for the break-in. If three attempts to break-in are unsuccessful the receiving operator shall cease attempts to break-in until the transmission in progress is completed.

c. The station breaking in to request an immediate repetition may omit the preliminary call before transmission of the last word or group received correctly when receiving conditions are good and no confusion will result. The transmitting station then commences transmission with the last word, group or prosign which the receiving station indicated it had correctly received.

EXAMPLE: (GABB is transmitting to NPQS.)

AND WILL PROCEED IMMEDIATELY

NPQS missed the word IMMEDIATELY. NPQS transmits: - - -
PROCEED

GABB then transmits:

PROCEED IMMEDIATELY etc.

d. A full or an abbreviated call must be employed when the reason for an interruption is for other than to request immediate repetition of a missed word.

EXAMPLE: (GABB is transmitting to NPQS.)

AND WILL PROCEED IMMEDIATELY

NPQS has trouble with the receiver and desires GABB to wait. He transmits:

- - - GABB DE NPQS \overline{AS}

When ready to receive NPQS transmits:

DE NPQS \overline{IMI} AA PROCEED K

GABB then transmits:

DE GABB AA PROCEED - IMMEDIATELY etc.

e. Any station may break-in on a transmission in order to transmit a message of higher precedence under the conditions specified in paragraph 213. If on a directed net, Net Control Station permission must be obtained before transmitting a message.

EXAMPLE:

GABB is transmitting a long routine message to NPQS and has only completed a short portion of the text. NPQT has been handed an Immediate message for transmission and desires to break-in. GABB's transmission:

AND IS THE

NPQT transmits a series of dashes:

- - - -

Upon hearing the succession of dashes, GABB immediately ceases transmitting. NPQT transmits:

GABB DE NPQT O K
NPQT DE GABB K
NPQT send his message

After NPQT has completed his higher precedence message GABB resumes transmission to NPQS.

SECTION VISPECIAL PROCEDURES331. EMERGENCY SILENCE – PROSIGN HM

a. Emergency silence may imposed or lifted only by competent authority.

b. When an authentication system is in force, a station must always authenticate a transmission which:

(1) Impose emergency silence.

(2) Lifts emergency silence.

(3) Calls stations during a period of emergency silence.

c. Messages imposing emergency silence will be sent once through and ended with the prosign AR. Stations do not answer or receipt for such transmissions.

d. The prosign HM meaning "CEASE TRANSMISSIONS IMMEDIATELY, SILENCE WILL BE MAINTAINED UNTIL DIRECTED TO RESUME" transmitted three times in succession will be used to impose emergency silence.

EXAMPLE 1: (To impose Emergency Silence on the net.) GABB transmits:

K49B DE GABB HM HM HM (time group and authentication) AR

EXAMPLE 2: (To lift Emergency Silence on the net.) GABB Transmits:

K49B DE GABB ZUG HM HM HM (time group and authentication) K

e. The prosign HM may be amplified by circuit designators, frequencies, etc. to indicate particular circuits and/or frequencies.

332. METHOD OF SYNCHRONIZING TIME

a. If an accurate time check is desired it will be requested by using the operating signal ZUA preceded by INT and followed by a four digit time group. Time checks will be given in GMT unless otherwise requested or directed.

EXAMPLE : (NPQS desires time check at 2345Z. NPQS transmits:

GABB DE NPQS INT ZUA 2345Z K

GABB transmits:

NPQS DE GABB ZUA 2345Z (pauses) then sends 5-seconds dash K

GABB DE NPQS R AR

b. The intention to transmit a time signal may be conveyed in advance by an abbreviated service message employing the operating signal ZUJ meaning "Standby" followed by the operating single ZUA and the time signal will be transmitted. The five second dash shown in sub para a above should terminate at the exact time requested.

EXAMPLE: (GABB informs K49B that a time signal will be transmitted at 0015Z.)

K49B DE GABB ZUJ ZUA 0015Z $\overline{\text{AR}}$

At the prescribed time he transmits.

K49B DE GABB ZUA 0015Z (pauses) then sends 5-second dash $\overline{\text{AR}}$

333. ACKNOWLEDGEMENTS

a. An acknowledgement is a communication indicating that the message to which it refers has been received and the purpose is understood by the addressee.

b. Instructions to acknowledge mean "AN ACKNOWLEDGEMENT OF THIS MESSAGE (OR MESSAGE INDICATED), WHEN UNDERSTOOD, IS REQUIRED." If the addressee(s) required to acknowledge is/are operating under conditions of communication silence, they shall reply by any means which does not violate the communication policy currently in effect. When the importance of an operational message necessitates an acknowledgement in force, a commander having the authority to direct the reply under these conditions, may direct an immediate acknowledgement by including in the message the phase "ACKNOWLEDGE IMMEDIATELY." Authentication is mandatory for plain language messages which require the breaking of communication silence.

c. Message acknowledgement will be made only:

(1) When specifically requested by the last word(s) "ACKNOWLEDGE" or "ACKNOWLEDGE IMMEDIATELY" appearing as the last word(s) of the text.

(2) When requested by a separate message. A separate message is used when the need for an acknowledgement is determined after release of the original message. Service messages will not be used for this purpose. Abbreviated Service message may be used on tactical circuits to request acknowledgements.

EXAMPLE:

A1QR DE NPQT $\overline{\text{INT}}$ ZEV 1218Z K

A1QR transmits:

DE A1QR $\overline{\text{AS}}$ $\overline{\text{AR}}$

Subsequently, A1QR acknowledges:

NPQT DE A1QR
ZEV 1218Z K

(3) On other than tactical circuits, the acknowledgement of a message shall be composed as follows:

(a) The word YOUR or the address designator actually used to represent the originator.

(b) The message reference (date-time group, reference number, etc.)

(c) The word "ACKNOWLEDGED".
EXAMPLE:

YOUR 121314Z JAN 83 ACKNOWLEDGED

334. ENDING AIR-GROUND COMMUNICATIONS

When one ground station is communicating with several aircraft on a common frequency, it is frequently impossible for one aircraft to determine when communication between other aircraft and the ground station has been terminated. Because of these difficulties, the following rules will apply to air-ground communications:

a. Every series of transmissions between a ground station and aircraft must conclude with a final transmission ending with the prosign AR by the ground station even when the last transmission made by the aircraft ended with the prosign AR. Thus, if the aircraft transmits R AR, ground station will reply R AR.

b. In air-ground communications, a ground station may, from time to time, indicate to all stations on a particular frequency that no transmissions are in progress, and that it is free to communicate with any station by transmitting the prosign DE and his call sign followed by AR

CHAPTER 4BROADCAST METHOD401. BROADCAST METHOD

The broadcast method is the primary means of delivering traffic to ships at sea. The principle advantage of the broadcast method is that the station addressed does not answer, thus avoiding disclosure of position. It has the further advantage that it often is possible to avoid the use of the individual call sign address groups of the stations addressed, thus concealing the identity of such addressees.

402. RESPONSIBILITY OF BROADCAST STATIONS

Broadcast stations will:

- a. Assign sequential serial numbers.
- b. Commence schedules broadcasts on time.
- c. Monitor off-the-air to ensure quality of transmission.
- d. Inform all subscribers of changes in frequency, transmission speeds and times of transmission at the beginning and ending of each schedule for a 48 hour period preceding the change, when practicable.

403. RESPONSIBILITY OF RECEIVING STATIONS

Receiving stations will:

- a. Maintain up-to-date files of all broadcast schedule copied.
- b. Ensure diversity reception when equipment is available.
- c. Notify broadcast stations promptly of any irregularities experienced or when shifting from one broadcast area to another.

404. SPEED OF OPERATION

All stations which make regularly scheduled transmissions by broadcast method should, if practicable, employ automatic equipment. When automatic equipment is employed, the speed of transmission will be between 17 and 29 words per minute. The actual speed to be used will be determined by the authority operating the particular broadcast. In establishing the operating speed, the term WORDS PER MINUTE is used to refer to the reading of the tachometer on the keying head drive without regard to the composition of the material being transmitted. The tachometer is calibrated by using a prepared tape on which has been repeatedly perforated the word PARIS followed by one morse space.

405. CALL TAPES

Call tapes for broadcast stations using automatic equipment shall be constituted as follows:

- a. Broadcast designator (made three times)
- b. The group VVV (made three times)

- c. Prosign DE (made once)
- d. Call sign of broadcast station (made three times)

EXAMPLE:

B13A B13A B13A VVV VVV VVV DE MHU MHU MHU

406. MARKING DURING IDLE PERIODS

When using automatic equipment, stations operating on a continuous basis will run a test call-tape during the time when no traffic is on hand for transmission.

407. SUBMARINE BROADCAST PROCEDURES

Procedures for the conduct of submarine broadcasts are outlined in ACP 176 and supplements thereto.

408. PROCEDURE

- a. When messages are specifically addressed, the broadcast shall begin:

NAWS NAWS DE NSS NSS

I13C 156 I13C 156 -
 -P- - 091951Z JAN 83 091951Z JAN 83
 FM FM GBGB GBGB
 TO TO SCZF SCZF
GR17 GR17
 BT
TEXT
 BT GR17 AR

- b. When messages are not specifically addressed, the broadcast shall begin:

CO CQ DE GBR GBR
 BT
TEXT
 BT AR

- c. When plain language address designators are used in the address component, the prosigns will be sent twice and the plain language address designators only once.

- d. When a message must carry double transmission identification data, it will appear as I11C 234/B13M 307 (assuming the primary designator to be I11C and the secondary to be B13M).

409. DELAYS DURING BROADCAST SCHEDULES

If for any reason (other than no traffic on hand) a delay occurs during a broadcast schedule, the transmitting station should transmit the operating signal ZUJ at intervals. If the delay is expected to exceed five minutes, a continuous test call-tape shall be run until service is resumed. When resuming transmission, the broadcast authority shall transmit a call tape to alert receiving operators.

CHAPTER 5INTERCEPT ("I") METHOD501. DESCRIPTION

The INTERCEPT method is one in which one transmitting station sends a message to a second station; the latter station obtains the necessary repetitions, etc., to ensure correct reception and, if so directed by the transmitting station, or if so prescribed by the operating agency, repeats back the message. Messages thus transmitted are actually intended for third stations who copy the messages but do not use their transmitters directly in connection with the intercept method transmission.

The "I" method is employed by stations which are organized as a group and which exchange messages on a frequency which other stations for whom the messages are intended will be copying either continuously or at routine scheduled times.

502. PROCEDURE USED ON "I" METHOD SCHEDULES

Normal direct working procedure is used between transmitting and receiving stations.

503. THE ADDRESS OF "I" METHOD TRANSMISSIONS

- a. Messages transmitted by the "I" method will normally be addressed to the intercepting station.
- b. The address of plaintext messages will be expressed in full.
- c. In code messages, the encrypted call signs or address groups of intercepting stations are transmitted in the same manner as in the broadcast method.

504. USE OF SERIAL NUMBERS

Serial numbers will be used for all messages and messages will be transmitted in strict sequence of serial numbers. Intercepting stations are to keep a check on the serial numbers of all transmissions in order to ensure that all messages intended for them have been received.

CHAPTER 6EXECUTIVE METHOD (PROSIGN \overline{IX})601. USE OF THE EXECUTIVE METHOD

The executive method is used when it is desired to execute a message at a certain instant, ie., to ensure that one or more units take action at the same moment. Only abbreviated plaindress messages may be employed with the executive method. The text of such messages may take the form of plain language instructions (e.g. "fire a red rocket") or groups from signal books (e.g. "TURN STBD NINE").

602. USE OF PROSIGN \overline{IX} AND THE "EXECUTIVE SIGNAL"

A message which requires a signal of execution carries the prosign \overline{IX} , meaning "EXECUTE TO FOLLOW", in the message instructions of the preamble. The signal of execution is known as the "executive signal" and consists of the prosign \overline{IX} followed by a dash of not less than five seconds, the end of the dash being the instant of execution. The following rules govern the use of the executive method and executive signal:

a. Executive method messages made with prosign \overline{IX} will not carry a time group. The precedence, date and group count are never used. If it is necessary to indicate that the purport of a message is to be executed at a specific time, this should be indicated by including the time in the text, and not by using prosign \overline{IX} . In this case a time group is to be added to the message for identification purposes.

b. The executive signal \overline{IX} (5-second dash), when transmitted by radio, is always preceded by a call.

c. The executive signal may be used alone (subject to b. above) to mean "EXECUTE ALL UNEXPECTED MESSAGES TRANSMITTED BY THIS STATION BY THE EXECUTIVE METHOD TO THE STATION CALLED."

d. Identification of an "Executive to Follow" message will be transmitted along with the executive signal whenever:

(1) It is one of two or more unexecuted "Execute to Follow" messages.

(2) A considerable time has elapsed between the transmission of the "Execute to Follow" message and the transmission of the executive signal.

e. When the message is transmitted and executed by more than one means: e.g. radio and visual, the first order to execute received will govern the time of execution.

603. TRANSMITTING THE EXECUTIVE MESSAGE

Before an executive message can be executed, it must first be transmitted and receipted for. In message containing groups from a naval signal book, portions must be separated by the word "TACK".

EXAMPLE 1:

ODPL DE NPQT
 IX
 BT
 FLAGSHIP FIRE SPECIAL ROCKETS CARRY OUT PLAN ZULU
 BT
 K

Receipt:

DE A1QR R \overline{AR}
 DE D3X/ R \overline{AR}
 DE H7NP R AR

EXAMPLE 2:

2SN7 DE NPQR
 IX
 BT
 TURN STBD NINE TACK SPEED ONE ZERO TACK GOLF TACK DELTA
 PT NINE PT SEVEN TACK TANGO ALFA ONE TWO
 BT
 K

Receipt:

DE C2S6 R \overline{AR}
 DE M9VO R \overline{AR}
 DE Z3PO R AR

604. EXECUTING THE EXECUTIVE MESSAGE

The executive signal from originators may now be given for all, or only a portion(s) of, their respective signals. To executive only part of a signal that part must first be retransmitted, followed by the executive signal.

EXAMPLE 1: (To execute "CARRY OUT PLAN ZULU" in para 603 Example 1):

ODP1 DE NPQT
 CARRY OUT PLAN ZULU \overline{IX} _____ (5 second dash) \overline{AR} (or K)

NOTE: The absence of \overline{IX} \overline{BT} preceding the portion being retransmitted indicates that it is a portion of a message awaiting execution and not a new message.

EXAMPLE 2: (NPQT now wishes to execute the remaining portion of his message in para 603 Example 1):

ODP1 DE NPQT
IX ____ (5 second dash) AR (or K)

(NOTE: Should a considerable time elapse before execution of the remaining portion that portion should be first be identified as in the preceding example.)

605. CORRECTING EXECUTIVE METHOD MESSAGES DURING TRANSMISSION

If the message has plain language text, corrections shall be made using the error prosign (EEEEEEEE) as explained in paragraph 317. If the text consists of signal book groups, the whole group must be erased by means of the error prosign, and retransmission started with the last "TRACK" transmitted or with the the first BT as appropriate. Once transmission of a message is complete it cannot be erased except by means of a cancellation (See para 608).

606. REPETITIONS

For plain language texts, repetitions should be requested and given as shown in paragraph 324. For signal groups:

- a. Parts of groups may not be requested.
- b. The prosign $\overline{\text{IMI}}$ is used to obtain required repetitions.
- c. Either the whole or portions of messages may be requested.

EXAMPLE 1: (D3X/ requires, before execution, a repetition of the word "ROCKETS" in paragraph 603 Example 1.)

DE D3X/ $\overline{\text{IMI}}$ WA SPECIAL K

Response:

D3X/ DE NPQT WA SPECIAL - ROCKETS K

A1QR requires a repetition of the whole message

DE A1QR $\overline{\text{IMI}}$ K

Response:

A1QR DE NPQT

- ODP1 DE NPQT $\overline{\text{IX}}$ $\overline{\text{BT}}$ FLAGSHIP FIRE SPECIAL ROCKETS CARRY OUT
PLAN ZULU BT K

EXAMPLE 2: (C2S6 requires a repetition of the speed in paragraph 603 Example 2.)

(Because there are more than two "TRACKS" in the message, the second word "TRACK" must be further identified.)

DE C2S6 $\overline{\text{IMI}}$ TACK TO TACK GOLF K

Response:

C2S6 DE NPQT TACK TO TACK GOLF – TACK SPEED ONE ZERO TACK
GOLF K

607. VERIFICATIONS (PROSIGN J)

a. For plain language texts, the prosign J shall be used as explained in paragraph 326. For signal groups, only the whole message, or complete portions thereof, may be verified.

b. If the answer to a request for verification is that the original version was correct as transmitted, the response will take the form of prosign C followed by a repetition of the portion being verified.

c. If the answer to a request for verification indicates that the original version was wrong. A CORRECTION CANNOT BE MADE; instead, the following procedure must be followed:

- (1) Cancel the incorrect version (see paragraph 608) to the original call.
- (2) Transmit a new "Executive to Follow" message showing the correct version to the original call.

EXAMPLE 1: (H7NP requires a verification of the word "ROCKETS" in paragraph 603 Example 1.)

DE H7NP J WA SPECIAL K

Response:

DE NPQT R \overline{AR}

Answer:

H7NP DE NPQT C WA SPECIAL - ROCKETS K

EXAMPLE 2: (Z3PO requires a verification of the TURN in paragraph 603 Example 2.)

DE Z3PO J \overline{BT} TO TACK K

Response:

DE NPQR R \overline{AR}

Answer:

Z3PO DE NPQR C \overline{BT} TO TACK - \overline{BT} TURN STBD NINE TACK K

608. CANCELLING MESSAGES

a. An executive method message may only be corrected after transmission by cancelling the original message (or portion thereof) and issuing a new executive method message. The cancellation is effected by means of the proword NEGAT.

b. An executive method message cannot be cancelled once the executive signal has been transmitted.

(1) The proword NEGAT, on its own, means "Cancel all unexecuted messages made by executive method to the station called."

(2) The proword NEGAT, followed by identification data means "Cancel the data following which was transmitted by executive method to station called."

EXAMPLE: (GABB, having transmitted an executive method message to K49B, now wishes to cancel it.)

K49B DE GABB

BT

NEGAT

BT

K

c. When a message is awaiting the signal of execution and a portion of it has been cancelled or executed, only the remainder of the message is considered to be outstanding.

CHAPTER 7REPORTING ENEMY CONTACT701. INTRODUCTION

Normal radiotelegraph procedure is to be used for signalling enemy contact reports. This chapter contains special instructions for transmitting them.

702. REPORTS FROM SHIPS AND MARITIME AIRCRAFT

a. Enemy contact reports transmitted by ships are normally to be made once when in direct communication with the Officer in Tactical Command, higher authority, or shore radio station, except:

(1) The complete heading and text of enemy contact reports transmitted blind or using "DO NOT ANSWER" procedure should be made twice.

(2) The text only of emergency alarm signals from the Allied Naval Signal Book should be made twice.

b. A repeat back may be requested by the insertion of prosign G in the transmission instructions (see paragraph 206. a).

c. Authentication, when in force, should be used when making initial, amplifying and negative reports in plain language or a brevity code. Lack of such authentication should not, however, prevent retransmission or relay of the message to higher authority.

703. REPORTS FROM AIRCRAFT

Enemy contact reports are normally transmitted by aircraft until a receipt is obtained. A repeat back will not be made unless requested. If a DF bearing is required, the aircraft or receiving station should initiate direction finding procedures.

704. MARITIME ENEMY CONTACT REPORTS

a. The precedence of enemy contact reports will be found in ACP 121.

b. The text of an enemy contact report will be signalled in the order "WHAT, WHERE, WHITHER, WHEN". It will normally commence with the letters LR, meaning "Locating report number", and a figure slant figure, the first figure representing the number of the sighting or detection by the reporting unit and the second figure representing the number of the subsequent report.

(1) The WHAT component will normally be signalled by means of "type designator letters" from ACP 165, preceded where possible by the number of units being reported. If the type of unit is not known, the letters UU are signalled.

(2) The WHERE component may be signalled in the following forms:

(a) Bearing and distance from reporting unit.

(b) Bearing and distance from a standard position in the force or from a ship in own force.

- (c) As a position which may be signalled as:
 - (i) Bearing and distance from a lettered position.
 - (ii) Bearing and distance from a geographical point.
 - (iii) Latitude and longitude.
 - (iv) Grid position.
 - (v) Georef.

(3) The WHITHER component will be signalled as a course followed by a speed. Where either or both of these elements is unknown, the element will be shown as the letters UU.

(4) The WHEN component is the time of sighting or the time of the position quoted in the text. It may be signalled as the final element of the text or, preferably in the message ending. It will consist of a four-digit time group and must bear a zone suffix. When authentication is in force, the time group in the message ending will be used in association with the authentication system.

c. Initial reports. The text of an initial report may omit any of the components WHERE, WHITHER, WHEN. When the WHAT component is followed by either a bearing and distance of the WHERE component and/or a course and speed of the WITHER component, the words "BEARING", "DISTANCE", "COURSE" and "SPEED" may be included where confusion might otherwise arise.

d. Components of the message text may also be signalled by means of code groups from relevant publications.

e. The first amplifying report of any sighting or detection must contain an up-to-date position. It should follow the initial contact report with the minimum delay.

f. Enemy reports, including initial contact reports, may be classified and, if so, will be transmitted in the form ordered for this purpose. Disguised enemy reports are always to be encrypted in a high grade cryptographic system.

g. Abbreviated plaindress format will always be used for unclassified enemy contact reports.

705. EXAMPLES OF MARITIME ENEMY CONTACT INITIAL REPORTS

Throughout these examples authentication is indicated by the operating signal ZNB which means "AUTHENTICATION OF _____ is _____". Also note that the separative sign may be used in the text to avoid errors in reception which might occur if letters/figures of adjacent groups were run together.

EXAMPLE 1: Initial report in standard form as transmitted to the OTC (NPQT) by the direct method.

NPQT DE D3X/
 - Z
 BT
 LR1/1 - 2DD - 129XX12 -145 - 10
 BT
 1513Z -
 K

(The text of this message, in plain language, reads: This is my first initial sighting report. Two destroyers in position bearing 129 degrees from position XX (the OTC's reference position) distance twelve miles on a course of 145 degrees at a speed of ten knots. Time of sighting 1513Z.)

D3X/ DE NPQT INT ZNB KA K
 DXE D3X/ ZNB PQ K

D3X/ DE NPQT R AR

EXAMPLE 2: The report of EXAMPLE 1, reprocessed by the Enemy Report Relay Ship, transmitted to a shore radio station (GYX) for relay to the Area Commander (MPQ) at sea but not in company. The cell no longer serves as the address and is reprocessed, and the position in the text is converted to a position which can be understood by an authority not a part of the force.

GYX DE NPQT
 - T
 - Z
 -FM NPQT
 -TO MPQ
 BT
 LR1/1 - 2DD - 300MK14 - 145 10
 BT
 1513Z
 K
 NPQT DE GYX INT ZNB BR K
 DE NPQT ZNB MF K
 NPQT DE GYX R AR

EXAMPLE 3: The message of EXAMPLE 2 retransmitted exactly as received on a ship broadcast for the area commander (MPQ).

NAWS NAWS
 - ZZ
 - ZFA ZFA -
GYX DE NPQT - T - Z - FM NPQT - TO MPQ
BT
 BT
 1513Z - ZNB LP
 *ZBQ 1521Z
 AR
 *(ZBQ means MESSAGE RECEIVED AT _____)

EXAMPLE 4: Initial report in abbreviated form as transmitted to the OTC (NPQT) by direct method using prosign G in the transmission instructions.

NPQT DE D3X/ - G <u>- Z</u> BT <u>LR3/1</u> - 1DD - 145PP14 BT 0440Z K D3X/ DE NPQT INT ZNB FV K DE D3X/ ZNB WX K	(The text of this message, in plain language, reads: This is my third initial sighting report. One destroyer in position bearing 145 degrees distant 14 miles from lettered position PP. Time of sighting 0440Z.)
--	---

The message is repeated back:

D3X/ DE NPQT
 - NPQT DE D3X/ - G - Z BT LR3/1 - 1DD - 145PP14 BT 0440Z K
 NPQT DE D3X/ C AR

(NOTE: Had the message been repeated back incorrectly, normal correction procedure would be carried out. See paragraph 206.c.)

EXAMPLE 5: Initial sighting report using an emergency alarm signal from national or regional instructions.

NPQT DE H7NP <u>- Z</u> BT <u>EMERG</u> ECHO ONE SEVEN FIVE TACK ONE ZERO IMI <u>EMERG</u> ECHO ONE SEVEN FIVE TACK ONE ZERO BT 1617Z - K H7NP DE NPQT INT ZNB BP K DE H7NP ZNB ML <u>K</u> H7NP DE NPQT R AR	(The text of this signal, in plain language, reads: Enemy surface craft in sight bearing 175 degrees distance 10 miles. Time of sighting 1617Z.)
---	--

706. EXAMPLES OF MARITIME ENEMY CONTACT AMPLIFYING REPORTS

EXAMPLE 1: An amplifying report transmitted to the OTC (NPQT) by the direct method (groups are from national or regional instructions).

<p>NPQT DE A1QR <u>- 0</u> BT LR1/3 - ECHO NOVEMBER SIX - TWO ZERO ZERO – ECHO SPEED <u>ONE ZERO</u> BT 1540Z - K A1QR DE NPQT <u>INT</u> ZNB AN K DE A1QR ZNB <u>WPK</u> DE NPQT R AR</p>	<p>(The text of this message, in plain language, reads: This is my second amplifying report of my first initial sighting: Enemy course and speed 200 degrees ten knots. Time of sighting 1540Z.)</p>
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EXAMPLE 2: First amplifying report as transmitted to a Shore Radio Station (GYX) for the Area Commander (MPQ) at sea but not in company:

<p>GYX DE NPQT - T - O - FM NPQT <u>- TO</u> MPQ BT <u>LR2/2</u> - 1 CC DAMAGED 140MK25 BT 1421Z - K NPQT DE GYX <u>INT</u> ZNB LW K DE NPQT ZNB <u>MA K</u> NPQT DE GYX R AR</p>	<p>(The text of this message, in plain language, reads: This is my first amplifying report of my second initial sighting: One cruiser damaged in position bearing 140 degrees from lettered position MK distance 25 miles. Time of sighting 1421Z.)</p>
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EXAMPLE 3: The first amplifying report in EXAMPLE 2 as retransmitted on a ship broadcast for the area commander (MPQ):

NAWS NAWS
 - 0
 - ZFA ZFA
 -GYX DE NPQT - T -Z - FM NPQT - TO MPQ BT LR2/2 - 1CC
 DAMAGED 140MK25 BT
 1421X - ZNB MA-ZBQ 1435Z AR

EXAMPLE 4: Amplifying Report to the OTC (NPQT) as transmitted by direct method using prosign G in the transmission instructions.

<p>NPQT DE A1QR - G <u>- O</u> BT <u>LR2/4</u> - 2DD JOINED 147XX19 BT 0445Z - K A1QR DE NPQT <u>INT</u> ZNB QR K DE A1QR ZNB TV K</p>	<p>(The text of this message, in plain language, reads: This is my third amplifying report of my second initial sighting. 2 destroyers have joined in position bearing 147 degrees from the OTC's reference position distance 19 miles. Time of sighting 0445Z.)</p>
--	--

This message is then repeated back.

707. NEGATIVE REPORTS

Negative reports will, where possible, be classified. If not possible, or if ordered to be unclassified, they will normally take either the form of groups from signal books or by quoting the originators position followed by two bearings clockwise and then the depth of search in miles.

EXAMPLE 1: (Negative Report using national or regional instructions.)

<p>NPQT DE H7NP <u>- O</u> BT NEGAT TANGO ALFA TWO THREE TACK THREE TACK NOVEMBER ALFA TWO TWO TACK ONE FOUR FIVE <u>ZULU</u> ZULU TWO ZERO BT 0512Z - K H7NP DE NPQT <u>INT</u> ZNB TC K DE H7NP ZNB <u>WO K</u> H7NP DE NPQT R AR</p>	<p>(The text of this message, in plain language, reads: Have no visual contact with enemy. My position bearing 145 degrees distance 20 miles from position ZZ (The center of the force). Time of origin 0512Z.)</p>
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EXAMPLE 2: (Negative Report using bearing-to-bearing and depth of search.)

<p>NPQT DE A1QR <u>- O</u> BT NEGATIVE ENEMY – 110 NANTUCKET LIGHT <u>40-140-180-20</u> BT 2311Z – K A1QR DE NPQT <u>INT</u> ZNB TC K A1QR DE NPQT R AR</p>	<p>(The text of this message, in plain language, reads: No enemy in sight or detected between the bearing 140 and 180 degrees to a depth of 20 miles from position bearing 110 degrees from NANTUCKET light range 40 miles time of origin 2311Z.)</p>
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CHAPTER 8SHIP-TO-SHORE801. PROCEDURE ON SHIP-TO-SHORE CIRCUITS

Ship-to-shore circuits are the primary means for delivery of traffic from individual ships to shore stations.

The procedure to be used for calling and for transmission of messages is the same as that for ship-ship circuits. Responsible commanders should ensure that large numbers of ships will not be required to make reports at the same time. Simultaneous reporting inevitably leads to congestion.

802. PRECAUTIONS IN WARTIME

In the event that radio silence has to be broken to transmit a message, one of the following measures may serve to minimize the significance of the transmission to the enemy:

a. If the presence of own task force has been discovered or is believed to have been disclosed to the enemy, the regular ship-to-shore communications using normal cryptographic channels, with codress and indefinite call signs should be employed.

b. Where it is contemplated to handle ship-to-shore traffic on tactical circuits, instructions for the handling of such traffic should be specific, with channels designated for the flow from each echelon of command. The task force commander's net should not be used for ship-to-shore traffic except for high command operational traffic of interest to other commands guarding the task force commander's net. In cases not covered by specific instructions, the ship-to-shore frequencies should be used.

c. An escort capable of fairly long range radiotelegraph communications may be sent to a position some distance from a task force to transmit important traffic to a shore station via ship-to-shore circuits.

803. CHOICE OF FREQUENCIES

Ships preparing to transmit over the ship-to-shore frequencies must ensure that the following steps are taken:

a. Choose that frequency within the prescribed assignment which will best cover the distance, taking into account the time of day, the season of the year, ship's position, the direction of the transmission and transmitter capabilities.

b. Tune transmitter and receiver to frequency by means of a frequency meter. Prior calibrations may be used only as guides and shall not be considered as exact settings.

c. Ensure that the antenna actually is radiating. It should be noted that antenna trunks in all types of craft, submarines in particular, may suffer marked reduction of transmission efficiency during prolonged cruises where normal maintenance is not permissible.

804. REPLIES FROM SHIPS AT SEA

In peacetime exercises and wartime, messages should not normally be transmitted or addressed to ships at sea if such messages will require those ships to break electronic silence. When electronic silence is in force, the use of ship-shore transmissions is to be restricted to those listed in ACP 176.

805. TRANSMISSION INSTRUCTIONS

a. Transmission instructions involve the routing, relaying and delivery of a message. They consist of prosigns, call signs and/or address designations and operating signals as necessary. They may be omitted or altered as appropriate by any relaying stations.

b. Whenever the originator of a message is in direct communication with the station serving the addressee, no transmission instructions are required.

c. Whenever the originator of a message is not in direct communication with all addressees, transmission instructions must be included either in the heading or the text to avoid nondeliveries. A station is responsible for delivery only to those addressees who are served by the cryptocenter at that station.

d. Transmission instructions, preferably in the heading, should always be used in doubtful cases. This is especially true in the case of commands afloat, which may move without promulgating information regarding their movement.

(1) When transmission instructions are included in the heading, relays can be effected without appreciable delay.

(2) If transmission instructions are in the text, delays should be expected since the text must be decrypted before relays can be effected. Transmission instructions in the text must be specific, especially in cases where two or more stations are required to pass to different addressees.

e. Unless it is definitely known that a cryptocenter serves an addressee, specific transmission instructions for that cryptocenter to deliver to the addressee must be included either in the heading or text.

CHAPTER 9BRITISH COMMONWEALTH BROADCAST METHODS901. PURPOSE

a. When using the communications facilities of another nation the procedures used by that nation shall be employed.

b. The purpose of this chapter is to promulgate the detailed methods and procedures employed by the British Commonwealth on its Naval broadcasts. This material is provided for information and naval operational use when authorized to use the facilities of the British Commonwealth as directed by appropriate operation orders.

c. British Commonwealth ship-to-shore and intercept methods are explained in Chapters 11 and 12.

902. GENERAL

a. The prosign F is not used in the transmission instructions of messages.

b. The group count when used is to be repeated in the final instructions of all messages.

c. The transmission of all messages is to end with the ending sign \overline{AR} .

d. When two or more frequencies are employed on a broadcast service, the transmitting station is to use the call signs allocated to each frequency employed separated from each other by the slant sign. Where the call signs consist of a basic letter group plus numbered suffixes the letter group need not be repeated.

e. During quiet periods the transmitting station is to transmit a test signal at regular intervals for the adjustment of receivers. This is to consist of not more than three series of three Vs followed by the call signs of all frequencies in use, and should not last longer than 30 seconds. This will normally be done by running an endless tape.

EXAMPLE: (Test tape on three GYK group transmitters being keyed simultaneously.)

VVV VVV VVV GYK4/6/8

f. An asterisk (*) against any time group in para 1003 refers to the identical time group in the example of Continuous Broadcast Services in subparagraph 1003k.

903. CONTINUOUS BROADCAST

a. Collective call signs are allocated for broadcast services and these are used in the call of all messages irrespective of the station for which a particular message may be intended.

b. The prosign DE and the call sign of the transmitting station are omitted from the call of all messages and are replaced by the separative sign. Thus calls of messages transmitted on broadcast services consist of a collective call sign followed by the separative sign.

EXAMPLE: (Collective call to "All British Warships" GBXZ -)

c. In codress messages the stations for whom the message is intended are indicated by their call signs or address groups in the transmission instructions.

d. All messages, except those which would be of no value unless received at the first transmission will bear a serial number. Service and abbreviated service messages such as requests for repetitions, verifications and corrections will also bear serial numbers. Other abbreviated service messages such as ship-shore working on a broadcast service will not normally bear a serial number.

e. Each message is made once through only at each transmission except that the elements or portions therein of message headings are made using "words twice" procedure. See subparagraph 1003k examples.

f. Repetitions of complete messages may be made on the frequencies of the broadcast or on special frequencies which may be allocated to a repetition broadcast. The operating signal "This is an exact duplicate of message previously transmitted" will precede the original station serial number.

g. If traffic does not allow a repetition of the complete message the heading only may be repeated from two to six hours after the transmission of the message. Message headings are transmitted in an Abbreviated Service Message preceded by AB BT. If more than one heading is to be transmitted each will be separated by the separative sign. The calls are omitted and message headings are only made once through.

h. Messages which are retransmitted in accordance with a specific request for a repetition will carry a new station serial number, followed by the operating signal "This is an exact duplicate of message previously transmitted" and the original serial number.

i. Different series of serial numbers will be used for messages intended for constant watch two or one-operator ships, in order to allow ships to keep only the serial applicable to their watch. Messages transmitted initially during a constant/two operator period, and repeated during a two/one operator period will carry both the original serial numbers (with the indication that it is an exact duplicate described in 1003f above), together with the appropriate new serial number. Messages may therefore bear up to three station serial numbers at one transmission.

j. The conclusion of a one or two operator period will be indicated by the transmission of an abbreviated service message including the operating signal ZKL meaning "Resume normal radiotelegraph communication now".

k. Examples of Continuous Broadcast Service.

A continuous shore-ship broadcast service, with the transmitting station using four frequencies (with associated call signs GYC/2/3/4 is taken as an example. In the following examples, watch being kept by stations is assumed to be:

Constant Watch	GABB
Two operator period ships	NPQR
	NPQT
Single operator period ship	NPQS

TIME

TRANSMISSION

2300Z

No traffic. Transmitting station making test signal:

VVV VVV VVV GYC/2/3/4 VVV VVV VVV GYC/2/3/4 etc.

2308Z A message for a constant operator ship copying the broadcast:

NAWS NAWS – B13A 231 B13A 231 -
 2BJQ/ 2BJQ/
 - RR - 282132Z OCT 83 282132Z OCT 83
GR52 GR52
 BT
 50 groups – B50 AS
51 - remaining 2 groups
 BT
GR52
 AR

2321Z A message for a constant watch ship copying the broadcast and also for a one operator ship. It will be repeated at the next single operator period for the latter.

NAWS NAWS - B13A 232 B13A 232
 - RR - 281112Z OCT 83 281112Z OCT 83
 - FM FM GABA GABA
 - TO TO GABB GABB
 - INFO INFO NPQS NPQS
 BT
TEXT
BT
 AR

2330Z No traffic.

VVV VVV VVV GYC/2/3/4 VVV VVV VVV GYC/2/3/4 etc

2335Z A priority message for a constant watch ship copying the broadcast.

NAWS NAWS - B13A 233 B13A 233
 - 3PHF/ 3PHF/
 - PP - 282230Z OCT 83 282230Z OCT 83
GR85 GR85
 BT
 First 50 groups - B50 AS
51
 BT
GR85
 AR

2340Z A repetition of a previous message which is interrupted for ship-shore working.

NAWS NAWS - *ZFG ZFG B13A 221 B13A 221
 - 6JKL/ 6JKL/
 - R - 281923Z OCT 83 281923Z OCT 83
GR74 GR74
 BT
 28240 ALFA NOVEMBER ZULU BRAVO FOXTROT
XQSBR SQBTN
 AS AR

NAWS BAWS - FM FM GYX4 GYX4
 - TO TO GD GD K AR
 NAWS NAWS - *ZFG B13A 221 AA7 - SQBTN etc.
 - B50 AS
51 - remaining 24 groups
 BT
GR74
 AR

2350Z Ship-shore working

NAWS NAWS - FM FM GYX4 GYX4
 - TO TO GD GD IMI 2 K AR
 NAWS NAWS - FM FM GYX4 GYX4
 - TO GD R 282237Z OCT 83 AR

2357Z A message of 500 groups for a constant watch ship copying the broadcast.

NAWS NAWS - B13A 234 B13A 234
 - 6GKA/6GKA/
 - RR 282041Z OCT 83 282041Z OCT 83
GR500 GR500
 BT

First 50 groups - B 50 AS
 51 - next 100 groups - B 150 AS
 151 - next 100 groups - B 250 AS
 251 - next 100 groups - B 350 AS
 351 - next 100 groups - B 450 AS
451 - remaining 50 groups
 BT
GR500
 AR

0005Z Message headings are repeated.

NAWS NAWS - AB BT B13A 231 TO B13A 234 BT
 - B13A 231 - 2BJQ/- R - 282132Z OCT 83 GR52 BT
 - B13A 232 - R - 281112Z OCT 83 - FM GABA - TO GABB
 - INFO NPQS BT
 - B13A 233 - 3PHF/ - P 282230Z OCT 83 GR85 BT
B13A 234 - 6GKA/ - R - 282041Z OCT 83 GR 500 BT
 AR

0008Z One and two-operator period begins transmission of priority traffic for any ship.

NAWS NAWS - B13A 235 B13A 235
 6GKA/ 6GKA/
 - PP - 282337Z OCT 83 282337Z OCT 83
GR40 GR40
 BT
TEXT
 BT
GR40
 AR

0010Z Repetition of B13A 232 (message for two addressees, a constant watch ship, and a one operator ship).

NAWS NAWS - B13A 1/109 B13A 1/109
 - *ZFG ZFG B13A 232 B13A 232
 - RR - 281112Z OCT 83 281112Z OCT 83
 - FM FM GABA GABA
 - TO TO GABB GABB
 - INFO INFO NPQS NPQS
 BT
 TEXT
 BT
 AR

0016Z A message for a two operator ship.

NAWS NAWS - B13A 2/317 B13A 2/317
 - RR - 282152Z OCT 83 282152Z OCT 83
 - FM FM GABB GABB
 - TO TO NPQR NPQR
 BT
 TEXT
 BT
 AR

0020Z The one-operator period ends.

NAWS NAWS - *ZKL *ZIC B13A 1/109
 AR

0030Z No traffic.

VVV VVV VVV GYC/2/3/4

0121Z Repetition of B13A 233 in accordance with a specific request.

NAWS NAWS - B13A 236 B13A 236
 - *ZFG ZFG B13A 233 B13A 233
 - 3PHF/ 3PHF/
 - PP etc.
 AR

0123Z A message for a constant watch and a two-operator ship.

NAWS NAWS - B13A 237 B13A 237 - B13A 2/318 B13A 2/318
 - RR - 281630Z OCT 83 281630Z OCT 83
 - FM FM GABA GABA
 - TO TO NPQT NPQT
 - INFO INFO GABB GABB
 BT
 TEXT
 BT
 AR

0130Z No traffic.
 VVV VVV VVV GYC/2/3/4 VVV VVV VVV GYC/2/3/4 etc.

0200Z The two-operator period ends.
NAWS NAWS - *ZKL *ZIC B13A 2/318
 AR
 *ZFG "This message is an exact duplicate of a message previously transmitted".
 *ZKL "Resume normal radio communication now"
 * ZIC "Serial number of last message transmitted to you is".

904. BROADCAST METHOD SCHEDULES

a. The following procedure is normally to be employed by stations conducting broadcast method schedules.

(1) Not specifically addressed.

(a) This method is employed to disseminate information for general use.

(b) Broadcast shall be made on specified frequencies and at specified times. Any changes in either frequencies or time shall be transmitted once at the beginning and once at the end of the regular broadcast during a period of 48 hours preceding the change.

After the test signal described in paragraph 1002e has been transmitted for approximately five minutes, at precisely the prescribed time, the broadcast shall be commenced by the general call CQ, transmitted three times, the prosign DE once and the call sign of the transmitting station transmitted three times. The prosign BT shall be used to separate the call from the first item of the broadcast.

EXAMPLE:

VVV VVV VVV GBY (for 5 minutes)
 CQ CQ CQ DE GBY GBY GBY BT (Content of broadcast)

(c) All messages transmitted are made to the general call CQ and carry no specific address or station serial numbers.

(d) On completing the schedule the transmitting station indicates that it is closing down until the time of the next schedule.

EXAMPLE:

CQ CQ CQ DE GBY ZKJ2 1100Z AR
 ZKJ2 "I am closing down (until . . .)"

(2) Specifically addressed

(a) In employing this method for the delivery of traffic specifically addressed, the procedure shall be as follows: After making the test signal described in paragraph 1002e for approximately five minutes, precisely at the prescribed time the transmission begins.

EXAMPLE:

VVV VVV VVV GYO/2/3... VVV VVV VVV GYO/2/3 (for 5 minutes)

NAWS NAWS - B42P 132 B42P 132

- RR - 131726Z OCT 83 131716Z OCT 83

- FM FM GABA GABA

- TO TO GABB GABB

- INFO INFO NPQT NPQT

BT

TEXT

BT

AR

NAWS NAWS - B42P 133 B42P 133 ETC

(b) The content of the broadcast is to be in accordance with the instructions for continuous broadcast contained in paragraph 1003.

(c) On completing the schedule the transmitting station indicates the time of the next routine and the last serial number transmitted on this routine.

EXAMPLE:

NAWS NAWS - ZKJ2 1400Z ZIC B42P 133 AR

CHAPTER 10BRITISH COMMONWEALTH SHIP-SHORE PROCEDURES1001. PROCEDURE TO BE USED ON SHIP-SHORE FREQUENCIES

The procedure used for calling and for transmission of messages is the same as that for normal radiotelegraph communications, with the exceptions below.

1002. TRANSMISSION OF CODRESS MESSAGES

Ships having a codress message to transmit must ALWAYS use an indefinite ship's call sign for ALL working in connection with the transmission of the message.

1003. USE OF SHIP/FLEET BROADCAST FOR ANSWERING

a. Ships are to indicate in their preliminary call (by use of the appropriate operating signals) a ship/fleet broadcast on which reception is reliable. This is done to allow the shore station to route an answer to the ship via broadcast should the ship be unable to hear the shore station direct. The broadcast indicated must be copied by the ship until all ship-shore working has been completed.

b. In wartime, for security reasons, a readable broadcast other than the one which the ship is already copying should be used when possible.

c. When a ship is receiving answers (or other responses) on a broadcast or from a station other than that originally called this fact MUST be indicated. This is done by the ship transmitting to the call sign of the shore station transmitter that the ship is actually receiving.

1004. TRANSMISSION INSTRUCTIONS

a. Transmission instructions are to be expressed in the form "Pass to...", plus the call signs and address groups of addressees to whom the shore station is to route the message and (except in the case of disguised enemy reports) are not to be further complicated, since this might lead to difficulty if the message were cleared to a shore station other than that for which the transmission instructions were originally made out.

b. A mobile authority passing a message on ship-shore addressed to an AIG is to use the transmission instruction "Pass to... (Address group of AIG)." The shore station on receipt of such instruction is to refile the message and complete delivery to the AIG.

c. If the shore station has insufficient routing information to effect delivery to an AIG the message is to be passed to the Net Control Station or Station designated with instructions to "Pass to.... (Address group of AIG)."

1005. COOPERATION BETWEEN SHORE STATIONS

a. Any shore station which hears a preliminary call which is not answered by the shore station called will answer it.

b. The shore station which gives a receipt for a message will be responsible for all onward routing of the message in accordance with the transmission instructions.

c. Shore stations will NOT use ship-shore frequencies for communicating with each other, even in connection with messages received from ships.

1006. PROCEDURE TO BE USED WITH SIMPLEX METHOD

The procedure used in Simplex Method on ship-shore frequencies is the same as that for normal radio telegraph communication with the exceptions stated in paragraph 1102 to 1105 above. The same frequency is used for calling, answering and working. The shore station may however, route answers to the ship via a broadcast if necessary in accordance with paragraph 1103 above.

1007. PROCEDURE TO BE USED WITH CROSS-BAND WORKING

a. The cross-band working employs calling, answering and working frequencies. The ship calls on one frequency (the calling frequency) and shifts to another frequency (the working frequency) to pass its message. The shore station answers on a different frequency (the answering frequency). The shore station may, however, route answers to the ship via a broadcast in accordance with paragraph 1103 above.

b. Once communication is established on the calling frequency it is the shore station's responsibility to initiate the shift from the calling frequency to the working frequency.

c. The sequence of events is as follows:

(1) Ship transmits preliminary call to shore station on the calling frequency.

(2) Shore station called answers on its answering frequency or if shore station called does not answer, another shore station keeping watch on the calling band should answer on its answering frequency, or if the shore station called answers but the ship does not hear, the answer is to be transmitted via the broadcast which the ship has indicated that she is copying in accordance with paragraph 1103 above.

(3) Ship indicates (by use of operating signal) that she is shifting to working frequency to transmit her message.

(4) Ship shifts to working frequency and requests permission to transmit her message and continues on this frequency until traffic is cleared. The shore station may order the ships to shift again if interference is experienced on the working frequency.

(5) Shore station makes appropriate responses on the answering frequency or via the broadcast.

EXAMPLE 1:

A ship (GCQP) has a plaindress message to pass to shore. GCQP calls shore radio station GYX4, indicating that she is copying the primary broadcast call sign GYZ. GYZ4 answers, GCQP shifts to the working frequency and transmits the message:

Calling Frequency	GYX4 GYX4 DE GCQP GCQP P QRK GYZ-5 K
Answering Frequency	GCQP GCQP DE GYX4 GYX4 K
Calling	GYX4 DE GCQP ZBW 8352 K
Answering	GCQP DE GYX4 R AR
Working Frequency	GYX4 GYX4 DE GCQP GCQP INT K K
Answering	GCQP DE GYX4 K
Working	GYX4 DE GCQP - T - <u>P</u> - 171623Z OCT 83 - FM GCQP - TO CAGT - INFO HYKS <u>BT</u> TEXT BT K
Answering	GCQP DE GYX4 AR

EXAMPLE 2:

A ship, GCQP, calls GYX4 with a codress message for QAXT/ and HETS/. GYX4 does not hear GCQP who is answered by GYL4. Since the message is codress the ship uses indefinite call sign GM.

Calling GYX4 GYX4 DE GM GM R QRK GYZ -5 K
 Calling GYX4 GYX4 DE GM GM R QRK GYZ -5 K
 Answering GM GM DE GYL4 GYL4 K
 Calling GYL4 DE GM ZBW 8352 K
 Answering GM DE GYL4 R AR
 Working GYL4 GYL4 DE GM GM INT K K
 Answering GM DE GYL4 K
 Working CYL4 DE GM - T - HETS/ QAXT/ - R - 172024Z OCT 83 GR92 BT first 50 GROUPS
 - B 50 K
 Answering GM DE GYL4 R K
 Working GYL4 DE GM AS
 Working GYL4 DE GM 51 - REMAINING 42 GROUPS BT K
 Answering GM DE GYL4 R AR

EXAMPLE 3:

A ship using indefinite call sign GQ has a codress message to pass to GYX4 for onward transmission to QAXT/ and HETS/. She does not hear GYX4 answer, and is then answered on ship/fleet broadcast (GYX/2/3/4).

Calling GYX4 GYX4 DE GQ GQ R QRK GYZ -5 K
 Answering GQ GQ DE GYX4 GYX4 K (not heard by GQ)
 Calling GYX4 GYX4 DE GQ GQ R QRK GYZ -5 K
 Broadcast NAWS NAWS - FM FM GYX4 GYX4 - TO TO GQ GQ K AR
 Calling GYZ DE GQ ZBW 8352 K
 Broadcast NAWS NAWS - FM FM GYX4 GYX4 - TO TO CG GQ R AR
 Working GYZ GYZ DE GQ GQ INT K K
 Broadcast NAWS NAWS - FM FM GYX4 GYX4 - TO TO GQ GQ K AR
 Working GYZ DE GQ - T - HETS/ QAXT/ - R - 171817Z OCT 83 GR45
 BT TEXT BT K
 Broadcast NAWS NAWS - FM FM GYX4 GYX4 - TO TO GQ GQ R AR

EXAMPLE 4:

A ship using an indefinite call sign GQ calls GKV with a codress message: GKV does not hear GQ. GYX3 answers GQ, but GQ cannot hear him:

Calling GKV GKV DE GQ GQ R QRK GYC - 5 K (not heard by GKV)
 Answering GQ GQ DE GYX3 K (not heard by GQ).
 Calling GKV GKV DE GQ GQ R QRK GYC - 5 K (not heard by GKV)

On Fixed Service Malta to Whitehall, an abbreviated service message telling Whitehall to relay Malta's response on Broadcast GYC.

Broadcast B13A
Calling NAWS NAWS - FM FM GYX3 GYX3 GYX3 - TO TO GQ GQ K $\overline{\text{AR}}$
GYC DE GQ ZBW 6264 K

Fixed Service - A request for Whitehall to relay Malta's receipt.

Broadcast
Working NAWS NAWS - FM FM GYX3 GYX3 GYX3 - TO TO GQ GQ R $\overline{\text{AR}}$
GYC GYC DE GQ GQ INT K K

On Fixed Service – a request for Whitehall to relay Malta's invitation to GQ to transmit.

Broadcast
Working NAWS NAWS - FM FM GYX3 GYX3 - TO TO GQ GQ K $\overline{\text{AR}}$
GYC DE GQ - T - HETS/ QAXT - R - 171256Z OCT 83 GR36 BT TEXT
BT K

On Fixed Service, a request for Whitehall to relay Malta's receipt.

Broadcast
Working NAWS NAWS - FM FM GYX3 GYX3 GYX3 - TO TO GQ GQ R $\overline{\text{AR}}$

1008. MESSAGES FROM SUBMARINES

a. In order to expedite the passing of surfacing signals and check reports by submarines when the cross-band working is in force on the ship-shore, these signals are to be made on the calling frequency, thus avoiding any delay caused by shifting to the working frequency.

b. Special orders may also be given in exercises that certain short operational messages (e.g. enemy reports) from submarines may also be passed on the calling frequency.

c. The preliminary call for such messages is to contain the operating signal ZPP, which means "Message which follows is a submarine surfacing signal/check report to be cleared on calling frequency" immediately after the precedence prosign, separated by the separative sign.

d. It is important that this procedure is used ONLY with surfacing signals, check reports and messages covered by the subparagraph b above.

EXAMPLE: (Preliminary call on the calling frequency by a submarine (GTDD) indicating a surfacing signal awaits transmission.

GKT GKT DE GTDD GTDD O-ZPP QRK GBR - 4 K

CHAPTER 11BRITISH COMMONWEALTH INTERCEPT PROCEDURES1101. GENERAL

The British Commonwealth "I" method procedures are the same as those outlined in Chapter 5. Certain additional procedures are employed as set out below.

1102. USE OF "I" METHOD IN AIRCRAFT

In some cases the address of "I" method messages is understood and is not included in the message. This procedure is used by aircraft when transmitting messages for the information of stations taking part in an operation when the latter are keeping radio silence. No transmission instructions are given to the receiving station.

1103. REPEATING BACK "I" METHOD MESSAGE

The transmitting station is to order the receiving station to repeat back if there is any reason to believe that the intercepting station would have difficulty in reading the messages; for example, if conditions of reception are poor. The receiving station gives a receipt, or repeats back as directed.

1104. REQUESTS FOR CHECKS AND REPETITIONS

The receiving station is to request checks or repetitions of any portion of the message which is received corrupt or which the intercepting station may have had difficulty in reading due to interference, etc.

1105. EXAMPLES:

a. GABA and GABC have been organised as an "I" method group to transmit messages for other stations in the areas.

- (1) A plaindress message for GABB
GABC DE GABA
NR15
- R - 171642Z OCT 83
- FM (Originating authority)
- TO GASBB
BT
TEXT
BT
K
GABA DE GABC R AR

- (2) A Codress message for NPQS

GABC DE GABA
 NR16
 - NPQS
 - P – 171730Z OCT 83
GR20
 BT
TEXT
 BT
 K

GABA DE GABC R AR

- (3) A plaindress message for NPQT and NPQS is transmitted. GABC is instructed to repeat back:

GABC DE GABA
 NR17
 - G
 - R – 171815Z OCT 83
 - FM (Originating authority)
 - TO NPQT
- INFO NPQS
 BT
TEXT
 BT
 K

- (4) Repeat back:

GABA DE GABC - GABC DE GABA NR17 - G - R 171815Z OCT 83 - FM
 (Originating Authority) TO NPQT – INFO NPQS BT TEXT BT K

GABC DE GABA C AR

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