CHAPTER 5

THE MESSAGE

A message is a thought or idea expressed briefly in plain or cryptic language, and prepared in a form suitable for transmission by any means of communication.

CLASSES OF MESSAGES

Messages are of five classes: A, B, C, D, and E. Classes A, B, and C are Government messages, and D and E are non-Government (or private) messages. The purpose of this classification system is to aid administration and accounting.

By far the largest volume of traffic handled by the Navy is class A, consisting of official messages and replies thereto originated by the Department of Defense (including the U. S. Coast Guard when operating as part of the Navy.

Class B is made up of official messages of U. S. Government departments and agencies besides the Department of Defense. (The U. S. Coast Guard is included under class B except when operating as a part of the Navy.)

Class C messages consist of broadcast traffic in special forms, available to ships of all nationalities. Class C messages are concerned with special services, such as hydrographic data, weather, and time.

Class D is composed of private messages for which the Navy collects tolls. The group includes radiotelegrams and press messages sent by correspondents aboard ship.

Class E messages are personal messages to and from naval personnel, handled free of charge over naval circuits. Charges are collected from the sender only when a commercial communication company, such as Western Union, handles the message over part of its route. For example, suppose your ship is in the Atlantic and has a Class E message addressed to a man at a naval air station in Cuba. Your ship transmits the message to Radio Washington, which relays it via San Juan,

P. R., to a station at Guantanamo Bay, Cuba, from which point delivery is made to the naval air station. The message never leaves Navy channels, and the originator pays nothing. But if the message were addressed to Louisville, Ky., Western Union would handle it out of Washington, and the ship would collect tolls from the originator for the distance between Washington and Louisville. Your ship would forward the money to the Navy Regional Accounts Office (NRAO), Washington, D. C., for payment to Western Union in accordance with instructions found in the effective edition of DNC 26.

The class E message privilege is mainly for purposes of morale. It affords naval personnel at sea a means of communication regarding urgent personal matters without incurring prohibitive expense. It is unavailable between points on shore within the United States. In general, the privilege is used sparingly. Subjects ordinarily acceptable for transmittal or delivery are matters of grave personal concern, such as the serious illness of a close relative, birth announcements, important non-recurring business communications, matters of life and death, and occasional greetings on important anniversaries. Not acceptable are trivial or frivolous messages, those of unnecessary length, and ordinary congratulations.

ORIGINATOR; DRAFTER; RELEASING OFFICER

The originator of a message is the command by whose authority the message is sent. The drafter—usually the communication officer or a department head—is the person who actually composes the message for release. The releasing officer authorizes transmission of the message for and in the name of the originator. Ordinarily the commanding officer is

releasing officer, but he may delegate releasing authority if he wishes.

A Radioman charged with accepting locally originated messages must know who has releasing authority, and should check every message for the releasing officer's signature.

ADDRESSEES

Most messages have at least one addressee responsible for taking action on the contents and for originating any necessary reply. Other addressees with an official concern in the subject of the message, but who do not have the primary responsibility for acting on it, receive the message for information. Do not be confused by the term "information addressee." Even though an information addressee usually is concerned only indirectly with a message, very frequently he must take action of some nature within his own command. Some messages have only information addressees.

Messages may be divided into types, according to the way they are addressed, as—
1. Single-address;
2. Multiple-address;
3. Book;
4. General.

A single-address message is sent to one addressee only.

A multiple-address message is sent to two or more addressees, each of whom is informed of the others. Each addressee must be designated either as action or information.

A book message is sent to two or more addressees, and is of such a nature that no addressee needs to know who the others are—although each addressee is informed whether he receives the message for action or for information.

The station sending a book message divides addressees into groups according to the relay stations serving them. A separate message is prepared and transmitted to each relay station; the message is changed only to drop addressees that are the concern of some other station. Upon receiving a book message, a relay station may further reduce the number of addressees by repeating the process or by making up single address messages for each of its tributaries addressed. Because many book messages are intended for dozens of addressees, and because some addressees may require delivery by Western Union or commercial teletypewriter services, substantial time and expense are saved by the shortened headings.

General messages are of sufficient importance that they are discussed fully in the next topic.

GENERAL MESSAGES

A general message has a wide standard distribution. General messages are of many types, each of which carries an identifying title and is intended for a certain standard set of addressees. (See table 5-1.) All messages of a given general message title are numbered serially through the calendar year; for example, ALNAV 12-63, signifying the twelfth ALNAV sent during 1963.

You will see other general messages with titles not listed in table 5-1. These are originated by sea frontier commanders, commandants of naval districts, and fleet, force, and ship type commanders to publish information within their respective commands.

Maintenance of general message files is often part of a Radioman's duties. General messages are grouped according to type, and are filed in order of serial numbers. Copies of general messages are kept in the general message file until cancelled or superseded.

RED CROSS MESSAGES

The American Red Cross is permitted free use of naval communication facilities for sending and receiving messages regarding emergency welfare in the interest of armed forces personnel. Red Cross messages are handled as class B messages and normally are in plain text.

The Red Cross messages you are most likely to see concern personal hardship, or death or serious illness of relatives of naval personnel. You will copy from the fleet broadcast many such messages addressed to ships at sea.

When emergencies or disasters occur involving Red Cross relief work, Red Cross messages may be handled over naval circuits whether they are in the interest of armed forces personnel or not.

Red Cross messages normally are not accepted for transmission unless delivery can be effected entirely by naval communications.

SPECIAL-PURPOSE MESSAGES

A number of messages are named for the purpose they serve. They usually contain

Table 5-1 — General Messages

Originator	Title of series	Description
SECNAV	ALNAV	Messages intended for wide distribution throughout the entire Naval Establishment, including the Marine Corps. They deal with administrative matters, such as fiscal policies, changes in personnel allowances, legislation affecting the Navy, promotions of officers, etc.
	NAVACT	Similar in content to ALNAV, but of no interest to the Marine Corps.
	ALNAVSTA	Administrative information requiring wide dissemination to the shore establishment of the Navy — including shore-based elements of the operating forces — and to the Marine Corps.
	ALSTACON and ALSTAOUT.	Similar to the above but of interest, respectively, to activities inside and activities outside the continental United States.
CNO	NAVOP	Similar in content to ALNAV but distribution list does not include attaches, missions, observers, or minor shore activities.
	ALCOM	Usually used for, but not restricted to, promulgation of communication information throughout the Navy.
	ALCOMLANT and ALCOMPAC.	Subdivisions of the ALCOM series for, respectively, Atlantic-Mediterranean areas and Pacific area.
	FLTOP.	Messages concerning fleet units and their operational commanders.
	MERCAST	The merchant ship equivalent to an ALNAV. Distribution includes ships guarding MERCAST (merchant ship broadcast) schedules, naval port control and naval control of shipping officers, and MSTS commands.
CINCPAC	JANAFPAC	Messages pertaining to the Pacific commands on matters of joint interest.

Table 5-1. — General Messages — Continued

Originator	Title of series	Description
CINCPACFLT	ALPACFLT.........	Messages for general distribution to commands under CINCPACFLT.
	MERCASTPAC	The merchant ship equivalent to an ALPACFLT.
Commandant, Marine Corps.	ALMAR	Messages for general dissemination to all Marine Corps activities.
	ALMARCON	Messages for Marine Corps activities within the continental United States.
CINCLANTFLT	ALLANTFLT	Messages for general distribution to commands under CINCLANTFLT.
	MERCASTLANT	The merchant ship equivalent to an ALL ALLANTFLT.
Communications Electronics Director-ate/Joint Staff.	ALJAP...........	Promulgates to holders information pertaining to CED/JS-adopted publications when rapid delivery to all branches of the armed forces is required.
Commandant, Coast Guard.	ALCOAST.........	Messages for general dissemination within the Coast Guard. The Coast Guard equivalent of ALNAV.
	ALDIST	Provide Coast Guard district commanders with policy instructions and other informa-tion.
Commander, MSTS..........	ALMSTS	Messages for all MSTS commands and offices.

reports or information of a recurring nature and may follow a specific format. A few of the more common types of special-purpose messages follow.

CONTACT AND AMPLIFYING REPORTS

A contact report is a message reporting the first contact with an enemy force. Speed of handling such a message is of the utmost importance. Contact reports have priority over every other type of traffic handled by naval communications.

An amplifying report follows up a contact report. It contains further data about the enemy force, such as number, type, position, course, speed, and distribution. A contact report may be followed by many amplifying reports as information becomes available and the enemy shows his intentions. Often it is possible to transmit some amplifying data with the contact report.

MOVEMENT REPORTS

The Navy has hundreds of fleet units always on the move. It is necessary both to command and to efficient administration to have an up-to-the-hour knowledge of the location of every vessel. This large-scale change of address work is carried on by the movement report system.

The controlling agency of the entire movement report system is the movement report control center at Washington, D. C. (MRCC WASHDC). For reporting purposes the world is divided into five zones, of which only four presently are assigned. Each zone is controlled by a movement report center (MRC). Each zone is further subdivided into areas controlled by movement report offices (MROs). An MRC receives information on movements all over the world, but MROs have information only on movements in their own areas of responsibility.

Before getting underway, a ship sends a movement report message stating the time of departure, destination, route, speed of advance, and any other information the ship may be directed to furnish. The message enters the movement report system through the MRO or MRC controlling the area the ship is in. It then is the responsibility of the MRO or MRC to relay the information to military and civilian activities that have an official interest in the location of the vessel. Included are such

activities as supply centers, fleet post offices, fleet broadcast stations, and the customs authorities.

Movement report messages are prepared in accordance with the movement report supplement to NWIP 10-1.

HYDRO MESSAGES

The U. S. Navy Oceanographic Office originates messages concerning navigation warnings. These messages are given wide distribution on special hydrographic broadcasts. There are two subdivisions of HYDRO messages. HYDROLANTS contain navigational information relating to the Atlantic, Mediterranean, and Indian Oceans. HYDROPACS furnish such information for the Pacific Ocean areas.

NOTICES TO AIRMEN

Notices to airmen (NOTAMs) are originated by military activities and civil agencies concerned with the safety of aircraft. NOTAMs are composed of data relating to aerological facilities, services, and hazards.

Q MESSAGES

The classified portions of the navigational warning systems of Allied Nations are known as Q messages. They contain information affecting navigation that an enemy would find difficult to obtain on his own. Do not confuse Q messages with Q signals, which are explained later in this chapter.

ALL SHIPS PRESENT MESSAGES

All ships present messages are for ships within visual signaling range. They are originated by the senior officer present afloat (SOPA), and relate to such matters as storms, port security regulations, and local liberty policy. The SOPA prescribes local instructions governing the initiation, transmission, and relay of all ships present messages.

MINIMIZE MESSAGES

In an emergency—either actual or simulated—it may be necessary to reduce message and telephone traffic to prevent delay in handling vital messages. This reduction in traffic is

accomplished by promulgation (usually by message) of the word MINIMIZE, which has the following meaning: "It is now mandatory that normal message and telephone traffic be reduced drastically in order that vital messages connected with the situation indicated shall not be delayed." The message ordering MINIMIZE consists of the word MINIMIZE followed by the scope (area affected) and the reason, and the duration of its imposition (when known).

Messages imposing MINIMIZE must be brought to the immediate attention of the communication officer.

STATION AND ADDRESS DESIGNATORS

Station and address designators are formed of combinations of characters or pronounceable words for use in message headings to identify originators and addressees. The four kinds of station and address designators are call signs, address groups, routing indicators, and plain language address designators.

CALL SIGNS

Call signs are letters, letter-number combinations, or one or more pronounceable words, used chiefly for establishing and maintaining communications that identify some communication activity. They are applicable in both civil and military communications. Call signs are of several categories, with some calls belonging to more than one category. They are described in the ensuing eight topics.

International Call Signs

International call signs are assigned radio stations of all countries—civil and military, afloat and ashore—according to international agreement. The first letter or first two letters of an international call indicate the nationality of the station. The United States has the first half of the A block (through ALZ) and all of the K, W, and N blocks. The United States reserves A calls for the Army and Air Force. The K and W blocks are assigned to commercial and private stations, merchant ships, and others. The N block is only for use by the Navy, Marine Corps, and Coast Guard.

Naval shore communication stations have three-letter N calls. If necessary, these calls may be expanded by adding numerical suffixes. Thus, additional call signs are provided for radio transmitting and receiving facilities located remotely from the parent station. Examples are the following:

NAM . . . NAVCOMMSTA Norfolk.
NAM1 . . . Headquarters,
      CINCLANTFLT, Norfolk.
NAM2 . . . Naval Shipyard, Norfolk.

The call signs for fixed and land radio stations are listed in ACP 100 (Allied Call Sign and Address Group System - Instructions and Assignments) and U. S. Supplement 1 thereto.

International call signs assigned to U.S. naval vessels are four-letter N calls, which are to be used unencrypted only. They have no security value, hence they are utilized for all nonmilitary international communications. Example:

NWBJ . . . . USS Renshaw (DD 499).

International call signs for USN, USMC, and USCG aircraft are composed of the service designator N, NM, or NC, respectively, followed by the last four digits of the serial or bureau number of the aircraft.

Military Call Signs

Most ships of the Allied Nations are assigned military call signs in addition to their international call signs. From the military call signs are derived the encrypted call signs for CW and RATT communications. Likewise, military call signs form the basis for both encrypted and unencrypted call signs for voice communications. They are never used in their basic form to address messages. Consequently, military call signs are assigned only to ships capable of encrypting call signs. Both international and military call signs are listed in ACP 113 (Call Sign Book for Ships).

Indefinite Call Signs

Indefinite call signs represent no specified facility, command, authority, or unit, but may represent any one or any group of these. Examples:

NERK . . . . (To) any or all U.S.
                  Navy ships(s).
NA through NZ . . (From) any U.S. Navy
                  ship
NQO . . . . Any or all U.S. Navy
                  shore radio station(s).

Indefinite call signs are used in codress message headings to conceal the identity of originators and addressees. In such instances this information is placed in the encrypted test.

The call NQO might be sent by a ship unable to raise a particular shore station. Any Navy shore station hearing the transmission would answer and accept the traffic.

Collective Call Signs

Collective call signs pertain to two or more facilities, commands, or units. Examples:

NATA . . . . . . All U.S. Navy ships
copying this broadcast.

NIMK . . . . . . All U.S. submarines
copying this broadcast.

Net Call Signs

Net call signs represent all stations within a net. (A net is a group of stations in direct communication with each other on a common channel.) Examples:

NQN . . . . All U.S. Navy radio
stations in the
Pacific guarding the
ship-shore high-
frequency calling
series.

OVERWORK . . All U.S. Navy stations
on this (radio-
telephone) circuit.

Tactical Call Signs

Tactical call signs, with the exception of task organization and aircraft call signs, are limited in application. They normally are used in tactical communications only, to identify tactical commands or communication facilities. Tactical call signs are composed of four-letters, which are letter-number combinations. They are listed in ACP 110, Tactical Call Sign Book with supplements, and ACP 112, Task Organization Call Sign Book.

Voice Call Signs

Voice call signs are words or combinations of words—such as SUNSHINE or HIGH HAT—limited to radiotelephone communications. Call signs in JANAP 119, Joint Voice Call Sign Book, are only for tactical circuits. On ship-shore administrative circuits, phonetically spelled international call signs are given as ships' voice calls. Under certain conditions, ships' names are used as voice call signs on local harbor circuits. All the various types of voice call signs and the rules for their application in radiotelephone communications are treated in detail in chapter 7.

Visual Call Signs

Visual call signs are groups of letters, numerals, special flags and pennants, or combinations of any of these, for use in visual communications. They are listed in ACP 118.

ADDRESS GROUPS

Address groups are four-letter groups assigned to represent a command, activity, or unit. They are used mainly in the message address, although, in military communications, they can be used in the same manner as call signs to establish and maintain communications. In general, call signs and address groups are used by the Navy in exactly the same way. Address groups never start with the letter N, hence they are easily distinguished from naval radio call signs. Unlike international call signs, address groups follow no distinctive pattern. For example, you learned the difference in call signs for naval ships and shore radio stations. In address groups, however, the arrangement of the four letters conveys no significance whatsoever.

All commands afloat (except individual ships) are assigned address groups. They are assigned also to shore-based commands, authorities, or activities not served by their own communications facilities. For example, (1) senior commands and commanders ashore, such as the Secretaries of Defense and of the Navy, bureaus and offices of the Navy Department, and district commandants; (2) fleet, type, or force commanders ashore; (3) elements of operating forces permanently ashore who are in frequent communication with forces afloat; and (4) elements of the shore establishment (such as weather centrals) having a need for direct addressing and receipt of the messages.

Among other uses, address groups facilitate delivery of messages when a communication center serves so many activities that its own call sign is insufficient to identify the addressee.

Address groups are contained in ACP 100 and its U.S. Supplement 1.

Address groups, like call signs, are divided into types. They are individual activity, collective, conjunctive and geographic address groups, address indicating groups, and special operating groups.

Individual Activity Address Groups

Individual activity address groups are representative of a single command or unit, either afloat or ashore. Examples:

DTCI - - - - - - COMPHIBLANT.
SSMW - - - - - CNO.

Collective Address Groups

Collective address groups represent two or more commands, authorities, activities, units, or combinations of these. Included in the group are the commander and his subordinate commanders. Examples:

DSWN - - - - - - DESRON 16.
AMGK - - - - - - SIXTHFLT.

Conjunctive Address Groups

You must remember that conjunctive address groups have incomplete meanings. It is always necessary to complete the meaning by the addition of other address groups denoting a specific command or location. It is for this reason that conjunctive address groups are used only with one or more other address groups. The conjunctive address group XZKW, for example, means "All ships present at _____." This particular group must be followed by a geographic address group to complete the meaning.

Geographic Address Groups

Geographic address groups are the equivalent of geographic locations or areas, and are always preceded by conjunctive address groups. Assuming the geographic address group for Newport, R. I., to be DEXL, all ships present at Newport would be addressed XZKW DEXL.

Address Indicating Groups

Address indicating groups (AIGs) represent a specific set of action and/or information addressees. The originator may or may not be included. The purpose of AIGs is to increase the speed of traffic handling. They shorten the message address by providing a single address group to represent a number of addressees, thus eliminating individual designators for each addressee. For example, BIOQ is an AIG used to address air defense messages originated by COMEASTSEAFRON to 24 action addressees and 37 information addressees. By using a single AIG, 61 call signs and address groups are eliminated from the heading of the message.

Special Operating Groups

Special operating groups (SOGs) are utilized for passing special instructions in message headings. They are four-letter groups that are identical in appearance to address groups. Special operating groups are not used by the Navy unless specifically authorized by CNO. When they are authorized, they must always be encrypted. A list of the SOGs, together with their meanings, is in ACP 100.

ROUTING INDICATORS

Routing indicators are groups of letters whose purpose is to identify stations in a teletypewriter tape relay network. Depending upon the type of station, routing indicators vary in length from four to seven letters. It is easy to distinguish routing indicators from call signs or address groups because routing indicators always begin with either the letter R or U. Routing indicators are never encrypted. A complete discussion of routing indicators and their usage in teletypewriter tape relay operation is included in chapter 11.

PLAIN LANGUAGE ADDRESS DESIGNATORS

Plain language address designators are the official, abbreviated, or short titles of commands or activities, used instead of call signs or address groups in the headings of messages. Some abbreviated titles are written as single words. Others have conjunctive titles and geographical locations. Examples:

BUSHIPS
NAVCOMMSTA GUAM

Plain language address designators have wide application in messages originated and addressed within the shore establishment. They
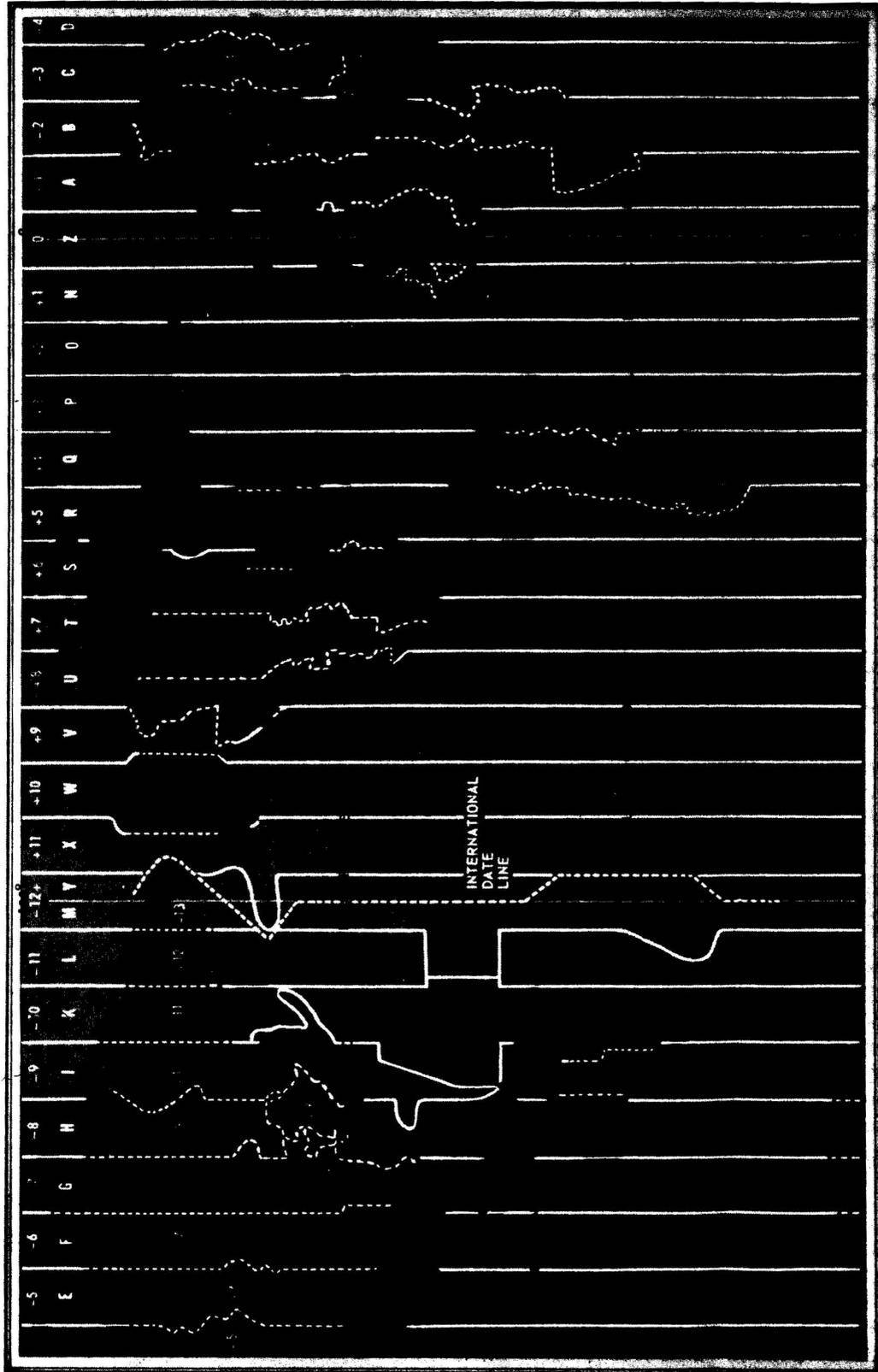
13.76

Figure 5-1. — Time zone chart of the world.

also are used in communications with the Army, Air Force, and the armed forces of Allied Nations. They are not used in the headings of codress messages, nor in radiotelegraph messages originated by U. S. Naval forces afloat.

TIME IN MESSAGES

For reckoning time, the surface of the earth is divided into 24 zones, each extending through 15° longitude. Each zone differs by 1 hour from the zone next to it.

The initial time zone lies between 7-1/2°E. and 7-1/2°W. of zero meridian, which passes through the town of Greenwich, England. The time in this zone—zone zero—is called GMT (Greenwich mean time). You may hear some oldtimers call it GCT (Greenwich civil time); both names mean the same. Each zone, in turn, is indicated by the number that represents the difference between the local zone time and Greenwich mean time.

Zones lying in east longitude from zone zero are numbered from 1 to 12 and are designated minus, because for each of them the zone number must be subtracted from local time to obtain Greenwich mean time. Zones lying in west longitude from the zero zone are numbered from 1 to 12 also, but are specified plus, because the zone number must be added to local zone time to obtain GMT. In addition to the time zone number, each zone is further designated by letter. Letters A through M (J omitted) indicate minus zones; N through Y, plus zones. (See fig. 5-1.) The designating letter for GMT is Z.

The 12th zone is divided by the 180th meridian, the minus half lying in east longitude and the plus half in west longitude. This meridan is the international date line, where each worldwide day begins and ends. A westbound ship crossing the line loses a day, whereas an eastbound ship gains a day.

The number of a zone, prefixed by a plus or a minus sign, constitutes the zone description. Often zones crossing land areas are modified to agree with boundaries of countries or regions using corresponding time.

The approved method of expressing time in the 24-hour system is with the hours and minutes expressed as a four-digit group. The first two figures of the group denote the hour and the second two the minutes. Thus 6:30 a. m. becomes 0630; noon is 1200; and 6:30 p. m. is 1830. Midnight is expressed as 0000—never as 2400—and 1 minute past midnight becomes

0001. The time designation 1327Z shows that it is 27 minutes past 1:00 p. m., GMT. Numbers are prefixed to the time to indicate the day of the month; in other words, to form a date-time group (DTG). The DTG 171327Z means the 17th day of the current month plus the time in GMT. Dates from the 1st to the 9th of the month are preceded by the numeral 0.

A date-time group is assigned to a message by the message center at the time the message is prepared for transmission. For standardization, the time expressed by a date-time group normally is GMT. The date-time group in a message heading serves two purposes: It indicates the time of origin of the message, and it provides an easy means of referring to the message.

In addition to the external DTG, an encrypted message has a DTG buried within the text. This is called the true date-time group (TDTG), and it is inserted by the cryptocenter. The TDTG is used when referring to a message that has been encrypted.

The DTG assigned to a general message always has a slant sign (/) and additional digits added to the DTG. The additional digits represent the general message sequential serial number. Example: 102347Z/35.

Local time is used sometimes to indicate date and time in the text, of a message, but must be accompanied by the zone designating letter—as in 170812Q. When local time is referred to frequently in the text, the suffix may be omitted if a covering expression is used, such as ALL TIMES QUEBEC.

TIME CONVERSION TABLE

The time conversion table (table 5-2) is useful for converting time in one zone to time in any other zone. Vertical columns indicate the time zones. Zone X is GMT. Time in each successive zone to the right of zone Z is 1 hour later, and to the left of zone Z is 1 hour earlier. Time in each successive shaded area to the right is 1 day (24 hours) later; to the left it is 1 day (24 hours) earlier. For example, to calculate the time in zone U when it is 0500 hours in zone I, proceed as follows: Find 0500 in column I and locate the time (1200) in the corresponding line in column U. Inasmuch as 1200 is not in the shaded area, the time is 1200 hours yesterday.

PRECEDENCE

Precedence is an important concept in naval communications. To communication personnel,

Y	X	W	V	U	T	S	R	Q	P	O	N	Z	A	B	C	D	E	F	G	H	I	K	L	M
+12	+11	+10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	−1	−2	−3	−4	−5	−6	−7	−8	−9	−10	−11	−12
1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800
1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
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1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300
1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400
1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500
1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700

(Left side: upper shaded rows = PREVIOUS DAY, lower rows = SAME DAY. Right side: upper rows = SAME DAY, lower shaded rows = NEXT DAY.)

Table 5-2. — Time Conversion Table

it indicates the relative order in which a message must be handled and delivered. To the addressees, precedence shows the relative order in which the contents are to be noted. Precedence is assigned by the originator on the basis of message content and how soon the addressee must have it. No message is assigned a precedence higher than that required to ensure that it reaches all addressees on time.

Multiple-address messages having both action and information addresses are often assigned two precedences, called dual precedence. One precedence is for the action addressees, and a lower precedence is for information addressees.

Use of higher precedences is limited to certain types of urgent traffic, and standards for handling each precedence are prescribed by DNC. The rules governing precedence are set forth in table 5-5 on page 77.

In addition to the precedences given in table 5-5, precedences of EMERGENCY and DEFERRED are assigned messages originated by NATO and other Allied Nations. Messages introduced into U. S. Military Communications Systems carrying an EMERGENCY (Y) precedence are handled before IMMEDIATE and after FLASH messages of the United States. Messages carrying a DEFERRED (M) precedence are handled after ROUTINE messages of the United States.

PROSIGNS

Procedure signs, or prosigns, are letters or combinations of letters that convey in short, standard form certain frequently sent orders, instructions, requests, reports, and the like, relating to communications. In radiotelegraphy, an overscore means that the prosign is sent as one character, that is, without the normal pause between the letters. Overscores are ignored in teletypewriter work.

Although some prosigns seem to be abbreviations of their assigned meanings, prosigns are never referred to as abbreviations. Prosign IMI, used internationally for many years by military radio operators, means "repeat." Some veteran operators would have you believe that IMI derived from the words "I missed it."

Following is a complete list of authorized prosigns. Memorize them now. It may be helpful to prepare a number of small cards, with the prosign on the front and its meaning on the back. Use the cards for self-drill.

1. Precedence prosigns:
   Z . . . . FLASH.
   O . . . . IMMEDIATE.

P . . . . . PRIORITY.

R . . . . . ROUTINE.

2. Prosigns that identify portions of a transmission:

AA . . . . All after.

AB . . . . All before.

WA . . . . Word after.

WB . . . . Word before

3. Ending prosigns:

K . . . . . Go ahead; or, this is the end of my transmission to you and a response is necessary.

$\overline{AR}$ . . . . End of transmission; no no receipt required.

4. Pause prosigns:

$\overline{AS}$ . . . . I must pause for a few seconds.

$\overline{AS}\ \overline{AR}$ . . I must pause longer than a few seconds; will call you back.

5. Separation prosigns:

$\overline{BT}$ . . . . Break. (Separates text of message from heading and ending.)

II (written in messages as a short dash) . . . . . Separative sign. (Used to separate parts of the message heading. Not to be used as punctuation to represent a hyphen or dash in message texts.)

6. Prosigns always followed by one or more call signs and/or address groups:

DE . . . . From (in call).

FM . . . . Originator's sign.

TO . . . . The addressee designations immediately following are addressed for action.

INFO. . . The addressee designations immediately following are addressed for information.

XMT . . . Exempt. (Used to exempt addressees from a collective call or address.)

7. Prosigns used in transmission instructions of a message:

T. . . . . . Transmit this message to all addressees or to the addressee designations immediately following.

G . . . . . Repeat this entire transmission back to me exactly as received.

F . . . . . Do not answer.

8. Group count prosigns:

GR plus numerals. Group count.

GRNC The groups in this message have not been counted.

9. Prosigns used with the executive method:

$\overline{IX}$ . . . . . Action on the message or signal that follows is to be carried out upon receipt of "Execute. "

$\overline{IX}$ plus 5-second dash . . . "Execute"—carry out the purport of the message or signal to which this applies.

10. General:

$\overline{AA}$ . . . . Unknown station.

B . . . . More to follow.

C . . . . Correct.

EEEEEEEE . . . . Error.

EEEEEEEE $\overline{AR}$. . This transmission is in error. Disregard it.

$\overline{HM}\ \overline{HM}\ \overline{HM}$ . . Emergency silence sign.

$\overline{IMI}$ . . . . Repeat

$\overline{INT}$. . . . . Interrogative.

J . . . . Verify with originator and repeat.

NR . . . . Station serial number.

R . . . . I received your last transmission satisfactorily.

CFN . . . . Confirmatory material to follow. (Used teletypewriter operation only.)

OPERATING SIGNALS

Radio operators and teletypists frequently exchange routine advice and operating information, and occasionally relay emergency communication instructions or reports to other ships and stations and to aircraft. Traffic of this nature is transmitted in condensed standard form by means of operating signals consisting of three-letter groups beginning with

Q or Z. These signals— of which there are several hundred— represent words, phrases, or complete sentences, and are a form of shorthand, eliminating time-consuming plain language transmissions. The Q signals are employed in both military and civil communications, and are understood by ships and shore stations of any nationality. The Z signals are for use only in the United States and Allied military communications, and represent meanings not found in the Q code. Both Q and Z signals can be used together, when necessary, in military communications. Operating signals are published in ACP 131. It has decode sections for both Q and Z signals, indexed alphabetically, and an encode section tabbed by subject matter.

USE OF OPERATING SIGNALS

Operating signals are prescribed for every form of electrical telecommunication except radiotelephone. Instead of using the customary operating signals, the radiotelephone operator transmits operating information in brief spoken phrases. An exception is made to this rule when a message containing an operating signal is relayed by radiotelephone; then the operator transmits the group phonetically.

Many operating signals may be used in either of two ways— as a question or as a statement. The prosign $\overline{INT}$ before the signal places it in the form of a question. Example: USS Epperson (DD 719) asks USS Renshaw (DD 499): NWBJ DE NTGT $\overline{INT}$ QRU K, meaning "Have you anything for me?"

Renshaw replies: NTGT DE NWBJ QRU $\overline{AR}$, meaning "I have nothing for you."

When communicating with nonmilitary stations, the prosign $\overline{IMI}$ after the Q signal, is employed instead of $\overline{INT}$ ahead of the Q signal to give an interrogatory meaning.

Some signals must be accompanied by a numeral suffix that completes, amplifies, or varies the basic meaning. Example: A teletypewriter operator checks circuit operation with the query $\overline{INT}$ ZBK, meaning "Are you receiving my traffic clear?" The receiving station has a choice of replies: ZBK1 means "I am receiving your traffic clear," or ZBK2, "I am receiving your traffic garbled."

Many operating signals contain blank portions in their meanings that are filled in to convey specific information. To illustrate, $\overline{INT}$ ZRE means "On what frequency do you hear me best?"

In ACP 131 the declaratory meaning listed for ZRE is "I hear you best on___kc (mc)." The operator fills in the necessary information thus: NTGT DE NWBJ ZRE 8578, which means "I hear you best on 8578 kc."

Other signals, in their meanings, have blanks enclosed in parentheses. Filling in such a blank is optional. For example, $\overline{INT}$ ZHA means "Shall I decrease frequency very slightly (or___kc) to clear interference?" The operator receiving the signal $\overline{INT}$ ZHA without the frequency added knows it means "Shall I decrease frequency very slightly?"

During wartime, operating signals often are encrypted, especially those revealing—

    1. Special frequencies.
    2. Cryptographic data.
    3. The organization of networks.
    4. Ship movements (estimated times of arrival, departure, and kindred data).

Unless they are encrypted, operating signals possess no security and must be regarded as the equivalent of plain language.

Some of the most commonly used operating signals are listed in table 5-3. Remember that the Q code is used internationally, and speaks of "telegrams" whereas a U. S. Navy communicator would say "messages.

BASIC MESSAGE FORMAT

With a few exceptions, military messages sent by electrical telecommunications are arranged according to a standard joint form called the basic message format. The form is substantially the same whether the message goes by radiotelegraph, radiotelephone, manual teletypewriter, or by automatic tape equipment. The format exists in four versions, one of which is adapted to the special requirements of each of these primary transmission media. Here we will study the radiotelegraph message format, the one of first and most immediate importance to the Radioman. You will read about the other formats in later chapters, but if you learn the one given here you will have little trouble understanding any message.

All messages in joint form have three parts: HEADING, TEXT, and ENDING. (Of the three the most complex is the heading, which often uses as many as 10 of the format's 16 lines.) Heading, text, and ending are divided into COMPONENTS. Each component, in turn, contains one or more ELEMENTS. From left to right, in table 5-4, the message is divided into

Table 5-3. --Operating Signals

Signal	Question	Answer, advice, or order
QCB	. . . .	Delay is being caused by ____ ((1) your transmitting out of turn; (2) your slowness in answering; (3) lack of your reply to my____).
QRA	What is the name of your station?	The name of my station is____ .
QRG	Will you tell me my exact frequency (or that of____)?	Your exact frequency (or that of ____) is____ kc (or mc).
QRK	What is the readability of my signals (or those of ____)?	The readability of your signals(or those of____) is____ (1 to 5).
QRM	Are you being interfered with?	I am being interfered with.
QRN	Are you troubled by static?	I am troubled by static.
QRO	Shall I increase power?	Increase power.
QRP	Shall I decrease power?	Decrease power.
QRQ	Shall I send faster?	Send faster. (____wpm.)
QRS	Shall I send more slowly?	Send more slowly. (____wpm.)
QRT	Shall I stop sending?	Stop sending.
QRU	Have you anything for me?	I have nothing for you.
QRW	Shall I inform____that you are calling him on____kc (or mc)?	Please inform____that I am calling him on ____kc (or mc).
QRX	When will you call me again?	I will call you again at____(hours) on____kc (or mc).
QRZ	Who is calling me?	You are being called by____on____kc (or mc).
QSA	What is the strength of my signals (or those of ____)?	The strength of your signals (or those of____) is____(1 to 5).
QSO	Can you communicate with____direct or by relay?	I can communicate with____direct (or by relay through____).
QSV	Shall I send a series of Vs on this frequency (or____kc (or mc))?	Send a series of Vs on this frequency (or ____kc (or mc)).
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on____kc (or mc)).
QSZ	Shall I send each word or group more than once?	Send each word or group twice (or____times).
QTC	How many telegrams have you to send?	I have ____telegrams for you (or for____).
ZAA	. . . .	You are not observing proper circuit discipline.
ZAR	. . . .	This is my____request (or reply). ((1) First, (2) second, (3) third, etc.)
ZBK	Are you receiving my traffic clear?	I am receiving your traffic____((1) clear; (2) garbled).

Table 5-3.--Operating Signals--Continued

Signal	Question	Answer, advice, or order
ZBO	Of what precedence and for whom are your messages?	I have (or___has)___(numeral indicating number of messages, may be followed by precedence prosign to indicate the precedence) message(s) for you (or for____).
ZBM	. . . .	Place___on watch on this frequency. ((1) A qualified speed key operator, (2) a competent operator.)
ZBP	. . . .	Your___((1) characters are indistinct, (2) spacing is bad).
ZDK	Will you repeat message___(or portion ___)? Or, rerun No.___?	Following repetition (of___) is made in accordance with your request.
ZDQ	. . . .	Message___was relayed to___at___by___ (on___kc (or mc)).
ZEC	Have you received message___?	Message___((1) not received, (2) unidentified, give better identification data).
ZEH	. . . .	Accuracy of___portion of following message (or message___) is doubtful. Correction or confirmation will be forwarded when received. ((1) Heading, (2) text, (3) group to___.)
ZEN	. . . .	This message has been delivered by other means or by a separate transmission to the addressee(s) immediately following this operating signal.
ZEU	. . . .	Exercise (drill) message.
ZEV	Request you acknowledge message____.	Message (or message___) is acknowledged.
ZEW	. . . .	Your attention is invited, for___((1) action, (2) information), to message which is in your files.
ZEX	. . . .	This is a book message and may be delivered as a single address message to addressees for whom you are responsible.
ZFF	. . . .	Inform me when this message (or message ___) has been received by___((1) addressee(s), (2) addressee's authorized representative, (3) by___).
ZFH	. . . .	This message (or message___) is being (or has been) passed to you (or___) for___ ((1) action, (2) information, (3) comment).
ZFI	Is there any reply to message___?	There is no reply to message___.
ZFL	Was there any traffic addressed to me on___Broadcast schedule between serial number___and___?	Following traffic was addressed to you on____ broadcast schedule between serial numbers ___and___.

Table 5-3.--Operating Signals--Continued

Signal	Question	Answer, advice, or order
ZFO	. . . .	Message___ is being delivered as a basegram message.
ZIA	. . . .	This message (or message___) is being (or has been) passed out of proper sequence of station serial numbers.
ZII	What was___ of your (or___'s) number ___? ((1) date-time group, (2) filing time).	My (or___'s) number___ had following___ ((1) date-time group, (2) filing time).
ZKA	Who is controlling station (NCS) on this frequency (or on___kc (or mc))?	I am (or___is) controlling station (NCS) on this frequency (or on___kc (or mc)).
ZKI	. . . .	Set watch on___kc (or mc)___((1) continuous, (2) until further notice).
ZKP	Are you (or is___) radio guard for___ (on___kc (or mc))?	I am (or___is) radio guard for___(on___ ___kc (or mc)).
ZNB	What is authentication of___((1) message___, (2) last transmission, (3)___)?	Authentication (of___) is___((1) message ___, (2) last transmission, (3)___).
ZOC	. . . .	Station(s) called relay this message to addressees for whom you are responsible.
ZOI	. . . .	Pass this message to the nearest (or___) weather central control.
ZON	. . . .	Place this message (or message___) on broadcast indicated by numerals following ___(numeral may be followed by specific broadcast designator) ((1) NSS; (2) NPG; (3) NPM; (4) NBA; (5) NPN; (6) NPO; (7) NHY; (8) NAM; (9) NAF; (10) NPL; (11) NDT).
ZOU	How should traffic for___be routed?	Route traffic for___through___(on___kc (or mc)).
ZOV	. . . .	Station designation preceding this operating signal is the correct routing for this message rerouted by___.
ZOY	. . . .	Relay this message only to the station(s) whose designation(s) precede this operating signal.
ZUE	. . . .	Affirmative (Yes).
ZUG	. . . .	Negative (No).
ZUI	. . . .	Your attention is invited to___.
ZUJ	. . . .	Standby.
ZWL	. . . .	No forwarding action to the addressee designation(s) immediately following is required.

Table 5-4. — Radiotelegraph Message Format

Parts	Components	Elements	Format line	Contents
H		Handling instructions .	1	Not used in radiotelephone and radiotelegraph.
E	Beginning procedure	a. Call	2 3	Station(s) called; prosign XMT (exempt) and exempted calls. Prosign DE (from) and designation of station calling.
		b. Transmission identification. c. Transmission instructions.	4	Station serial number. Prosign T (relay); G (repeat this transmission back to me exactly as received); F (do not answer); operating signals; call signs, address groups, plain language.
A	Preamble	a. Precedence; date-time group; message instructions.	5	Precedence prosign; date-time group and zone suffix; operating signals; prosign IX (execute to follow).
D	Address	a. Originator's sign; originator.	6	Prosign FM (originator of this message is); originator's designation expressed as call sign, address group, or plain language.
		b. Action addressee sign; action addressee(s).	7	Prosign TO; action addressee designation(s) expressed as call signs, address groups, address indicating groups, or plain language.
N		c. Information addressee sign; information addressee.	8	Prosign INFO (this message addressed for information to); information addressee designation(s) expressed as call signs, address groups, or plain language.

Table 5-4. — Radiotelegraph Message Format—Continued

Parts	Components	Elements	Format line	Contents
		d. Exempted addressee sign; exempted addressee(s).	9	Prosign XMT; exempted addressee designation(s) expressed as call signs, address groups, or plain language.
G	Prefix	a. Accounting information; group count; SVC.	10	Accounting symbol; group count; SVC (this is a service message).
SEPARATION			11	Prosign $\overline{BT}$ (break).
T E X T	Text	a. Subject matter...	12	Internal instructions; basic idea of originator.
SEPARATION			13	Prosign $\overline{BT}$.
E N D I N G	Ending procedure	a. Time group.....	14	Hours and minutes expressed in digits and zone suffix, when appropriate.
		b. Final in-	15	Prosigns B (more to follow); $\overline{AS}$ (I must pause); C (I am about to correct a transmission error in some foregoing part of this message); operating signals.
		c. Ending sign.....	16	Prosign K (go ahead and transmit), or $\overline{AR}$ (end of transmission).

its parts, components, and elements. The heading, for example, consists of the following components: beginning procedure, preamble, address, and prefix. Elements of the beginning procedure (see "Elements" column) consist of the call, transmission identification, and transmission instructions. Contents of the call are station(s) called, prosign XMT and exempted calls (if required), and the prosign DE and designation of calling station.

It is well to consider each item in the heading separately, for each has a special meaning and its relative position is significant. Prosigns, call signs, address groups, and other contents that make up a typical heading must always appear in the order specified for the means of transmission.

It should be understood that there is no relationship between format lines and typed or handwritten lines. Format line 12, for example, is the text of the message and may consist of many written lines.

The form of the message and its transmission requirements dictate which components, elements, and contents will be used in the heading. Format line 1 is used only in teletypewriter and tape relay work, but is omitted in radiotelephone and radiotelegraph. The abbreviated plaindress heading (discussed later) may omit any or all of the following:

precedence, DTG, and group count. Many messages not in abbreviated plaindress omit such elements as transmission instructions, information addressee data, and final instructions because there is no occasion for them. The messages themselves are, for this reason, much simpler than the basic message format, which must provide for everything. You seldom see a message with every format line, and you may never see one that used all the contents. But remember that the sequence actually appearing in any one message must be in accordance with the proper message format.

It is impossible in a training course such as this to show you how to construct headings to meet every eventuality. Your Chief or senior Radioman has handled thousands of messages, and can explain a greater variety of messages examples for you. Make it your rule to read every message you handle. Take a good look through the message files in your ship or station. Doctrinal communication publications, which are available on the job, provide you with valid, up-to-date sources of operational communication information.

PRELIMINARY CALL

A preliminary call is for the purpose of establishing radiotelegraph communications before transmitting a message. The preliminary call also alerts the receiving operator to prepare to copy a message.

A simple preliminary call consists of the station called, the prosign DE, the calling station, and the prosign K. If desired, the precedence of the message may be included. Following are two examples of a preliminary call.

    1. NCFX DE NAUC K
    2. NCFX DE NAUC P K

From the earlier discussion of call signs, it is apparent that transmission of the preliminary call is sent from one U.S. Navy ship to another. A check of the call sign book shows that NCFX is USS Radford (DD 446) and NAUC is USS Philip (DD 498). In the second example, Philip's operator indicates that he has a priority message for Radford. When ready to copy the message, Radford's operator gives the go-ahead by transmitting: NAUC DE NCFX K.

RADIOTELEGRAPH MESSAGE ANALYSIS

With communication established, Philip commences clearing traffic. The message is analyzed as follows:

Format line	Transmission	Explanation
2 and 3	NCFX DE NAUC.	Radford from Philip.
5	- P - 22345Z	PRIORITY precedence. DTG, indicating that this message was originated at 2345 GMT, on the 22d day of the month.
10	GR8	Group count. This message has 8 groups in the text. (A plain language word counts as 1 group.)
11	B̄T̄	Break. Separation between heading and text.
12	UNCLAS. GUARD MAIL	Text.
	FOR YOU AT FIRST LIGHT.	
13	B̄T̄	Break. Separation between text and ending.
16	K	Go ahead and transmit.

On receiving the prosign K, Radford's operator checks the message and counts the groups in the text. If he missed some of the message, or doubts that he received a portion correctly, he requests and obtains a repetition of the missed or doubtful portions. When certain that he has the message complete and correct, he so informs the Philip by transmitting: NAUC DE NCFX R A̅R̅. This transmission is called a RECEIPT.

In the preceding example, two ships were in direct communication, and Radford's call sign served to address the message to that ship. A message that must undergo relay to reach the addressee requires a somewhat longer and differently constructed heading.

It must be apparent to every station handling the message (1) who originated the message,

(2) who receives the message for relay, and (3) to whom the message ultimately is destined.

Assume that USS Ranger (CVA 61), steaming off Cristobal, Panama, completes her mission of qualifying carrier pilots and wishes to so report to COMNAVAIRLANT (in Norfolk) and to the Jacksonville (Fla.) Naval Air Station. Communication is established with NAVCOMMSTA Balboa, the nearest U. S. Naval shore radio station, and transmission of the message commences. Note the use of the information addressee prosign.

Format line	Transmission	Explanation
2 and 3	NBA DE NHKG -	NAVCOMMSTA Balboa from Ranger.
4	T -	Relay this message to all addressees.
5	R - Ø11324Z -	ROUTINE precedence. DTG.
6	FM NHKG -	Originator, USS Ranger.
7	TO YONA -	Action to COMNAVAIRLANT.
8	INFO OJWN	Information to NAS Jacksonville.
10	GR6	Group count of text groups.
11	B̄T̄	Break.
12	UNCLAS. CARQUALS COMPLETED. ETA GTMO Ø314ØØZ	Text. Certain authorized abbreviations, standard throughout the services, are used in messages for sake of brevity. The version as sent is 62 percent shorter than the expanded text, which reads: CARRIER QUALIFICA-TION LANDINGS COMPLETED. ESTIMATED

Format line	Transmission	Explanation
		TIME OF ARRIVAL GUANTANAMO BAY CUBA Ø314ØØZ.
13	B̄T̄	Break.
16	K	Go ahead and transmit.

Radio Station NBA gives Ranger a receipt for the message, and by doing so assumes responsibility for relay.

Here is an example of a type of message you will see often. This is a fleet broadcast message from NAVCOMMSTA Washington, originated by CNO. Note the exempted addressee prosign. Fleet broadcast messages via CW repeat each element of the heading, except when the addressees are designated by plain language. Plain language designators are transmitted only one time.

Format line	Transmission	Explanation
2 and 3	NERK NERK NERK DE NSS NSS NSS	Any or all U. S. Navy ships from NAVCOMMSTA Washington. (This call is sent with the first message of each hourly schedule, omitted thereafter.)
4	W NR522 W NR522 -	NAVCOMMSTA Washington broadcast serial number 522 - - that is, the 522d message placed on this broadcast schedule since the beginning of the current month.
5	PP -	PRIORITY precedence to action addressees.
5	RR -	ROUTINE precedence to information addressees.

Format line	Transmission	Explanation
5	11Ø847Z	
	11Ø847Z -	DTG.
6	FM FM	Originator's prosign.
6	CNO --	Originator.
7	TO TO	Action addressee prosign.
7	All ships NAVAIRLANT-.	Action addressee(s).
8	INFO INFO	Information addressee prosign.
8	NAS GTMO-- . .	Information addressee.
9	XMT XMT	EXEMPTED addressee prosign, meaning that stations or addressees that follow are exempted from foregoing collective address -- in this instance, the action addressee.
9	USS Saratoga. . .	Exempted addressee.
10	GR156 GR156 . .	Group count.
11	$\overline{BT}$	Break.
12	(156 groups text)	Text.
13	$\overline{BT}$	Break.
16	$\overline{AR}$	This is the end of this transmission and no receipt is required or expected.

PLAIN LANGUAGE TEXT

A standard textual format is prescribed for plain language messages. The format is designed to make maximum use of the capabilities of teletypewriter equipment, thereby eliminating much of the processing formerly required for incoming messages. It also decreases the originator's preparation time and the addressee's comprehension time.

Exempt from the standard format are messages with very short texts, such as tactical messages, and messages employing a firmly established format, such as standard "reporting type" messages that use letters of the alphabet to indicate a prearranged subject matter. For messages received for relay by other means than NTX (for example, those received via a CW circuit), the communication center accepting the message is responsible for assuring that the elements are in proper sequence before relaying. If all of the elements are required, they must appear in the following order:

1. Classification or the abbreviation UNCLAS.
2. Special category markings (EXCLUSIVE, COSMIC, and the like).
3. Special handling security markings (NOFORN, RESDAT, and so on).
4. Exercise identification (EXERCISE MAIN BRACE).
5. Code name or nickname of special projects or operations.
6. Flag word (EXPRESS, REDLINE, etc.).
7. Passing instructions and other indications of message distribution (FOR _____).
8. Subject line, concise and untitled.
9. References, identified by letter(s).
10. Text:
   a. Paragraphs are numbered.
   b. Subparagraphs are indented and lettered or numbered as appropriate.
   c. In a one-paragraph message, any subparagraphs are lettered.
   d. If a message is classified, proper downgrading/declassification markings are included.

Following is an example of a message employing most of the elements of the standard text format.

CONFIDENTIAL NOFORN
COMTWELVE PASS TO FADM SMITH
REVISED CONFERENCE SCHEDULE
A. MY Ø917ØØZ
B. COMTHIRTEEN 13153ØZ
1. REQUEST DESIGNATED COMMITTEE
2. AGENDA:
A. ADD "LOGISTICS OF PROJECT."

B. DELETE "POSSIBLE LOCATION FACILITIES."
3. CNO ITINERARY, 19 AUG, TIMES UNIFORM:

ETA	ETD	LOCATION
ORIG	13∅∅	NAS SEATTLE
1515	18∅∅	NAS ALAMEDA
23∅∅	TERM	CHICAGO-OHARE
SCP 4		

If a message does not require all of the elements, the format is adjusted accordingly by omitting the nonessential elements. Certain other exceptions are allowed when using the standard format.

The subject line may be omitted if it necessitates that an otherwise unclassified message be classified, noticeably increases the length of what would be a brief message, or increases commercial charge when the message is addressed to activities served by commercial communication facilities.

If a short message consists of only one paragraph, the paragraph is not numbered; and when there is only one reference, the reference identification is included in the body of the paragraph. For example:

UNCLAS
YOUR 1∅∅915Z. BUDGET APPROVED SUBJECT CNO CONCURRENCE

The number of characters and spaces on each teletypewriter line is limited to 69.

MESSAGE PARTS THAT MAY NOT BE CHANGED

Certain portions of a message are fixed by the originator and may not be changed by anyone else. This rule is necessary to ensure the reliability of communications. No one knows better than the originator what the message should say, to whom it should be delivered, or what precedence it should carry. Changes in these message parts are forbidden: (1) preamble, (2) address, (3) prefix, and (4) text.

MESSAGES BETWEEN COMMUNICATION PERSONNEL

Supervisory wires, procedure messages, and service messages between communication personnel are for the purpose of expediting the handling of message traffic. All three types of these messages make maximum use of prosigns and operating signals to shorten message

length and transmission time. Although supervisory wires, procedure messages, and service messages are in everyday usage in handling messages, you are likely to hear friendly argument among Radiomen about their differences.

SUPERVISORY WIRES

Supervisory wires are the means of correcting traffic-handling errors in teletypewriter tape relay operation. You can recognize them easily, because they invariably are addressed to the supervisor (SUPVR) of the called station. Examples of supervisory wires are shown in chapter 12.

PROCEDURE MESSAGES

Procedure messages obtain and provide corrections, verifications, and/or repetitions. The test of a procedure message contains only prosigns, operating signals, address designations, identification of messages or parts of messages, and any necessary amplifying data. A procedure message may contain any of the components shown in the basic format, except that the break prosign ($\overline{BT}$) is used only if the DTG is included. The DTG, in turn, is employed only when it is necessary to show time of origin, or when further references may be made to the procedure message. You will find the most common use of procedure messages in radiotelegraph circuit operation. Examples are given in chapter 6.

SERVICE MESSAGES

Service messages pertain to any phase of traffic handling (including requesting and giving corrections and repetitions of messages), communication facilities, or circuit conditions. Most service messages are concerned with the handling of messages. Less frequently they deal with communication facilities or circuit conditions, which accounts for the occasional confusion between procedure messages and service messages. The majority of both types are used to obtain corrections and repetitions of messages or parts of messages. Service messages, however, are prepared and transmitted as regular messages, and normally contain all the necessary format lines, including The DTG and $\overline{BT}$. They may even be encrypted, but in an encrypted service message, you

cannot recognize it as a service—purposely so, for security reasons. It is identified as a service message only within the encrypted text. You can recognize plain language service messages easily by one or more of the following:

1. Reference to another service message;

2. The abbreviation SVC in the prefix or as the first word of the text;

3. That it is addressed specifically to a communication center.

In teletypewriter tape relay operations, if the tributary station is not in direct communication with any station but its own relay station, service messages are used when necessary to question the originating station about a message. Examples are given in chapter 11.

BASEGRAM SYSTEM

The basegram system of delivery is for general messages of insufficient operational importance to warrant immediate delivery to ships by the fleet broadcast method. Originators of general messages decide which messages may be designated basegrams. The purpose of basegram delivery is to keep the fleet broadcast free for operational traffic. Strategically located shore stations, acting as basegram delivery authorities, furnish copies of basegrams to ships in ports from which U.S. Navy ships normally operate.

Basegrams and all other general messages are delivered by teletypewriter throughout the shore communications system. Broadcast stations, although they receive basegrams by rapid means, normally do not broadcast the actual basegrams. Instead, they originate and broadcast a procedure message, indicating that the general message is being delivered as a basegram. The operating signal ZFO (Message _____ is being delivered as a basegram) is transmitted, along with the message identification. Example:

```
WR NR34Ø4
M 11Ø254Z
FM NSS
TO NERK
BT
UNCLAS
ZFO ALNAV 1Ø192ØZ/Ø5
BT
AR
```

Broadcast stations are permitted to send basegrams on the fleet broadcast if all other traffic is cleared and free circuit time exists.

All ships are required to keep a general message receipt log. Usually, a standard ledger-type book is used for this purpose, with columns ruled and labeled to indicate the general messages that were received and the basegrams for which only the procedure messages (ZFOs) were received. The ZFO procedure message is always placed in the appropriate general message file until it is replaced by the actual general message basegram.

Aboard ship, your leading Radioman will send you ashore to pick up basegrams as soon as you arrive in port, at frequent intervals while in port, and immediately before getting underway. Be sure to take along the general message logbook, because the basegram office has no other way of knowing which general messages your ship lacks.

When you obtain copies of basegrams from the basegram office, you will notice the word BASEGRAM near the beginning of the text. Additionally, the message heading bears the operating signal ZFP, meaning BASEGRAM, following the DTG.

Upon receipt, basegrams are written up and routed the same as any other general message.

FORMS OF MESSAGES

A military message may be drawn up in any one of the following forms: plaindress abbreviated plaindress, or codress.

PLAINDRESS

A plaindress message has originator and addressee designations in the heading. Unless the call serves as the address, the message contains all the components (but not necessarily the elements) prescribed by the message format—with one exception: The prefix may be omitted. All foregoing examples of radio-telegraph messages are in plaindress form. Call signs and address groups in plaindress messages may be encrypted for a degree of security.

ABBREVIATED PLAINDRESS

Operational requirements for speed of handling—of contact reports, for example—may dictate the abbreviation of plaindress message headings. At such times, any or all of the following may be omitted from the heading: precedence, date, DTG, and group count.

CODRESS

Codress is an encrypted message form in which originator and addressee designations (as well as additional passing instructions, if any) are buried in the encrypted text. Codress is a valuable security device in that it conceals the identity of units and prevents an enemy from making inferences from originator-addressee patterns.

Plaindress and codress forms may be compared from the following message prepared in both versions. Assume that Task Group (TG) 66.1 is conducting exercises in the Mediterranean. Commander Task Group (CTG) 66.1 wishes to order the beginning of a new phase of operations, the message to be addressed action to TG 66.1, information to COMCRUDESLANT and COMASDEFORLANT. USS Joseph K. Taussig (DE 1030), although a part of the task group is on detached duty and not participating. The following are the call signs and address groups:

CTG 66.1	E2L4
TG 66.1	K3M3
COMDESLANT.	HAPA
COMASDEFORLANT.	SNDS
USS Joseph K. Taussig . . .	NFFN

1. For the PLAINDRESS version, the call signs are encrypted in accordance with current instructions. Example:

K3M3 - XMT - NFFN DE E2L4 -
P - 18Ø934Z
FM E2L4 -
TO K3M3 -
INFO HAPA
SNDS -
XMT NFFN
GR35
BT
15268 ALFA BRAVO CHARLIE DELTA
ECHO MNPTX WQLTP... etc.
(code groups -- 1Ø groups in each line)
BT
K

The message will also go, with a slightly different heading, on a separate circuit to the nearest shore radio station, for relay to the information addressees.

2. In the CODRESS version, NERK and NA are indefinite ships' call signs. Example:

NERK DE NA -
P - 18Ø934Z
GR57
BT

15268 ALFA BRAVO CHARLIE DELTA
ECHO RLPZC... etc.
(code groups -- 1Ø groups in each line)
BT
AR

The only information an enemy might recover from the codress message is that it (1) was sent from one U.S. Navy ship to another; (2) is of PRIORITY precedence; and (3) originated at 18Ø934Z. Moreover, this is the only information available to bona fide recipients, who must decrypt the message to learn for whom it is intended. (Joseph K. Taussig needs to break the message only far enough to learn she is exempted.)

Codress message texts are somewhat longer than their plaindress counterparts, because the originator and addressees are in the text. The originator and addressees are designated within the text by plain language, not by call signs address groups.

READDRESSING MESSAGES

At times an originator or an addressee wants to readdress a message to other ships or activities not included in the original address. The following rules apply:

1. All format lines preceding line 5 (precedence, DTG) of the original message heading are deleted.

2. With a single exception, no alteration can be made to the original message from the precedence to the end of the text. If the message to be readdressed carries a DTG besides the current month, the abbreviation of the month of origin is added following the original DTG.

3. A supplementary heading is inserted in front of the original heading.

4. The precedence indicated in the supplementary heading pertains to the supplementary address only.

5. The DTG of the original message is used for purposes of reference, reply, and filing.

Assume that, on receipt of the following plaindress message, NTAA readdresses it to NUYO for information. Here is the original message received from NTSY:

NTAA DE NTSY -
P - 281634Z -
FM NTSY -
TO NTAA -
INFO NBFJ

GR32
$\overline{BT}$
TEXT
$\overline{BT}$

Station NTAA adds his supplementary heading and transmits to NUYO the following message:

NUYO DE NTAA -
R - 281832Z -
FM NTAA -
INFO NUYO -
P - 281634Z -
FM NTSY -
TO NTAA -
INFO NBFJ

GR32
$\overline{BT}$
TEXT
$\overline{BT}$

ADDITIONAL MESSAGE EXAMPLES

Additional message examples are described in later chapters of this manual. Radiotelegraph operating procedure is explained in the following chapter. Radiotelephone messages and operating procedure are treated in chapter 7. Chapter 11 is devoted to teletypewriter communications.

Table 5-5. — Precedence of Messages

Pro-sign	Desig-nation	Definition and use	Handling requirements
Z	F L A S H	FLASH precedence is reserved for initial enemy contact messages or operational combat messages of extreme urgency. Brevity is mandatory. Examples: (1) Initial enemy contact reports. (2) Messages recalling or diverting friendly aircraft about to bomb targets unexpectedly occupied by friendly forces; or messages taking emergency action to prevent conflict between friendly forces. (3) Warnings of imminent large-scale attacks. (4) Extremely urgent intelligence messages. (5) Messages containing major strategic decisions of great urgency.	FLASH messages are 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 the FLASH message is completed. Time standard: Not fixed. Handled as fast as humanly possible with an objective of less than 10 minutes.
O	I M M E D I A T E	IMMEDIATE is the precedence reserved for messages relating to situations that gravely affect the security of national/allied forces or populace, and require immediate delivery to the addressee(s). Examples: (1) Amplifying reports of initial enemy contact. (2) Reports of unusual major movements of military forces of foreign powers in time of peace or strained relations. (3) Messages that report enemy counterattack or request or cancel additional support. (4) Attack orders to commit a force in reserve without delay. (5) Messages concerning logistical support of special weapons when essential to sustain operations. (6) Reports of widespread civil disturbance. (7) Reports or warnings of grave natural disaster (earthquake, flood, storm, etc). (8) Requests for, or directions concerning, distress assistance. (9) Urgent intelligence messages.	IMMEDIATE messages are processed, transmitted, and delivered in the order received and ahead of all messages of lower precedence. If possible, messages of lower precedence will be interrupted on all circuits involved until the handling of the IMMEDIATE message is completed. Time standard: 30 minutes to 1 hour.
P	P R I O R I T Y	PRIORITY is the precedence reserved for messages that require expeditious action by the addressee(s) and/or furnish essential information for the conduct of operations in progress when ROUTINE precedence will not suffice. Examples: (1) Situation reports on position of front where attack is impending or where fire or air support will soon be placed. (2) Orders to aircraft formations or units to coincide with ground or naval operations. (3) Aircraft movement reports (messages relating to requests for news of aircraft in flight, flight plans, or cancellation messages to prevent unnecessary search/rescue action). (4) Messages concerning immediate movement of naval, air, and ground forces.	PRIORITY messages are processed, transmitted, and delivered in the order received and ahead of all messages of ROUTINE precedence. ROUTINE messages being transmitted should not be interrupted unless they are extra long and a very substantial portion remains to be transmitted. PRIORITY messages should be delivered immediately upon receipt at the addressee destination. When commercial refile is required, the commercial precedence that most nearly corresponds with PRIORITY is used. Time standard: 1 to 6 hours.
R	R O U T I N E	ROUTINE is the precedence to use for all types of messages that justify transmission by rapid means unless of sufficient urgency to require a higher precedence. Examples: (1) Messages concerning normal peacetime military operations, programs, and projects. (2) Messages concerning stabilized tactical operations. (3) Operational plans concerning projected operations. (4) Periodic or consolidated intelligence reports. (5) Troop movement messages, except when time factors dictate use of a higher precedence. (6) Supply and equipment requisition and movement messages, except when time factors dictate use of a higher precedence. (7) Administrative, logistic, and personnel matters.	ROUTINE messages are processed, transmitted, and delivered in the order received and after all messages of a higher precedence. When commercial refile is required, the lowest commercial precedence is used. ROUTINE messages received during nonduty hours at the addressee destination may be held for morning delivery unless specifically prohibited by the command concerned. Time standard: 3 hours—start of business following day.