CHAPTER 2

NAVAL MESSAGES

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

CLASSES OF MESSAGES

For administrative purposes, particularly accounting, messages handled by naval communications are divided into five classes: A, B, C, D, and E. Classes A, B, and C are Government messages; D and E are non-Government (private) messages.

The largest volume of traffic handled by the Navy is class A, which consists of official messages and replies thereto originated within the Department of Defense.

Class B includes official messages of the United States Government, excluding those originated within the Department of Defense. (The U. S. Coast Guard is included under class B except when operating as part of the Navy.) Class B messages take precedence with, but after, class A traffic. They are carried free of charge over naval nets and circuits.

Class C messages consist of broadcast traffic in special forms, available to ships of all nationalities. These messages are concerned with special services, such as oceanographic data, weather, and time. Class C traffic also is handled free of charge.

Class D traffic consists of private messages involving tolls collected from the sender. The group includes radiotelegrams and press messages sent by correspondents aboard ship.

Class E messages are personal messages between personnel stationed on board ship or at overseas naval stations and addressees in the continental United States. This traffic is handled free of charge over naval circuits; charges are collected from the sender only when a commercial communication firm, such as Western Union Telegraph Company, handles the message over part of its route. For example, if a man on a ship in the Atlantic sends a class E message to a man at a naval station in Washington, D. C., the ship transmits the message to Radio Washington, which effects delivery to the station. The message never leaves Navy channels and the sender pays nothing. But if the message were addressed to Louisville, Kentucky, Western Union would handle it out of Washington and the ship would collect tolls from the originator for the distance between Washington and Louisville. The ship would forward the money to the Navy Finance Center, Washington, D. C., for payment to Western Union in accordance with instructions contained in DNC 26.

The class E message privilege is chiefly for purposes of morale. It affords naval personnel at sea a means of communication regarding urgent personal matters without incurring prohibitive expense. In general, the privilege is used sparingly. Subjects ordinarily acceptable for transmittal or delivery are matters of grave personal concern, a birth announcement, important nonrecurring business communication, matters of life and death, and occasional greetings on important anniversaries. Trivial or frivolous messages, those of unnecessary length, and ordinary congratulations are unacceptable.

MESSAGE ADDRESSEES

Most messages have at least one addressee (addee) responsible for taking appropriate action on the contents and for originating any necessary reply. Other addees with an official interest in the subject of the message, but who do not have the primary responsibility for acting on it, receive the message for information. An information addee, although usually concerned indirectly with a message, frequently must take action of some nature within his own command. Some messages have only information addressees.

The originator of a message fixes the address; it may not be altered by any other station, although an addee may readdress a message to others not included in the original address. In the interests of brevity and security, the number of addressees is kept to a

minimum consistent with the requirement that an originator must make every reasonable effort to foresee and include all who need the information. Except in unusual circumstances, messages are addressed to the command instead of to the administrative office of the command.

Messages often are categorized according to the way they are addressed. There are four types: single-address, multiple-address, book, and general messages.

A single-address message is destined for one addressee only.

A multiple-address message is intended for 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 directed to two or more addressees, and is of such a nature that no addressee needs to be informed of any others. Book messages are mainly the concern of shore stations. The station initially accepting 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 omit addressees that are the concern of some other station. Upon receipt of a book message, a relay station may further reduce the number of addressees by making up single address messages for each of its tributaries addressed. Because many book messages are destined for scores of addressees, significant time and expense are saved by the shortened headings.

A general message is disseminated widely according to a standard distribution list. General messages are of many types, most of which are shown in table 2-1; each carries an identifying title. All messages of a given general message title are numbered serially through the calendar year, as ALNAV 12-64, signifying the 12th ALNAV sent during 1964. General messages are grouped by type and are filed in a general message file according to serial number. They are retained until canceled or superseded.

The originator of a general message may designate it as a basegram if it is of insufficient operational importance to justify immediate delivery to forces afloat by fleet broadcasts. The basegram system is used to reduce the number of messages transmitted by fleet broadcast so that broadcast facilities are available for messages that must be delivered by rapid means. Forces afloat may obtain copies of basegrams from designated basegram authorities located in ports from which U. S. Navy ships normally operate.

General messages originated by sea frontier commanders, commandants of naval districts, and fleet, force, and ship type commanders for the purpose of publishing information within their respective commands are not included in table 2-1.

CALL SIGNS AND ADDRESS GROUPS

Call signs and address groups are used to identify addressees and to assist in the transmission and delivery of messages. Call signs identify activities having their own communication facilities; address groups normally are used where no communication capability is immediately assigned. The basic purpose of call signs is to establish and maintain communications. The same group also is used as an address when the activity sends and receives messages. Address groups, on the other hand, ordinarily are used to facilitate the sending and receiving of messages, and are assigned to all activities having such a need.

Call Signs

Call signs are letters, letter-number combinations, or one or more pronounceable words used principally to identify a communication activity. This is true in both civil and military usage, but military call signs also may designate the command(s) served by the station. Call signs are of several categories, with some calls belonging to more than one category.

INTERNATIONAL.—International call signs are assigned radio stations of all countries—civil and military, fixed and mobile—according to international agreement. The first letter or first two letters of an international call indicate the nationality of the station. The United States is allocated the first half of the A block (through ALZ) and the whole of the K, W, and N blocks. The U. S. portion of the A block is reserved for Army and Air Force use. The K and W blocks are assigned to commercial and private stations, merchant ships, and others. The N block is for the exclusive use of the Navy, Marine Corps, and Coast Guard.

Naval shore communication stations are assigned three-letter N calls. These calls may be expanded by adding numerical suffixes.

Table 2-1.—General Messages

Type	Originator	Description
ALCOAST	Commandant, USCG	General dissemination within the Coast Guard.
ALCOM	OPNAV	Usually originated by DNC for dissemination to all commands. Designed for, but no longer restricted to, the promulgation of communication information.
ALCOMLANT, ALCOMPAC	OPNAV	Usually originated by DNC. Subdivisions of the ALCOM series for commands in the Atlantic-Mediterranean and Pacific areas, respectively.
ALLANTFLT, ALPACFLT	CINCLANTFLT, CINCPACFLT	Equivalent of ALNAV or NAVOP within the commands of CINCLANTFLT and CINCPACFLT, respectively.
ALMAR	Commandant, USMC	General dissemination within the Marine Corps.
ALMSTS	Commander, MSTS	General dissemination to MSTS commands and offices.
ALNAV	SECNAV	Normally concerns the administrative functions of the entire Naval Establishment, including the Marine Corps.
ALNAVSTA	SECNAV	Similar in content to ALNAV. Requires wide dissemination to the shore establishment of the Navy and Marine Corps, including shore-based elements of the operating forces.
ALSTACON, ALSTAOUT	SECNAV	Contains administrative information requiring wide dissemination to activities either inside or outside the continental United States.
FLTOP	OPNAV	Message concerning fleet units and their operational commanders.
JANAFPAC	CINCPAC	Addressed to U. S. commanders within the Pacific command on matters of joint interest.
MERCAST	OPNAV	Merchant ship equivalent of ALNAV. Distribution includes ships guarding MERCAST (merchant ship broadcast) schedules, naval port control and naval control of shipping offices, and MSTS commands.
NAVACT	SECNAV	Similar in content to ALNAV, but of no interest to the Marine Corps.
NAVOP	OPNAV	Similar in content to ALNAV; attachés, missions, observers, and minor stations are excluded from distribution.

Thus, additional call signs are provided for radio transmitting and receiving facilities located remotely from the parent station. For example:

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

International call signs assigned to U. S. Navy ships are four-letter N calls used unencrypted. They have no security value, and are utilized for all nonmilitary international communications. Example:

NWBJ USS Renshaw (DD 499).

International call signs for USN, USMC, and USCG aircraft consist 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.—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. Military call signs, consequently, are assigned only to ships capable of encrypting call signs.

INDEFINITE. — 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.
NA through NZ	(From) any U. S. Navy ship.
NQO	(To) any or all U. S. shore radio stations.

Indefinite call signs often are used as "dummy" calls in codress message headings (discussed later) to conceal the identity of originators and addressees. In such instances this information is placed in the encrypted text.

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

COLLECTIVE. — 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. — Net call signs represent all stations within a net, a net being an organization of two or more stations capable of direct communication on a common channel. Examples:

NQN	All U. S. Navy radio stations in the Pacific guarding the ship-shore high-frequency calling series.
OVER-WORK	All U. S. Navy stations on this (radiotelephone) circuit.

TACTICAL. — Tactical call signs, composed of letter-number combinations or pronounceable words, normally are used only for tactical communications.

VOICE. — Voice call signs are words or combinations of words—such as SUNSHINE or HIGH HAT—limited to radiotelephone communications. The Joint Voice Call Sign Book, JANAP 119, lists the voice call signs for use on tactical circuits. On ship-shore administrative circuits, phonetically spelled international call signs are used on ships' voice calls. Under certain conditions, ships' names are used as voice call signs on local harbor circuits. Radiotelephone communications are discussed fully in chapter 8.

VISUAL. — Visual call signs are groups of letters, numerals, special flags and pennants, or combinations of any of these, for use in visual communications. Visual communications are covered in chapter 9.

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. Because address groups never start with the letter N, they easily are distinguished from call signs. Unlike international call signs, address groups follow no distinctive pattern (i. e., three-letter N calls for shore stations, four-letter N calls for ships); the arrangement of the four letters conveys no significance.

Address groups are assigned to all commands afloat except individual ships. They are assigned also to shore-based commands, authorities, or activities not served by their own communication facilities. These include (1) senior commands and commanders, such as the Secretary of Defense, Secretary of the Navy, heads of the bureaus and offices of the Navy Department, and district commandants; (2) fleet, type, and force commanders ashore; (3) elements of those operating forces permanently ashore which 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 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 addressees. Address groups are divided into types as follows: individual activity, collective, conjunctive, geographic, address indicating, and special operating groups.

INDIVIDUAL ACTIVITY. —Individual activity address groups are representative of a single command or unit, either afloat or ashore.

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

DSWN	DESRON 16.
AMGK	SIXTHFLT.

CONJUNCTIVE. —Conjunctive address groups per se have incomplete meanings. They are used only in conjunction with at least one other address group. The conjunctive address group DRHG, for example, represents the naval control of shipping officer at_____. A geographic address group must follow DRHG to complete the meaning.

GEOGRAPHIC. —Geographic address groups are the equivalent of geographical locations or areas, and are always preceded by conjunctive address groups. Assuming the geographic address group for Kodiak, Alaska to be SAAN, the naval control of shipping officer at Kodiak would be addressed DRHG SAAN.

ADDRESS INDICATING. —Address indicating groups (AIGs) represent a number of specific action and/or information addressees. Use of an AIG shortens the message address by providing a single address group to represent a number of addees, thus eliminating individual designators.

SPECIAL OPERATING. —Special operating groups (SOGs) are utilized for passing special instructions in message headings. Unless specifically authorized by CNO, SOGs are not used; when they are used, they must be encrypted.

ROUTING INDICATORS

Routing indicators are unencrypted groups of letters (four to seven) used to identify stations in a teletypewriter tape relay network. They begin with either the letter R or U.

PLAIN LANGUAGE DESIGNATORS

Plain language address designators are the official, abbreviated, or short titles of commands or activities, used in lieu of call signs or address groups in message headings. Some abbreviated titles are written as single words; others have conjunctive titles and geographical locations. Examples: BUSHIPS, NAVCOMMSTA GUAM.

Plain language designators have wide application in messages originated and addressed within the shore establishment. They also are used in joint and allied communications. They are not used in messages originated by or addressed to naval forces afloat.

Call signs or address groups must not be mixed with plain language address designators in the same address component of a message. The address component contains either all plain language designators or all call signs and address groups.

TIME IN MESSAGES

For reckoning time, the surface of the globe is divided into 24 zones, each bound by meridians of 15° of arc, and each 1 hour apart in longitude. The initial time zone lies between 7 1/2°E. and 7 1/2°W. of the Greenwich (England) meridian. It is called ZONE ZERO because the difference between the standard time of this zone and Greenwich civil time is zero. Each zone, in turn, is designated by the number that represents the difference between the local zone time and Greenwich mean time (GMT), as in figure 2-1.

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 also numbered from 1 to 12, but are designated plus, because the zone number must be added to the local zone time to obtain GMT. In addition to the time zone number, each zone is designated by letter, with letters A through M (J omitted) corresponding to the minus zones, and letters N through Y indicating the plus zones. The designating letter for GMT is Z. (See fig. 2-1.)

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

The number of a zone, prefixed by a plus or minus sign, constitutes the zone description. In the vicinity of land, zones often are modified in accordance with the boundaries of the countries or regions using corresponding time.

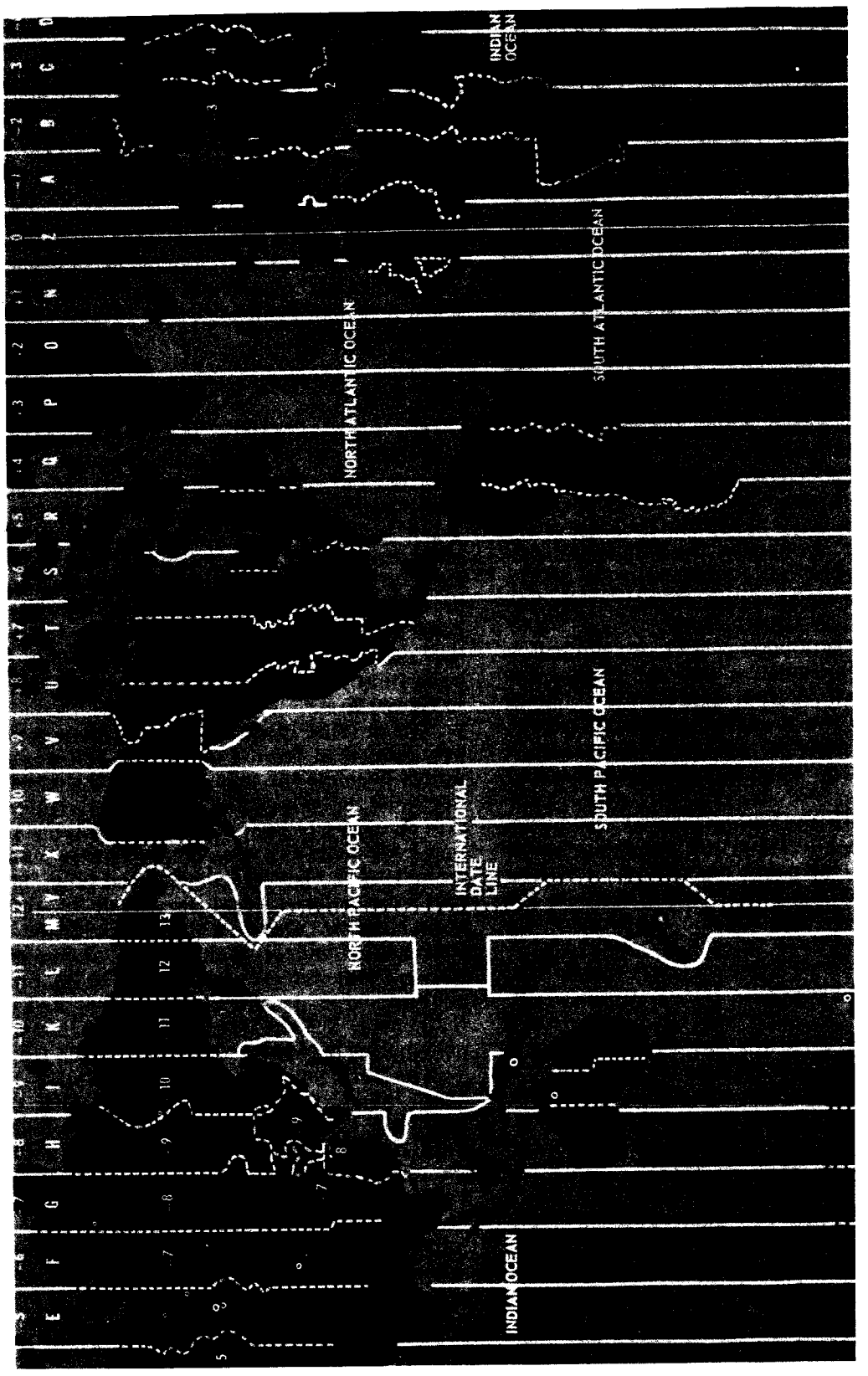

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Figure 2-1. —Time zone chart of the world.

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 Ø63Ø (canceled ciphers are used for zero in all naval messages to avoid confusion with the letter O); noon is 12ØØ; and 6:30 p.m. is 183Ø. Midnight is expressed as ØØØØ—not as 24ØØ—and 1 minute past midnight becomes ØØØ1. The time designation 1327Z indicates 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 Ø.

A DTG 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 DTG in a message heading serves two purposes: it indicates the time of origin of the message, and it provides an easy means of referral.

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 true date-time group, instead of the DTG, is used when referring to an encrypted message.

In a general message, a slant sign and additional digits are added to the DTG. The additional digits represent the general message sequential number, e.g., 1Ø2347/35.

When local time is used to indicate the DTG, it is followed by the zone designating letter, as 17Ø821Q. When local time is referred to frequently in the text, the suffix may be omitted if an inclusive expression is used; for example, ALL TIMES QUEBEC.

TIME CONVERSION TABLE

A time conversion table, table 2-2, is useful for converting time in one zone to time in any other zone. Time in each successive zone to the right of zone Z (GMT) is 1 hour later, and to the left of zone Z is 1 hour earlier. Time in each successive shaded area to the right represents the following day; to the left it is 1 day earlier. To calculate the time in zone U when it is Ø5ØØ in zone I, find Ø5ØØ in column I and locate the time (12ØØ) on the same line in column U. Because Ø5ØØ lies in the shaded area but 12ØØ does not, the time indicated is 12ØØ on the previous day.

PROCEDURE SIGNS

Procedure signs, or prosigns, are letters or combinations of letters that convey in standard condensed form certain frequently transmitted orders, instructions, requests, reports, and information relating to communications. Some prosigns are borrowed from various commercial procedures. Others are arbitrary coinages or simply abbreviations of the words they represent, although prosigns themselves are never referred to as abbreviations. Most prosigns have radiotelephone counterparts, called prowords, which are discussed in chapter 8.

PRECEDENCE PROSIGNS

Among the most important prosigns are those used to show precedence. Precedence indicates to communication personnel the relative order in which a message should be handled and delivered, and, to the action officer, the relative order in which he should note its contents. Precedence is assigned by the originator on the basis of message content and how soon the addressee must have it. Because precedence begins as soon as the message is drafted, the drafter and releasing officer should handle the message with the same speed they expect from communication personnel.

Multiple-address messages may be assigned a dual precedence, one precedence for the action addressees and a lower one for information addees.

No message should be given higher precedence than will assure its reaching the addressee in time for action. Unfortunately for communication efficiency, this rule often is disregarded. The importance of the message subject matter does not necessarily imply urgency. Drafters should be reminded by communicators that misuse of precedence tends to destroy the value of all precedence designators. Those who draft messages should be aware that all but the lowest precedence messages are delivered to the addressee immediately upon receipt by the communication center, regardless of the hour.

Joint precedence prosigns, their meanings, definitions, and appropriate handling requirements are tabulated in table 2-3. In addition to

Table 2-2. —Time Conversion Table

PREVIOUS DAY																									SAME DAY
	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	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
SAME DAY	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	NEXT DAY
	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	
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	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	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	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	
	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	

Table 2-3. —Precedence Table

Prosign	Designation	Definition and use	Handling requirements
Z	FLASH	Reserved for 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. In automatic systems where automatic interruption of lower precedence messages is not provided, adequate procedures must be prescribed to ensure that Flash messages are not delayed. Time standard: Not fixed. Handled as fast as humanly possible with an objective of less than 10 minutes.
O	IMMEDIATE	Reserved for messages relating to situations that gravely affect the security of national/Allied forces or populace, and which required immediate delivery to	Processed, transmitted, and delivered in the order received and ahead of all messages of lower precedence. If possible, messages of lower precedence are

Table 2-3.—Precedence Table—continued

Prosign	Designation	Definition and use	Handling requirements
O	IMMEDIATE (continued)	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.	interrupted on all circuits involved until the handling of the Immediate message is completed. In automatic systems where automatic interruption of lower precedence messages is not provided, adequate procedures must be prescribed to ensure that Immediate messages are not delayed. Time standard: 30 minutes to 1 hour.
P	PRIORITY	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 (e.g., 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.	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, assign the commercial precedence that most nearly corresponds with priority. Time standard: 1 to 6 hours.
R	ROUTINE	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	Processed, transmitted, and delivered in the order received and after all messages of a higher precedence. When commercial refile is required,

Table 2-3.—Precedence Table—continued

Prosign	Designation	Definition and use	Handling requirements
R	ROUTINE (continued)	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.	utilize the lowest commercial precedence. 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 to start of business the following day.

the precedence categories shown in the table for United States joint use, NATO and other Allied Nations utilize the designations Emergency and Deferred. When such traffic enters a United States military communication system, messages carrying an Emergency precedence are handled after Flash and before Immediate; Deferred traffic is handled after messages bearing the joint precedence Routine.

The time standards indicated in the last column of table 2-3 serve as a general guide to the desired overall handling times between points of origin and delivery to the addressee at destinations.

LIST OF PROSIGNS

In addition to precedence prosigns, the following authorized list of prosigns may be used as prescribed. A bar or overscore over a prosign indicates that the latter is transmitted as a single character with no pause between letters. Overscores are ignored in teletypewriter transmissions.

Prosign	Meaning
$\overline{AA}$	Unknown station.
AA	All after.
AB	All before.
$\overline{AR}$	End of transmission; no receipt required.
$\overline{AS}$	I must pause for a few seconds.
$\overline{AS}$ $\overline{AR}$	I must pause longer than a few seconds; will call you back.
B	More to follow.
$\overline{BT}$	Break. (Separates text of message from its heading and ending.)
C	Correct.
CFN	Confirmatory material to follow. (Used only in teletypewriter operation.)
DE	From (used in the call).
EEEEEEEE	Error.
EEEEEEEE $\overline{AR}$	This transmission is in error; disregard it.
F	Do not answer.
FM	Originator's sign.
G	Repeat this entire transmission back to me.
GR (followed by numerals)	Group count.
GRNC	The groups in this message have not been counted.
$\overline{HM}$ $\overline{HM}$ $\overline{HM}$	Emergency silence sign.
II	Separate sign. (Used to separate parts of a message heading.)
$\overline{IMI}$	Repeat, or i am repeating.

Prosign	Meaning
INFO	The addressee designations immediately following are addressed for information.
INT	Interrogative.
IX	Action on the message or signal that follows is to be carried out upon receipt of "EXECUTE." (Used for intended simultaneous tactical maneuvers to be executed by all units in a force.)
IX (followed by 5-second dash	(Signal to execute.) Carry out now the purpose of the message or signal to which this applies.
J	Verify with originator and repeat.
K	Go ahead, or this is the end of my transmission to you and a response is necessary.
NR	Station serial number.
R	I have received your last transmission satisfactorily.
T	Transmit this message to all addressees or to the address designations immediately following.
TO	Action addressee.
WA	Word after.
WB	Word before.
XMT	Exempt. (Used to exempt addees from a collective call or address.)

Procedure signs may be classed according to their particular functions as follows:

Prosigns used to identify portions of a transmission.	AA, AB, WA, WB
Ending prosigns	K, AR
Pause prosigns	AS, AS AR
Separation prosigns	BT, II
Prosigns always followed by one or more call signs and/or address groups.	DE, FM TO, INFO, XMT
Prosigns used in the transmission instructions of a message.	T, G, F
Group count prosigns	GR, GRNC
Prosigns used with the executive method.	IX, IX plus 5-second dash
General prosigns	AA, B, C, EEEEEEEE, EEEEEEEE AR, HM HM HM, IMI, INT, J, NR, R, CFN

OPERATING SIGNALS

Operating signals are designed chiefly for use by communication personnel in exchanging information incident to the handling of messages or in establishing communications. These three-letter signals possess no security and therefore are regarded as the equivalent of plain language transmissions.

Several hundred operating signals are listed in Allied Communication Publication (ACP) 131. It is divided into a Q code and a Z code. The Q signals are prescribed for international use, and may be used for both military and nonmilitary communications. The Z code is designed to cover military communication requirements not adequately provided for in the Q code. Although both Q and Z signals may be used in military communications, the Z code is only for Allied military usage, because Z signals represent meanings not found in the Q code.

USE OF OPERATING SIGNALS

Operating signals are prescribed for every form of electrical telecommunication except radiotelephone. 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; in such an instance the operator transmits the group phonetically.

Many operating signals may be used in either of two ways—as a question or as a statement in reply to a question. The prosign INT before the signal places it in the form of a question. As an example, USS Epperson (call sign NTGT) asks USS Renshaw (NWBJ): NWBJ DE NTGT INT QRU K, meaning "Have you anything for me?" Renshaw replies: NTGT DE NWBJ QRU K, meaning "I have nothing for you." The given example pertains to communications with a military station (INT before the Q (or Z) signal). When communicating with nonmilitary stations, an operating signal is given an interrogatory sense by inserting the

prosign IMI after the Q signal and any data used with it, such as call signs or time groups.

Many operating signals contain blank portions in their meanings that are filled in to convey specific information. For instance, 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: NSS DE NIQM ZRE 8578, meaning "I hear you best on 8578 kc."

Other signals have, in their meanings, blanks enclosed in parentheses. Filling in such a blank is optional. To illustrate, INT ZHA means "Shall I decrease frequency very slightly (or_____kc) to clear interference?" The operator receiving the signal 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. Specific frequencies.
2. Cryptographic data.
3. The organization of networks.
4. Ship movements (estimated times of arrival, departure, etc.).

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, 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.

All messages in joint form have three parts: heading, text, and ending. The three parts are divided into components, which, in turn, are broken down into elements. (See table 2-4.) Although the elements are arranged according to numbered format lines, there is no relationship between the format lines and the number of typed or handwritten lines. Format line 12, for example, which is used for the text of the message, may consist of many written lines.

Of the three parts of a message, the most complex is the heading, which often uses as many as 10 of the format's 16 lines. Each item in the heading has a special meaning, and its relative position is significant.

The prosigns or prowords, call signs, address groups, and other elements that make up a typical heading always appear in the order specified for the means of transmission. The form of the message and its transmission requirements, however, dictate the components and elements actually used in the heading. For example, format line 1 is used only in tape relay communications; and transmission identification is not used in ship-to-ship communications or on harbor nets. Many messages may omit such elements as transmission instructions or on harbor nets. Many messages may omit such elements as transmission instructions, information addressee prosigns, and final instructions because there is no occasion for their use. The average communicator seldom sees a message that utilizes every format line.

MESSAGE ANALYSIS

Before transmitting a radiotelegraph message, the radio operator establishes communications by means of a preliminary call (callup). The callup alerts the intended addee(s) and identifies the station calling to the station(s) for which it has a transmission, or, if not in direct communication, to the station that is to effect relay or delivery of the message.

A simple preliminary call consists of the station called, the prosign DE, the station calling, the precedence (if appropriate), and the prosign K, as follows: NACH DE NKKC R K.

A check of the call sign book shows that NACH is USS Hailey and NKKC is USS Hancock. The callup translates literally, "Hailey from Hancock, I have one Routine message for you. Are you ready to receive?" Hailey's operator inserts a message blank in his typewriter and tells Hancock to go ahead by sending: NKKC DE NACH K.

With communication established, Hancock commences clearing traffic. The transmission may be analyzed as follows:

Format line	Transmission	Explanation
2 and 3	NACH DE NKKC. .	Hailey from Hancock
5	R	ROUTINE precedence.
5	222345Z	DTG.

Table 2-4.—Radiotelegraph Message Format

Parts	Components	Elements	Format line	Contents
H	Beginning procedure	Handling instructions .	1	Not used in radiotelephone and radiotelegraph.
E		a. Call	2 3	Station(s) called; prosign XMT (exempt) and exempted calls. Prosign DE (from) and designation of station calling.
A		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.
	Preamble	a. Precedence; date-time group; message instructions.	5	Precedence prosign; date-time group and zone suffix; operating signals; prosign $\overline{IX}$ (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.
I		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.
		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).
TEXT	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 instructions	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).

Format line	Transmission	Explanation
10	GR9	Group count. This message has 9 groups in the text. (Each plain language word counts as 1 group.)
11	BT	Break. Separation between heading and text.
12	UNCLAS GUARD MAIL FOR YOU RECEIVE AT FIRST LIGHT . .	Text.
13	BT	Break. Separation between text and ending.
16	K	Go ahead.

On receiving K, which is the ending prosign, Hailey's operator checks the message and counts the groups. If the message appears to be correctly received, he gives a receipt for Hancock's transmission by sending NKKC DE NACH R AR. If Hailey's operator is in doubt about some portion of the message, he requests a repetition by transmitting NKKC DE NACH IMI WA AT, meaning "Hancock from Hailey, repeat word after 'at'." If the operator misses a substantial portion of the message, he might frame his request. NKKC DE NACH IMI GUARD TO LIGHT.

In the preceding example two ships are in direct communication and Hailey's call sign has 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 purposes, and (3) to whom the message ultimately is destined.

Assume that USS Ranger, steaming off Cristobal, Panama, completes her mission of qualifying carrier pilots and the CO wishes to so report to the Commander Naval Air Force, U. S. Atlantic Fleet (COMNAVAIRLANT) in Norfolk, Va., and to the Commanding Officer, U. S. Naval Air Station, Jacksonville, Florida. Communication is established with NAVCOMMSTA Balboa, the nearest naval shore radio station, and the ship transmits this message:

NBA DE NHKG - T - R - Ø11324Z - FM NHKG - TO YONA - INFO OJWN GR6 BT UNCLAS. CARQUALS COMPLETED. ETA GTMO Ø314ØØZ BT K

Following is an analysis of the message. The short dashes in the heading are mandatory signs used by the sending operator to prevent mistakes in reception that might occur if letters or figures of adjacent groups were run together. Specific instructions for their use are contained in DNC 5.

Format line	Transmission	Explanation
2, 3	NBA DE NHKG -	NAVCOMMSTA Balboa from Ranger.
4	T -	Relay this message to all addressees.
5	R - Ø11324Z -	Routine precedence and DTG.
6	FM NHKG -	Originator Ranger.
7	TO YONA -	Action COMNAVAIRLANT.
8	INFO OJWN	Information to CO NAS JAX.
10	GR6	Group count 6 words.
11	BT	Break.
12	UNCLAS. CARQUALS COMPLETED. ETA GTMO Ø314ØØZ	Text.
13	BT	Break.
16	K	Go ahead.

Certain authorized abbreviations, standard throughout the services, are used in messages for the sake of brevity. The text as sent (format line 12) is about 60 percent shorter than the expanded text, which would read: CARRIER QUALIFICATION LANDINGS COMPLETED. ESTIMATED TIME OF ARRIVAL AT GUANTANAMO BAY CUBA Ø314ØØZ.

Station NBA gives Ranger a receipt for the message, and by so doing assumes responsibility for relay. NBA has no direct links with Norfolk or Jacksonville, but does have a RATT circuit to NAVCOMMSTA WASHDC, which, in turn, has the necessary landline connections. Accordingly, NBA adds routing indicators to the message (using format line 1), telling Washington to relay to Norfolk and Jacksonville. Radio Norfolk, guard for COMNAVAIRLANT, effects delivery to that addee.

Following is an example of a fleet broadcast message from NAVCOMMSTA WASHDC, originated by CNO. Fleet broadcast messages via CW repeat each element of the heading except when the addressees are designated by plain language.

NERK NERK NERK DE NSS NSS NSS W NR522 W NR522 - PP - RR - 11Ø847Z 11Ø847Z - FM FM SSMW SSMW - TO TO YIOX YIOX - INFO INFO AOQW AOQW - XMT XMT NJRS NJRS GR156 GR156 BT (text) BT AR

An analysis of the preceding fleet broadcast message follows.

Format line	Transmission	Explanation
2,3	NERK DE NSS	Any or all U. S. Navy ships from NAVCOMMSTA WASHDC. (This call is sent with the first message of each hourly schedule, and is omitted thereafter.)
4	W NR522	NAVCOMMSTA WASHDC broadcast serial number 522—the 522d message placed on this broadcast schedule since the beginning of the current month.
5	P - R - 11Ø847Z	Priority precedence to action addees; Routine precedence to information addees; DTG.
6	FM SSMW	Originator CNO.
7	TO YIOX	Action to all ships in NAVAIRLANT.
8	INFO AOQW	Information to Naval Air Station, Guantanamo Bay, Cuba.
9	XMT NJRS	USS Saratoga (NJRS) is exempted from the collective address, in this case the action addressee.
10	GR156	Group count.
11	BT	Break.
12	Text	Text.
13	BT	Break.
14	AR	End of transmission; no receipt required.

Plain Language Text

A standard textual format is prescribed for plain language messages. The format (fig. 2-2) is designed to make maximum use of the capabilities of teletypewriter equipment. In addition, it 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 an otherwise firmly established format. An example of the latter is a standard "reporting type" message that uses letters of the alphabet to indicate a prearranged subject matter. When a message does not require all of the elements shown in figure 2-2, the format is adjusted accordingly by omitting the nonessential elements.

Supervisory Wires, Procedure Messages and Service Messages

Supervisory wires, procedure messages, and service messages are used by communication personnel to expedite the flow of message traffic. These types of messages make maximum use of prosigns and operating signals to shorten message length and transmission time.

Supervisory wires correct traffic-handling errors. They invariably are addressed to the supervisor (SUPVR) of the called station.

Procedure messages are used to obtain or provide corrections, verifications, and/or repetitions. The text of a procedure message contains only prosigns, operating signals, address designations, identification of messages or parts of messages, and any necessary amplifying data.

Service messages pertain to all phases of traffic handling. The majority of both procedure and service messages are used to obtain corrections and repetitions of messages or parts of messages. Service messages, however, are prepared and transmitted as regular messages, and contain all the necessary format lines, including a DTG.

1. FORMAT FOR MESSAGE TEXT

Classification (5 spaces) Special Handling (if required)	CONFIDENTIAL NOFORN
Passing Instructions (if required)	COMTWELVE PASS TO FADM SMITH
Subject, concise and untitled	REVISED CONFERENCE SCHEDULE (U)#
Reference, identified by letter	A. MY 091700Z
Reference, (continued as necessary)	B. COMTHIRTEEN 131530Z
Text	1. REQUEST DESIGNATED COMMITTEE ARRIVE COMTWELVE 24 HOURS PRIOR CNO.
a. Paragraphs are numbered.	2. AGENDA:
b. Subparagraphs are indented and lettered or numbered as appropriate.	A. ADD "LOGISTICS OF PROJECT."
c. In a one-paragraph message, the subparagraphs are lettered.	B. DELETE "POSSIBLE LOCATION FACILITIES."
	3. CNO ITINERARY, 19 AUG, TIMES UNIFORM:

ETA	ETD	LOCATION
0900	1300	SEATTLE
1515	1800	SFRAN
2300		WASHDC

2. EXCEPTIONS

a. The subject line may be omitted if its use will: (1) require an otherwise unclassified message to be classified, (2) noticeably increase the length of an otherwise brief message, or (3) increase commercial charges when the message is addressed to activities served by commercial communication facilities.

b. In a short message requiring only one paragraph, the paragraph need not be numbered and where there is only one reference the reference identification may be included in the body of the paragraph. For example:

UNCLAS
YOUR 190915Z. BUDGET APPROVED SUBJECT CNO CONCURRENCE

3. CHARACTERS AND SPACES. The number of characters and spaces on each teletypewriter line shall be limited to 65, except semi-automatic off-line decrypted messages which are subsequently relayed on-line may use a maximum line length of 69 characters and spaces.

4. TABULATED ENTRIES. A substantial reduction in message preparation and transmission time can be attained by the judicious arrangement of columnar material. In the sample message text above, note the arrangement of the first column at the left margin and succeeding columns spaced to the right of the first. The last column should be for entries of varying lengths, such as place and proper names.

5. PUNCTUATION. Punctuation shall be used when essential for clarity. The use of the letter "X" is discontinued. The punctuation marks used in the drafting of naval messages normally shall be limited to those symbols listed below which have Morse equivalents and appear on the standard typewriter and teletypewriter keyboards:

NAME	SYMBOL	ABBREVIATION	MORSE
Apostrophe	* '		.----.
Colon	:	CLN	---...
Comma	,	CMM	--..--
Hyphen	-		-....-
Parenthesis	( )	PAREN	-.--.-
Period	.	PD	.-.-.-
Question Mark	?	QUES	..--..
Quotation Marks	* " "	QUOTE/UNQUOTE	.-..-.
Slant sign/Virgule	/	SLANT	-..-.

The following symbols, which appear on the standard typewriter and teletypewriter keyboards may be used although they have no Morse equivalents:

Ampersand	* &
Dollar Sign	* $

*These symbols are not agreed for Allied use.

#CLASSIFIED MESSAGES INCLUDE A 1-LETTER ABBREVIATION OF SUBJECT CLASSIFICATION.

Figure 2-2.—Textual format for plain language messages. 105.1

MESSAGE FORMS

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

PLAINDRESS

A plaindress message is one in which the originator and addressee designations are indicated externally of the text, i.e., they appear in the heading.

Unless the call serves as the address, the message contains all the components (but not necessarily all the elements) shown in the basic message format, except that the prefix may be omitted. A plaindress message must include the precedence and DTG elements. All the examples of radiotelegraph messages given thus far in the chapter are in plaindress form.

ABBREVIATED PLAINDRESS

An abbreviated plaindress form may be used when operational requirements, such as an enemy contact report, demand maximum handling speed. The abbreviated form may omit the precedence, date, DTG, and/or the group count.

CODRESS

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

Plaindress and codress encrypted message forms may best be compared from a message prepared in both versions.

Commander Task Group (CTG) 66.1, conducting an exercise in the Mediterranean, wishes to order a new phase of operations. USS Taussig, attached to the group, is on detached duty and not participating. Assume the call signs and address groups to be:

CTG 66.1	E214
TG 66.1	K3M3
Taussig	NFFN

For the plaindress version, the call signs are encrypted in accordance with current instructions:

K3M3 - XMT - NFFN DE E214 - P - 18Ø934Z - FM E214 - TO K3M3 - XMT NFFN GR35 $\overline{BT}$ (text) $\overline{BT}$ K

Using codress, the originator and addressees are given indefinite ships' call signs, as follows:

NERK DE NA - P - 18Ø934Z GR57 $\overline{BT}$ (text) $\overline{BT}$ $\overline{AR}$

The only information an enemy might gain from the codress form is that it was sent from one Navy ship to another, is of Priority precedence, and 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. (Taussig needs to break the message only far enough to learn she is exempt.)

The texts of codress messages are somewhat longer than their plaindress counterparts, because the originator and addees are included in the text; they are designated by plain language, although encrypted, and not by call signs or address groups.

105.1