



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON 25, D.C.

7 June 1961

LETTER OF PROMULGATION

1. Change No. 2 to DNC 5(B), U.S. NAVAL COMMUNICATION INSTRUCTIONS, is an unclassified, nonregistered publication issued by the Chief of Naval Operations for use within the U.S. Navy and U.S. Marine Corps.
2. Change No. 2 to DNC 5(B) is effective upon receipt. Insert new pages in numerical sequence and check the List of Effective Pages. Destroy all superseded pages of DNC 5(B) and the remaining pages of Change No. 2, including the Letter of Promulgation to Change No. 2, after all corrections and new pages have been inserted. Appropriate entry shall be made on the Record of Changes page that Change No. 2 has been entered.
3. Extracts may be made from this publication without the consent of the Authorizing Agency.
4. This publication may be carried in aircraft for use therein.


FRANK VIRDEN
Rear Admiral, U.S. Navy
Director, Naval Communications

REVIEWED AND APPROVED (OR CANCELED) 7 JUN 1961
(Date)

(Reviewing Official)

W L KITCH
By direction

ROUTING

1. The following summary of Change No. 2 to DNC 5(B), U.S. NAVAL COMMUNICATION INSTRUCTIONS, is provided for the purpose of acquainting you with significant features of this change.

2. SUMMARY: This change reflects the accumulation to date of numerous corrections, deletions, and insertions throughout the book. The following in particular should be noted:

- a. Chapter 2: Rearranged and updated. Defense Communications System, Art. 2090.
- b. Chapter 3: Communication Files, Art. 3001.
- c. Chapter 5: Publications, Art. 5110. Control of Obscene and Profane Language, Art. 5318.
- d. Chapter 6: Administrative Communications, Art. 6002. Physical Delivery Procedures, Art. 6013. Net Transmissions, Art. 6117. Amateur Radio, Art. 6140.
- e. Chapter 7: Red Cross Messages, Art. 7013. Types of General Messages, Art. 7022. Basegram Handling Instructions, Art. 7043. Restrictions on Subject Matter in Official Navy Messages, Art. 7073. Special Message Distribution Instructions, Art. 7074. Punctuation, Art. 7077.
- f. Chapter 8: General, Art. 8000. Employment of Station and Address Designators, Art. 8020. Plain Language Designators, Art. 8030.
- g. Chapter 9: Service Message, Art. 9014. Accounting Symbols, Art. 9041. Group Count, Art. 9042. Transmission of Punctuation, Art. 9043. Speed Key Requirements, Art. 9074. Use of Error Prosign, Art. 9099. Readdressing Messages, Art. 9132. Methods of Requesting Information, Art. 9156.
- h. Chapter 10 and Chapter 11: The material which was in Chapter 10 has been incorporated into Chapter 9. Chapter 11 has been deleted and reference should be made to ACP 125 for Radio-telephone procedures.
- i. Chapter 13 Call Tapes, Art. 13022. Called Stations, Art. 13103. Basic Routing Doctrine, Art. 13121. Reintroducing Messages at a Relay Station, Art. 13134. Receipt of an Incomplete Message by 82B1 Stations, Art. 13135. Requests for Re-runs, Art. 13137. Missents, Art. 13143. Number Pickups, Art. 13148. Open Numbers, Art. 13149.
- j. Annex Alfa: Assignment of TWX Indicators, Art. A-2. Alphabetical Listings of TWX Facilities, Art. A-7.

Note to Publication Control Officer:

This notice has been included to assist you in providing information to cognizant personnel at your activity. It is not accountable. Do NOT enter this notice in the publication. Destroy this notice when it is no longer required.

CHANGES AND INSTRUCTIONS

1. This change contains the following pages:

Letter of Promulgation Page 1 of 6.
 Summary Page 2 of 6.
 Changes and Instructions Pages 3 of 6 through 6 of 6.
 New and Reprint Pages:

III(RB)	6-5 through 6-8	9-45, 9-46
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VII(RB)	6-27 through 6-30	11-1(RB)
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2. Insert new pages and make pen and ink corrections in accordance with instructions:

- a. Insert pages:

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III	Remove and replace with Change No. 2 page.
V, VI	Remove and replace with Change No. 2 pages.
VII(RB)	Remove and replace with Change No. 2 page.
XI, XII	Insert new pages immediately following Page X.
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1-3 through 1-6	Remove and replace with Change No. 2 pages 1-3 through 1-5(RB).
2-1(RB)	Remove and replace with Change No. 2 page.
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3-3 through 3-6	Remove and replace with Change No. 2 pages.
4-7 through 4-10	Remove and replace with Change No. 2 pages.
4-19, 4-20	Remove and replace with Change No. 2 pages.
5-1, 5-2	Remove and replace with Change No. 2 pages.
5-7 through 5-14	Remove and replace with Change No. 2 pages 5-7 through 5-10.
5-15 through 5-18	Renumber these pages 5-11 through 5-14.
5-19, 5-20	Remove and replace with Change No. 2 pages 5-15, 5-16.
5-21, 5-22	Renumber these pages 5-17, 5-18.
5-23, 5-24	Remove without replacement.
6-5 through 6-8	Remove and replace with Change No. 2 pages.
6-15 through 6-20	Remove and replace with Change No. 2 pages 6-15 through 6-20a(RB).
6-27 through 6-30	Remove and replace with Change No. 2 pages.

CHANGES AND INSTRUCTIONS (Continued)

<u>Page</u> 7-1, 7-2	Remove and replace with Change No. 2 pages.
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CHANGES AND INSTRUCTIONS (Continued)

b. Pen and ink changes:

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|-------------|---|
| 3-1 | Art. 3001., heading should read "Message Files". |
| 3-7 | Art. 3015.2, in example of log:
Opposite 1315, add "1322" under TOX.
Opposite 1510, delete "for breakdown". |
| 6-13 | Art. 6102.2. Delete. |
| 6-24 | Art. 6162.1(e). After Aeronautical Service, change "(CAA)" to read "(FAA)". |
| 6-26 | Art. 6205.2. End of 1st sentence should read "normally is employed." |
| 7-4 | Art. 7011.1(a), end of para. <u>Class A</u> : Delete "Annex Bravo" and insert "Chapter 18, NWIP 16-1". |
| 7-19 | Art. 7064.1(d). 1st paragraph, last sentence should read "This is the highest precedence which normally may be assigned to administrative messages." |
| 7-20 | Art. 7064.1(f). 1st paragraph, delete last sentence. |
| 7-27 | Art. 7101.3(a)(5), last line of Example, change "19/1921Z" to read "19/1905Z". |
| 7-28 | Art. 7101.4, last line of Example, change "19/2120Z" to read "19/2107Z".
Art. 7101.6, last line of Example, change "19/2232Z" to read "19/2208Z". |
| 9-7 | Art. 9014. Delete entire article and insert the following: "Procedures for the use of service messages are contained in ACP 124 and ACP 127." |
| 9-24 | Art. 9096.1(b), 1st line of Example, delete separative sign following NTSY. |
| 9-39 | Art. 9144.2(a), 2nd line, delete parens enclosing A6. |
| 9-50 | Art. 9175.2(a), 1st Example, change date-time group "102625Z" to read "101625Z". Under 2nd NOTE, change "102725Z" to read "101725Z". |
| 12-1 | Art. 12004., change title to read "Calling, Answering and Receipting Allied Naval Vessels". |
| 12-4 | Art. 12002.6. Overscore second "PT" in sentence.
Art. 12002.7(d). Delete. |
| 13-6 | Art. 13012.1(c). In the Example, 1st line should read "PAGE TWO NFGJ NR6"; 5th line should read "PAGE THREE NFGJ NR6". |
| 13-12 | Art. 13035.1(a), item 14. Change "GRNC" to read "GR9". |
| 13-27 | Art. 13113.1(a). Delete last sentence.
Art. 13113.1(c). Add sentence at end of paragraph: "Routing line segregation is prescribed for intra-Navy use." |
| 13-51 | Art. 13153.2, (Line 15), change "09/1800Z" to read "09/1715Z". |
| 13-59 | Art. 13168.1(b), 2nd NOTE. Change sentence to read: "The Operating Signal ZFU means CHANNEL NUMBER.....preceded message.....ADVISE". |
| 14-5 | Art. 14008.3, under Element column, 1st line, change precedence "NM" to read "M". |

CHANGES AND INSTRUCTIONS (Continued)CHECK THE LIST OF EFFECTIVE PAGES

3. Change No. 2 pages 1 of 6 through 6 of 6, and the following pages which have been removed incident to the entry of this change, shall be destroyed by burning. No report of destruction is required.

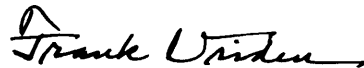
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21 October 1958

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2. DNC 5(B) is effective upon receipt, and supersedes DNC 5(A) and OPNAV 20-27 which may be destroyed.
3. This publication supports and amplifies NWP 16 and NWIP 16-1. It contains substantially those procedures and instructions promulgated in the JANAP and ACP series of publications, together with an expansion of that material and modification where appropriate. In cases of conflict it is intended that for U.S. Naval use DNC 5(B) shall apply. These instructions are designed to permit flexibility with due regard for the requirements of reliability, security, and speed. Initiative and common sense should be used in cases where no provision has been made to cover a particular communication situation.
4. Extracts may be made from this publication without the consent of the authorizing agency.
5. This publication may be carried in aircraft for use therein.
6. The following symbols have been used in this publication to denote textual information which has been added, deleted or changed:
 - means that the material is new.
 - ★ means that the material has been changed.
 - * means that material has been deleted and subsequent paragraphs or sub-paragraphs renumbered.



FRANK VIRDEN
Rear Admiral, U.S. Navy
Director, Naval Communications

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FOREWORD

The U.S. Navy has long recognized that communications is the vital element of command and control. In support of this concept, the Navy has developed a Mobile Command and Control Posts afloat capability, which can function on a National, Joint or Service level and can be linked to the Operational Control Centers.

Relative to these requirements, plus a need for rapid world-wide communications, a forward looking plan has been formulated to direct the Navy's Research and Development Program for future Naval Advanced Communications.

Implementation of this plan is strongly oriented toward development of the facilities and capabilities that will permit the exercise of command, control, coordination and administration of Naval Operations, including fleet broadcast, from mobile fleet units. Increased capacity, range, and reliability, of ship communications are essential elements of this plan.

New concepts of telecommunications currently programmed under the Naval Advanced Communication Plan include the following:

Satellite relay by both natural and man-made objects in orbit.

Rocket relay for emergency communications.

Relay by ionospheric, tropospheric, meteor, and chaff scattering.

New and improved techniques for increasing speed and reliability of telecommunications include the following:

Automatic Frequency Prediction.

Automatic Message Handling, Processing and Circuit Switching.

Precise time and frequency control of equipment and circuits.

Automatic monitoring and fault prediction-location.

Correlation and error correction techniques.

On-line encryption.

It is inevitable that these new requirements and concepts will require deviation from some of the instructions set forth herein. Therefore, nothing contained in these instructions should be construed as inhibiting the development

of new and advanced techniques, within the framework of International Telecommunications Rules and Regulations, to more effectively utilize any mode of communication that may be available for ship-to-ship and ship-shore communications.

Commands developing new techniques and procedures should promptly submit them, via the appropriate chain of command, for evaluation and approval.

CHAPTER ONE
MISSION, POLICY AND DOCTRINE
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CHAPTER ONE

MISSION, POLICY AND DOCTRINE

1000. NAVAL COMMUNICATIONS

1001. DEFINITION

- .1 "Naval Communications" is a comprehensive term which connotes the aggregate rapid communication effort of the Naval Establishment both afloat and ashore. Although it embraces all the facilities, personnel and techniques employed for the purpose of rapid communications by the Naval Establishment, it does not connote a formally constituted organization.

1010. RELATIONSHIP TO COMMAND

1011. VOICE OF COMMAND

- .1 Naval communications is the instrument by which a commander makes his will known, and as such is the "voice of command." Any transmission accomplished by naval communications, afloat or ashore, speaks only for and with the authority of the commander who originates the transmission.
- .2 With this authority over naval communications, commanders have the responsibility of maintaining adequate communications.
- .3 Command organizations are subject to unexpected changes, and communications must have the inherent flexibility to meet these changes.

1012. CONTROL OF NAVAL COMMUNICATIONS

- .1 Responsibility for the control of naval communications follows the organizational chain of command.

1013. SENIOR OFFICER PRESENT

- .1 The authority of the senior officer present afloat (SOPA) prevails over communications afloat, including those shore stations assigned to the operating forces. The authority of the senior officer present ashore prevails over communications ashore. Necessary communication coordination between the two shall be effected by the senior officer present, whether afloat or ashore.

1014. FLAG AND SENIOR OFFICERS AFLOAT

- .1 In flagships, the flag officer normally shall assume jurisdiction over communications therein. However, the commanding officer of the flagship is not relieved of his responsibility for the proper internal handling of messages to and from his own command as distinguished from the flag.

1015. COMMANDS ASHORE

- .1 District Commandants are responsible for the coordinated operation of naval communication facilities within their respective districts. The details of communications between districts shall be handled, as far as possible, directly between District Commandants.

1020. MISSION

1021. SERVICE OF COMMAND

- .1 The mission of naval communications is to provide and maintain reliable, secure, and rapid communications, based on war requirements adequate to meet the needs of naval command, to facilitate administration, and to satisfy as directed, JCS approved Joint requirements.

1030. POLICY

1031. NAVAL COMMUNICATION POLICY

- ★.1 The policy of naval communications is:
 - (a) To cooperate with the military services and other departments and agencies of the U.S. Government and Allied nations.
 - (b) To encourage development of the amateur and commercial communication activities of the U.S. for the enhancement of their military value and for safeguarding the interests of the nation.
 - (c) To promote the safety of life at sea and in the air, maintain facilities for adequate communication with the U.S. merchant marine, aircraft over the sea, and appropriate U.S. and foreign communication stations.

1040. DOCTRINE

1041. CONCEPT

- .1 The primary concept of naval communications is to meet the requirements of war. To this end organization, methods, procedures, facilities, and training must be adequate to meet war or emergency requirements and must be flexible in order to provide for rapid expansion.
- .2 Peacetime methods must be such that only a few minor changes will be required when shifting to an emergency or war status.

1042. PRINCIPLES

- .1 Based upon the above concept, the following principles have been proved under war conditions:
 - (a) Reliability, security and speed are the three fundamental requirements of naval communications. Reliability is always paramount. It must never be lessened or sacrificed to achieve security or speed. Whenever there is a conflict between the demands of security and speed, the one or the other must be sacrificed in the light of the demands of the situation.
 - (b) Success of operations in a large measure depends upon effective communications which require a basic knowledge and appreciation of how, when and where to send messages.

1042.1 (Continued)

- (c) The most detailed instructional publications and the most up-to-date equipment in no way lessen the need for initiative, common sense and good judgment in the planning and conduct of naval communications.
- (d) Correct methods of operation and precise use of established procedures are essential to effective communications.
- (e) Rapid communications must be limited to the minimum required for the successful accomplishment of the operational task assigned. Proper administrative planning and foresight are required to ensure that rapid communications are employed only when other means of communication will not suffice.
- (f) Proper choice of frequency is of the greatest importance in establishing and maintaining reliable radio communications.
- (g) Communications media which are susceptible to interception should not be used in wartime when a more secure means will serve.
- (h) Additional fleet operational communication doctrine is contained in NWP 16 and NWIP 16-1.

CHAPTER TWO
ORGANIZATION OF COMMUNICATIONS

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CHAPTER TWO
ORGANIZATION OF NAVAL COMMUNICATIONS

2000. BASIC ORGANIZATION

2001. ELEMENTS

- .1 The major elements of naval communications are:
 - (a) The Office of Naval Communications
 - (b) The Naval Security Group
 - (c) The Naval Communication System
 - (d) U.S. Naval Communication System Headquarters Activity
 - (e) Communication Departments of Activities of the Shore Establishment
 - (f) Communication Organizations of the Operating Forces

2002. INTER-RELATIONSHIP OF ELEMENTS

- .1 The elements of naval communications bear the following relationship to each other:
 - (a) The Office of Naval Communications provides the necessary department-level coordination and planning for those activities and functions under the cognizance of the Assistant Chief of Naval Operations (Communications)/Director, Naval Communications (ACNO (COMM)/DNC) with the objective of providing at all times, to the maximum practicable extent, efficient communications for the Naval Establishment based upon present and contemplated requirements. With this objective in mind, the Office of Naval Communications translates both tactical concepts and strategic plans into communication requirements and studies communications-electronics trends and development in order to direct the effective use of modern equipment within the Naval Communication System and the Naval Security Group.
 - (b) The Naval Security Group performs special operations as directed by the Chief of Naval Operations, including the operation of the Navy High Frequency Direction Finding (HFDF) nets; provides for the protection of Naval Communications by directing the communications security effort, including the provisions of cryptographic equipment for the Navy, Marine Corps and the Coast Guard; administers the Registered Publications System and its Registered Publications Issuing Offices; supervises the Naval portion of the Armed Forces Courier Service (ARFCOS) including the manning and operation of specified ARFCOS Courier Transfer Stations; and administers the Naval Reserve Naval Security Group Program.
 - (c) The Naval Communication System provides fixed communications, ship-to-shore and fleet broadcast, and is the means by which all other elements of naval communications are linked. It is the integrated network required to provide rapid communications for the transmission of CNO directives and instructions to the principal fleet, area and force commanders. It provides for the broadcast of weather and meteorological data, general messages, orders, instructions and similar message traffic to the forces afloat. It also engages in special communication projects as directed.

2002.1 (Continued)

- (d) Shore Station Communication Departments furnish primarily local communications essential to accomplishment of the shore station mission in regard to the Operating Forces. They provide the means for disseminating information and for conveying reports, progress data, current status information, and similar intelligence to the command or supervisory level within the activity. These Communication Department facilities connect with the world-wide arterial network of the Naval Communication System.
- (e) Within the Operating Forces the communication organizations (departments, sections, signal battalions and companies, etc.) operate and maintain the authorized equipment to provide communications essential to the coordinated control of ships, aircraft and Marine Corps troops in the accomplishment of the assigned missions and tasks. At the level of the Operating Forces, communications is the voice of command in a visible and tangible way and the communications provided often influence directly and materially the degree of success achieved by the force, squadron, division, or other combat unit.

2010. OFFICE OF NAVAL COMMUNICATIONS

2011. STATUS

- .1 The Office of Naval Communications is that office of the staff of the Assistant Chief of Naval Operations(Communications)/Director, Naval Communications(ACNO(COMM)/DNC) which plans and coordinates the provision of communications to meet naval requirements.

2012. FUNCTIONAL ORGANIZATION

- .1 The Office of Naval Communications is an organization within the Office of the Chief of Naval Operations, assigned to the Assistant Chief of Naval Operations(Communications)/Director, Naval Communications to support him in the execution of his duties. The Naval Communications organization presently provides two Deputy Directors (one for Communications and the other for Naval Security Group matters), one Staff Office (Assistant for Naval Command Systems), and six Special Assistants which are:
 - (a) Controller for Naval Communications
 - (b) Assistant for Marine Corps matters
 - (c) Technical Advisor
 - (d) Chief Communications Advisor
 - (e) Naval Communication System
 - (f) Assistant for Administration
- .2 The Office of Naval Communications is further broken down into four Divisions, which include the following Sections:
 - (a) Plans and Policy Division
 - (1) Coordinator for JCS/MCEB and AFPC matters
 - (2) Future Plans Section
 - (3) Aeronautical Communications Section

2012. (Continued)

(b) Shore System Division

- (1) Military Construction Section
- (2) Naval Reserve Communication Section
- (3) Programs and Readiness Section
- (4) OPNAV Communication Office

(c) Fleet Communications Division

- (1) Radio Section
- (2) Procedures and Doctrine Section
- (3) Visual Section
- (4) Fleet Plans and Readiness Section

(d) Radio Frequency Spectrum Division

- (1) Frequency Assignment (Elec) Section
- (2) Frequency Assignment (Comm) Section
- (3) Radio Frequency Capability Section
- (4) Wave Propagation and Frequency Management Section
- (5) Marine Corps Frequency Liaison Section

2013. MISSION OF ACNO(COMM)/DNC

- .1 To advise the Chief of Naval Operations concerning, and to coordinate within the Department of the Navy, naval communications, Naval Security Group, and frequency spectrum matters; to provide communication means for directing operations of the fleets and for administering the Department of the Navy; and to implement other assigned functions concerning these matters, including the maintenance and operation of the Naval Communication System and the Naval Security Group.

2014. FUNCTIONS OF ACNO(COMM)/DNC

- .1 Advises the Chief of Naval Operations on naval communications, Naval Security Group, and frequency spectrum matters; conducts continuing studies to improve naval communications and develops procedures, plans and programs to meet the needs of naval communications and the Naval Security Group.
- .2 Provides the communications required by agencies of the Department of the Navy and for communications matters has access to other military and civilian agencies through direct channels.
- .3 Provides communications to meet the needs of the Deputy Chief of Naval Operations (Fleet Operations and Readiness) and is responsive to his requirements for the operational capability and readiness of naval communications.
- .4 Coordinates, within the Department of the Navy, matters pertaining to naval communications, the Naval Security Group, and the frequency spectrum.
- .5 Coordinates and directs, for the Chief of Naval Operations, the efforts of the bureaus and offices in matters affecting or relating to assigned communication responsibilities.
- .6 Formulates plans, policies and procedures to implement assigned responsibilities with regard to naval communications, Naval Security Group, and frequency spectrum matters.

2014. (Continued)

- .7 Administers, maintains and operates the Naval Communication System and, in connection therewith, utilizes other governmental and commercial communications facilities as necessary to maintain effective service.
- .8 Administers and provides for the maintenance and operations of the Naval Security Group.
- .9 Procures, assigns and protects radio frequencies for all electronic requirements of the Naval Establishment, effecting coordination with civil and military agencies of the United States, and with other nations as necessary, and ensures that maximum feasible operational compatibility within the Department of the Navy and with other users of the frequency spectrum is achieved in the coordination and assignment of frequencies for electronic devices employed by the Navy.
- .10 Initiates development of operational requirements and assists in the preparation of military and/or development characteristics for communications equipment and systems, including cryptographic, for naval communications and the Naval Security Group.
- .11 Maintains liaison with the Deputy Chief of Naval Operations(Development) concerning the development, test and evaluation of communications equipment (less cryptographic) for naval communications and the Naval Security Group; supervises and follows up the development, test and evaluation of cryptographic communications equipment, and supervises the service acceptance and procurement of communications equipment for naval communications and the Naval Security Group.
- .12 Develops and administers programs for the maintenance, operation and improvement of the Naval Communication System and the Naval Security Group, including the procurement of communications equipment, commercial facilities and services, and support of joint agencies, and prepares and justifies such Military Construction Programs as are necessary to meet the requirements of the Naval Communication System and the Naval Security Group.
- .13 Acts as budget activity manager for appropriations financing the programs for the Naval Communication System and the Naval Security Group, and as such prepares budget estimates and justifications, and supervises the administration of funds appropriated therefor.
- .14 Exercises management control for the Chief of Naval Operations over activities of the Naval Communication System, and over assigned activities of the Naval Security Group, including the Naval Security Station, Washington, D.C.
- .15 Provides for the handling of such commercial communications as are authorized by law, under such rules and regulations as may be prescribed by the Secretary of the Navy.
- .16 Collaborates in furnishing aids to mariners by transmission of time signals, weather reports and hydrographic information; provides communication procedures to support the peacetime requirements of merchant ship reports of vital sightings; arranges for adequate and secure wartime communications for merchant ships.
- .17 Is a member of the Ship Characteristics Board, the Military Construction Review Board, the Standing Committee for Shore Facilities and the Navy Research and Development Review Board.
- .18 Acts as the Navy Service Representative of, and the adviser to, the Chief of Naval Operations and the Secretary of the Navy for communications-electronics matters which are considered by the Joint Chiefs of Staff;

2014.18 (Continued)

such communications-electronics matters are those within the purview of the Director, Communications-Electronics, Joint Staff, and the Military Communications-Electronics Board; acts as the Navy Service Representative of, and the adviser to, the Chief of Naval Operations for communications and all frequency spectrum matters which arise in the Department of Defense or are incident to other inter-service or Navy/federal agency needs or plans.

- .19 Represents the Chief of Naval Operations and the Secretary of the Navy on the U.S. Military Communications-Electronics Board in joint session with the CAN-UK Joint Communications-Electronics Committees in the consideration of combined communications-electronics matters; provides similar representation on other joint, combined, national, and international boards and groups which consider communications matters including the U.S. Communications Security Board, the Telecommunications Planning Committee, Telecommunications Coordinating Committee, the Interdepartment Radio Advisory Committee, the Defense Communications Policy Advisory Committee and, as required, on other boards, panels and committees concerned with naval communications, Naval Security Group and frequency spectrum matters.
- .20 Provides cryptographic publications and equipment to the Naval Establishment, and promulgates cryptographic allowances and related instructions.
- .21 Coordinates and prepares naval publications pertaining to naval communications, the Naval Security Group, and frequency spectrum matters.
- .22 Administers, within the Office of the Assistant Chief of Naval Operations (Communications)/Director, Naval Communications, military (including Naval Reserve) and civilian personnel matters affecting naval communications, and the Naval Security Group; maintains liaison with other personnel agencies; and makes recommendations to cognizant bureaus and offices relative to the detail of military personnel to naval communications and Naval Security Group duties.
- .23 Provides technical guidance to and administers the operations of the Naval Reserve Communication Networks; maintains and operates the National Naval Reserve Master Control Station; sponsors the Naval Reserve Naval Security Group and the Naval Reserve Communication Programs for the Chief of Naval Operations.
- .24 Maintains liaison with amateur radio organizations and activities and coordinates matters relating to amateur radio operations.
- .25 Provides informational services for naval communications and Naval Security Group personnel.
- .26 Provides for the security of naval communications.

2020. THE NAVAL SECURITY GROUP

- .1 The Naval Security Group is a world-wide organization which performs cryptologic and related functions based upon requirements originated by or placed upon the Chief of Naval Operations.
- .2 The Naval Security Group is the Service Cryptologic Agency for the Department of the Navy. It consists of those facilities and personnel who, under ACNO(COMM)/DNC, engage in Special Operations, Communications Security, administration of the Registered Publications System, operation of the Naval portion of the Armed Forces Courier Service, and administration of the Naval Reserve Security Group Program.

- .3 The U.S. Naval Security Group Headquarters administers and directs the operations of the Naval Security Groups as directed by the Chief of Naval Operations, exercising for the Chief of Naval Operations management control of the component activities and detachments of the Naval Security Group.
- .4 Additional information is contained in NWIP 16-1.

2030. THE NAVAL COMMUNICATION SYSTEM

2031. DEFINITION

- .1 The Naval Communication System is a fixed, integrated communication network which forms the world-wide framework of naval communications.

2032. MISSION

- .1 The mission assigned to all activities of the Naval Communication System is: "As an activity of the Naval Communication System, to manage, operate and maintain those facilities, equipments, devices and systems necessary to provide requisite communications for the command, operational control and administration of the Naval Establishment afloat and ashore, and to perform such other functions as may be directed by the Chief of Naval Operations."

2033. TASKS

- .1 The tasks of naval communications, and the Naval Communication System in particular, in accomplishment of the assigned mission are the establishment, management, operation, maintenance and improvement of an adequate global communication system for command and administration:
 - (a) Between the Navy Department and the Operating Forces afloat and ashore.
 - (b) Between the Navy Department and activities of the Shore Establishment wherever located.
 - (c) Between the Operating Forces (surface, sub-surface, air and ashore) and activities of the Shore Establishment wherever located.
 - (d) Between activities of the Department of the Navy and activities of the Departments of the Army and Air Force, U.S. Coast Guard and allied military services as required.
 - (e) Between commands in the Operating Forces in any ocean or area and those in any other location throughout the world.
 - (f) Provision of such other communication facilities and services as the Chief of Naval Operations may prescribe.

2034. ORGANIZATIONAL COMPONENTS

- .1 The Head, Naval Communication System, assigned to the Office of Naval Communications, acts as principal advisor to and executive for the ACNO(COMM)/DNC on matters pertaining to the Naval Communication System and such other aspects of naval communications as are directly involved in the management and operation of the Naval Communication System.
- .2 The Naval Communication System comprises the following types of activities:

2034.2 (Continued)

- (a) U.S. Naval Communication Station (NAVCOMMSTA) - which includes all communication facilities and ancillary equipment required to provide the essential fleet support and fixed communication services for a specific area.
 - (b) U.S. Naval Radio Station (NAVRADSTA) - generally a remote component of a NAVCOMMSTA which performs radio transmitting or radio receiving functions. To indicate the transmitting or receiving function performed, a type designation letter T or R is added in parenthesis.
 - (c) U.S. Naval Communication Unit (NAVCOMMU) - generally smaller in personnel and facilities than a NAVCOMMSTA, which is assigned a limited or specialized functional mission.
- .3 From the management standpoint, the Naval Communication System consists of all NAVCOMMSTAs, NAVRADSTAs and NAVCOMMUs, including the buildings, grounds, antenna systems, electronic and cryptographic equipment and systems, utilities and facilities and equipment.

2035. OPERATIONAL COMPONENTS

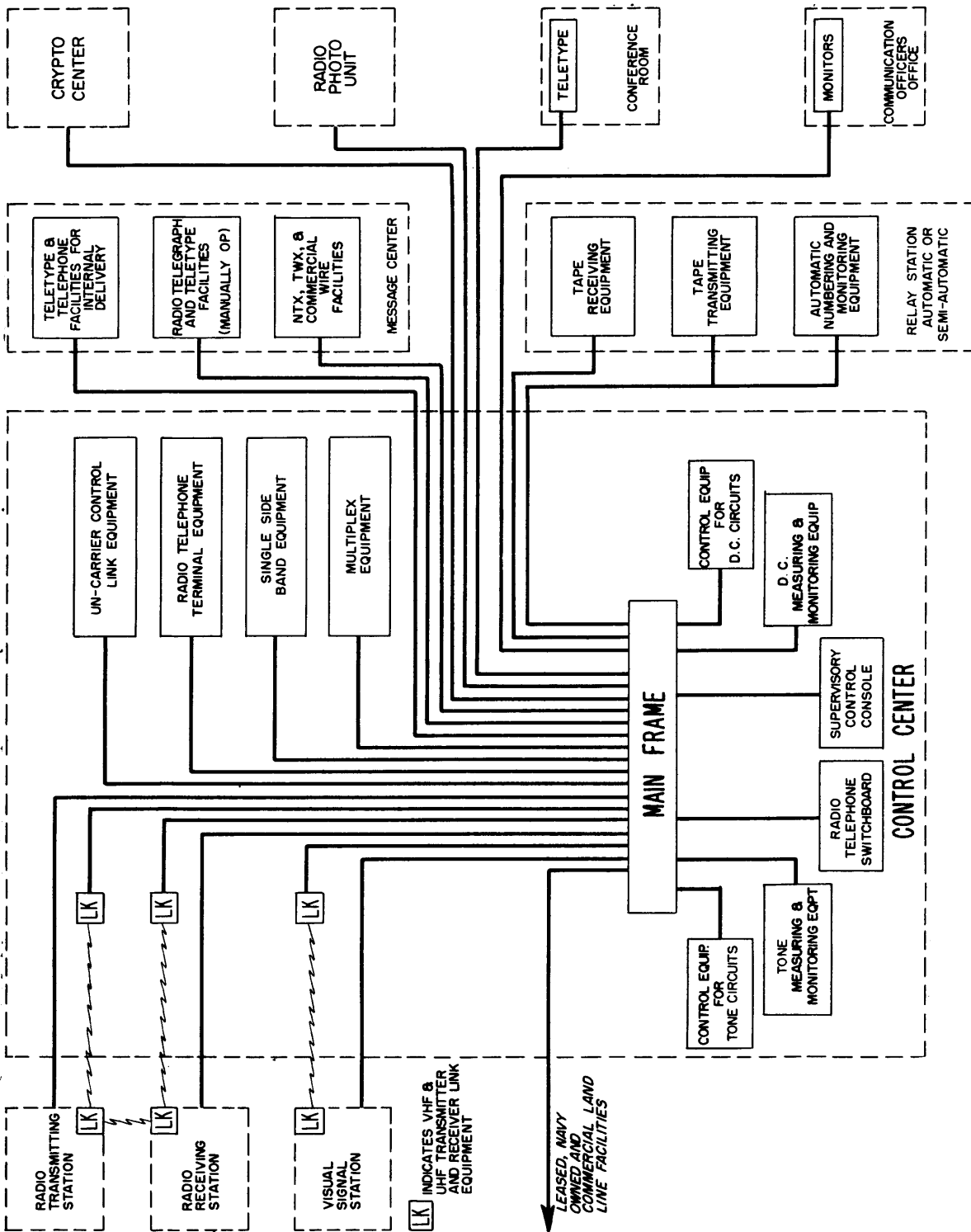
- .1 In accomplishment of the assigned mission and in accordance with applicable naval communications policy and doctrine, the Naval Communication System is planned, engineered and developed so that activities of the System are organized into one or more of the following operationally integrated components:
- (a) Message Center
 - (b) Cryptocenter
 - (c) Relay Station
 - (d) Wire Room
 - (e) Radio Transmitter and Radio Receiver Stations
 - (f) Control Center
 - (g) Visual Signal Station as required
 - (h) Classified Relay
 - (i) Facsimile and Radio Photo Center

These components are operationally integrated and controlled at any geographical location by the Communication Center, the organization of which is shown on page 2-10.

- .2 Communication Centers are categorized as primary, major, minor, and tributary or user message centers.
- .3 There are six primary communication centers strategically located throughout the world to furnish complete radio coverage of the major portions of the world's ocean areas. These six, indicated in chart below, form the nucleus of the Naval Communication System.

<u>Location</u>	<u>Call Sign</u>	<u>Routing Indicator</u>
Washington	NSS	RBEP
San Francisco	NPG	RBWPC
Honolulu	NPM	RBHPC
Guam	NPN	RBMP
Balboa	NBA	RBLPC
Port Lyautey	NHY	RBTPC

TYPICAL COMMUNICATION CENTER



2035.3 (Continued)

These centers are linked together by multi-channel radio teletypewriter, voice and facsimile trunk circuits. In addition, each maintains and operates:

- (a) A Fleet Broadcast for the delivery of traffic by the broadcast method to all U.S. Naval ships in the ocean area which that center serves. These broadcasts consist of a high power VLF or LF transmitter keyed simultaneously with high power HF transmitters.
 - (b) A fleet Radioteletypewriter Broadcast, similar to the Fleet Broadcast except that a VLF transmitter is not employed.
 - (c) A General Broadcast, also similar to the Fleet Broadcast except that a VLF transmitter is not employed. These broadcasts provide time signals, weather (RATT and CW), hydrographic warnings and notices, press (RATT and CW), and merchant ship broadcast schedules.
 - (d) A Fleet Facsimile Broadcast, similar to the Fleet Broadcast, but with no VLF transmitter.
 - (e) A high power, high frequency ship-to-shore circuit, manually keyed.
 - (f) A high power, high frequency duplex or multiplex radioteletypewriter ship-to-shore circuit available for use with fleet commanders.
 - (g) Local MF, UHF manual, radioteletypewriter and voice ship-to-shore circuits as required.
 - (h) Multi-channel radio and/or landwire teletypewriter, voice and facsimile trunk circuits to major or minor communication centers throughout the world.
 - (i) Radio or landwire teletypewriter circuits to tributary or user activities.
 - (j) Other radio or landwire circuits as may be required to meet specific requirements.
 - (k) Radio and landwire link control circuits and facilities of the communication center at any one geographical location. (See page 2-10).
 - (l) Visual signaling facilities as required.
- .4 Major communication centers maintain facilities and perform functions, to a limited extent and within their geographical spheres of influence, similar to the primary centers. They perform a limited fleet support function. Radio or landwire circuits, emanating from the primary communication centers, link the several major centers to the Naval Communication System. They maintain and operate:
- (a) Fleet broadcast of limited area coverage.
 - (b) General broadcasts of limited area coverage.
 - (c) High power HF ship-to-shore circuits as required.
 - (d) High power HF duplex or multiplex radioteletypewriter circuits for use with fleet or force commanders as required.
 - (e) Local harbor circuits.

2035.4 (Continued)

- (f) Multi-channel radio and/or landwire teletypewriter, voice, or facsimile trunk circuits to primary or minor communication centers throughout the world.
 - (g) Radio or landwire teletypewriter circuits to tributary or user activities.
 - (h) Radio and landwire link control circuits and facilities of the communication center at any one geographical location. (See page 2-10).
 - (i) Visual signaling facilities as required.
- .5 Radio or landwire circuits emanating from the primary and major communication centers link the several minor centers to the Naval Communication System. Very limited fleet communication support is rendered from a few designated minor centers, as may be required. These centers maintain radio or landwire circuits to tributary or user activities.
 - .6 The Naval Communication System employs the tape relay method of traffic relay whereby messages are received and routed to their destination in teletypewriter tape form by means of automatic or semi-automatic relay equipment. Tapes are routed by means of routing indicators which are directional in character. These indicators are constructed and assigned in accordance with a definite plan. Tapes are routed in accordance with a routing doctrine, whereby the traffic flow over various circuits or channels and the responsibilities of the relay stations concerned are in accord with a specific prearranged plan. The various circuits or channels, equipment, procedures and routing indicators are engineered and coordinated within the System in such a manner that full benefits may be realized from the advantages, flexibilities, and speed of service of automatic or semi-automatic relay equipment. This method of traffic handling is designed to reduce in-station processing to a minimum.
 - .7 The ACNO(COMM)/DNC maintains a current list, in the JANAP 195 series, of all Navy radio circuits with the frequencies assigned to each circuit. In addition, the channel allocations, schedules, services rendered and other details are set forth for those circuits of the Naval Communication System. Charts are promulgated periodically showing the current arrangement of radio circuits and the area boundaries of the broadcasts of the Naval Communication System.

2036. FUNCTIONS OF THE COMPONENTS OF A COMMUNICATION CENTER

- .1 The Control Center:
 - (a) Operates the radio and landwire link facilities for remote control of the facilities at the naval radio stations (T) and (R) by other components of the communication center.
 - (b) Operates the facilities for testing all circuits or channels when required and analyzes any malfunctions, taking remedial action if necessary and returning the circuit or channel to its appropriate terminal or user as soon as practicable.
 - (c) Operates the facilities for patching circuits or channels to alternate terminals or users as required.
 - (d) Operates the telephone switchboard and the associated facilities of the point-to-point radio telephone channels.
 - (e) Operates the intercommunication system between the control center and the naval radio stations (T) and (R) and other components of the communication center and terminal users.

2036.1 (Continued)

- (f) Maintains close surveillance over conditions existing on all circuits and channels.
- (g) Directs emergency changes or adjustments to all circuits, maintaining close coordination with distant stations and terminal users.
- (h) Operates and maintains the terminal equipment of all multi-channel radio circuits.
- (i) Operates all frequency measuring equipment in coordination with distant stations. Directs all frequency shifts.
- (j) Operates and maintains the facilities required for on-line operation.

.2 The Message Center:

- (a) Accepts messages via messenger, mail, pneumatic tube, etc., for rapid transmission, and time stamps copies.
- (b) Prepares messages for transmission.
 - (1) Authenticates releasing signature.
 - (2) Checks messages for security features.
 - (3) Prepares check copy for checking and retention in files.
 - (4) Affixes routing indicators, call signs and address groups as necessary; prepares heading and routes to the appropriate circuit terminal for transmission.
 - (5) Checks and files check copy.
- (c) Receives messages via electrical means for local delivery or further relay.
 - (1) Operates room or tributary circuits to and from the relay station.
 - (2) Scans messages received for garbles and time stamps messages.
 - (3) Prepares incoming messages for further relay when required.
 - (4) Prepares check copy.
 - (5) Decodes call signs and address groups.
 - (6) Makes duplicate copies as necessary for internal distribution.
 - (7) Routes messages to delivery desk where they are logged for delivery by messenger pick-up, pneumatic tube, telephone, etc.
 - (8) Checks and files check copy.
- (d) Maintains message files.

.3 The Cryptocenter:

- (a) Receives and encrypts messages and routes to message center for rapid transmission or transmits to relay station directly.
- (b) Receives and decrypts messages and makes delivery to addressees and others in accord with the internal distribution.

2036. (Continued)

.4 The Relay Station:

- (a) Receives messages in tape form for further relay. Single address message tapes are distributed to the appropriate outgoing circuits in accordance with the routing indicators and the routing doctrine; multiple address tapes are distributed to the tape factory.
- (b) Operates tape factory. The necessary number of tapes for the number of transmissions required is reproduced without alteration to the original incoming tape. The tapes thus reproduced are routed and distributed to the appropriate outgoing circuits in accordance with the routing indicators and routing doctrine.
- (c) Relays messages in tape form in accordance with routing doctrine.
- (d) Operates monitor section for purposes of monitoring and recording all outgoing circuit transmissions.
- (e) Maintains service section for the purpose of obtaining and making returns, tape corrections, handling misroutes, etc.
- (f) Maintains a file of monitor tapes for an appropriate period of time.
- (g) Many of the aforementioned functions will be performed automatically in the near future as a result of the application of newly-developed automatic traffic switching equipment.

.5 The Wire Room operates those radio or landwire circuits which are off-net or not a part of the integrated tape relay network, such as:

- (a) Circuits to commercial companies.
- (b) Circuits to other government agencies.
- (c) Fleet and General Broadcast.
- (d) Certain ship-to-shore circuits.
- (e) Cables, etc.

.6 The Facsimile and Radio Photo Center operates the facsimile facilities as required for the transmission of pictures, photographs, weather maps, charts and material where the information to be conveyed is in graphic form.

.7 The Visual Signal Station transmits and receives messages by means of flashing light, semaphore, flaghoist, etc.

.8 The Classified Relay:

- (a) Operates a high command (on-line crypto) teletypewriter tape relay network consisting of classified relay stations linked by channels and circuits of the Naval Communication System, utilizing on-line crypto-equipment for the handling of high precedence classified and unclassified messages pertaining to those commands served by this network.
- (b) Operates the Naval Operations Net (NAVOPNET) which provides naval communications with an interim on-line cryptographic capability to expedite delivery of classified messages.
- (c) The methods, procedures, practices, techniques and functions of the classified relay are similar to those of the relay station.

2036. (Continued)

.9 The Transmitter Station:

- (a) Provides the capabilities, through efficient operation and maintenance of all transmitting equipment and associated facilities, to meet the current and foreseeable operating requirements of the Naval Communication Station or Unit of which the transmitter station is a part.
- (b) Provides transmitting facilities to be remotely controlled by other naval activities as authorized by the ACNO(COMM)/DNC.

.10 The Receiver Station:

- (a) Provides the capabilities, through efficient operation and maintenance of all receiving equipment and associated facilities, to meet the current and foreseeable operating requirements of the Naval Communication Station or Unit of which the receiver station is a part.
- (b) Provides receiving facilities to be remotely controlled by other naval activities as authorized by the ACNO(COMM)/DNC.

2040. U.S. NAVAL COMMUNICATION SYSTEM HEADQUARTERS ACTIVITY

2041. MISSION

- .1 The U.S. Naval Communication System Headquarters is an activity established to supervise, administer and coordinate the activities of the Naval Communication System and to operate the Naval Communication System as directed by the ACNO(COMM)/DNC.

2042. RELATIONSHIP WITH DEFENSE COMMUNICATIONS AGENCY

- .1 The Defense Communications System (DCS) comprises the major portions of the individual Army, Navy and Air Force world-wide, long-haul, point-to-point communications complexes brought together under a single system to provide a single system response to the Department of Defense world-wide communications needs. The military departments continue to maintain and operate their assigned portions of the DCS but are responsive to the over-all operational control and supervision of the Defense Communications Agency (DCA) which is the management agency for the DCS. The Naval Communication System Headquarters Activity maintains direct liaison with the DCA in matters affecting the operation of certain segments of naval communications, and coordinates and supervises the operation of those facilities of the DCS for which operational control has been delegated to the Navy. For the most part, these latter facilities are organizational components of the Naval Communication System.

2050. BUDGETING AND ADMINISTRATION

2051. MANAGEMENT

- .1 The Chief of Naval Operations has delegated to the Assistant Chief of Naval Operations (Communications)/Director, Naval Communications responsibility for management control of the activities and functions of the Naval Communication System and the Naval Security Group. The discharge of these management responsibilities includes the preparation of budget estimates and justifications in support of the annual and projected program objectives, and the administration of funds appropriated therefor.

2051. (Continued)

- .2 The ACNO (Communications) sponsors communications budgetary programs for:
 - (a) The basic Naval Communication System, the shore-based network (ship/shore, point-to-point and broadcast) which serves to link all other elements of naval communications for command control of the operating forces and for administration of the Naval Establishment.
 - (b) Communications complexes which are portions of new operating systems for weapon systems; i.e., G-I-UK Barrier and the Navy's Data Network.
- .3 The ACNO (Communications) provides technical direction and guidance to the sponsors of budgetary programs for:
 - (a) Airborne communications.
 - (b) Shipboard communications.
 - (c) Communications internal to shore stations not assigned to the management control of the Director, Naval Communications.
- .4 The following appropriations provide funds for the budgetary programs sponsored by the ACNO (Communications) and those communications programs in which the Director, Naval Communications has a technical interest:
 - (a) Operation and Maintenance, Navy (O&MN). This appropriation provides for operating and maintenance costs of the facilities of the Naval Communication System and the Naval Security Group. Also, the cost of installing communication equipment, both for modernization and in new construction, in shore activities is budgeted in this appropriation. The Bureau of Ships obtains funds from this appropriation for the installation of communication equipment aboard ship in connection with the overhaul and modernization programs. The Bureau of Weapons obtains funds from this appropriation for installing modern communication equipment in planes as a part of the back-fitting programs.
 - (b) Other Procurement, Navy (OPN). This appropriation provides for procurement of communications and related electronic equipment required for both modernization and new construction for the Naval Communication System; for modernization of ship-to-shore, ship-to-ship, air-to-ground, and ground-to-air communications; all cryptographic aids and devices required for the Naval Establishment; and cryptologic equipment for the Naval Security Group, required for both modernization and new construction.
 - (c) Military Construction, Navy (MILCON). Within this appropriation funds are provided for the construction of new facilities for the Naval Communication System and the Naval Security Group.
 - (d) Research, Development, Test and Evaluation, Navy (RDT&E,N). This appropriation provides for research in connection with projects for development of improved communication systems and techniques.
- .5 In addition to the foregoing, the Chief of Naval Operations (DNC) performs other managerial functions in connection with the Naval Communication System and the Naval Security Group. These managerial functions are:
 - (a) The establishment of organizational structures, the determination, coordination and assignment of functions and the conduct of periodic reviews of such organizational structures.

2051.5 (Continued)

- (b) The coordination of the planning for, and the allocation of, civilian and military ceilings and allowances within the over-all ceilings and allowances allocated.
- (c) The coordination of the civilian personnel ceilings with military personnel allowances.
- (d) The administration, in accordance with current instructions, of the Management Improvement Program, the Manpower Utilization Program, and similar programs.

2060. COMMUNICATIONS ASHORE

2061. COMMUNICATION DEPARTMENTS OF ACTIVITIES OF THE SHORE ESTABLISHMENT

- .1 The organization of the activities of the Shore Establishment generally provides for a Communication Department. The Communication Departments maintain and operate various communication facilities primarily to provide local (intra-activity and/or intra-area) communications for activities of the Shore Establishment as necessary for the accomplishment of their assigned missions in regard to the Operating Forces, as dictated by local circumstances or world-wide requirements. They may further provide certain general communications in furtherance of the world-wide functions of the Naval Communication System.
- .2 Communication Departments are organizational components of the shore activity for which they provide requisite local communications. Management control is exercised by the bureau or office of the Department of the Navy having management control of the parent shore activity.
- .3 Normally the Communication Department of activities of the Shore Establishment provides for a small Communication Center, consisting of a Message Center and Cryptocenter. However, when required, it may also provide for a Relay Station, Wire and/or Radio Center, Control Center, Radio Transmitting and Receiving Facilities, and a Visual Signal Station.
- .4 Where radio transmitting and receiving facilities are required, it is the policy, in the interests of economy and efficient use of men, money and material, where practicable, to install the transmitting and receiving equipments in regularly established radio transmitter or receiver stations of the Naval Communication System and remotely control these facilities from the Communication Center of the activity concerned.

2070. COMMUNICATIONS AFLOAT

2071. COMMUNICATION ORGANIZATIONS OF THE OPERATING FORCES

- .1 Every communication organization of the Operating Forces is an integrated unit of that command. Through the ship or staff organization, the commanding officer or commander has direct and positive control of communications; and in the transmission and reception of signals and messages, the communication organization participates in the exercise of command.

2072. THE OPERATIONS DEPARTMENT OF A SHIP

- .1 The Operations Department is one of the command departments of the ship. Its functions embrace all external communications, combat information center, control of aircraft in the air, and electronics repair.
- .2 In a large ship, the Operations Department will contain signal and radio divisions. In a small ship these divisions may be combined, or there may be only an Operations Division.

2073. THE COMMUNICATIONS DEPARTMENT OF A STAFF

- .1 On a naval staff the communications organization is a staff department or division separate from the staff operations department.

2074. FLAGSHIP

- .1 On board flagships, ship and flag personnel may be combined into one communications organization, under flag supervision.

2075. COMMUNICATION SPACES

- .1 The number, size and arrangement of the communication spaces of a ship is dependent upon the size and the mission of the ship. In a large ship, the functions of the communication organization are carried out in the following spaces:
 - (a) Message Center - The shipboard message center contains personnel and equipment for the placing in proper form, write-up, internal routing, delivery and filing of messages. It is the duty station of the communication watch officer. All messages, other than operational messages received and sent direct from shipboard control stations, must clear the message center before internal routing or external transmission. In ships without space allotted for a message center, the functions of the message center are carried out in radio central.
 - (b) Radio Spaces - Radio central, also called main radio, is the largest and most completely equipped radio space on board ship. It contains operating positions for radiotelegraph, radiotelephone and facsimile. Normally, it is the location where transmitters, receivers and remote speakers and keying positions are selected and tied together to provide communication channels for the remote operating stations elsewhere in the ship. Radio central is located in close proximity to the message center and is the duty station of the supervisor of the watch and of most radio operating personnel. According to the size of the ship, there may be one or more additional spaces containing special equipment, additional equipment, or duplicate facilities. Depending upon their arrangement and intended use, such spaces may be designated as transmitter room, emergency radio room, auxiliary radio, or other appropriate functional titles.
 - (c) Remote Control Facilities - Remote stations, consisting of receiving outlets and transmitter keying positions, are established in battle control spaces where a need exists for direct radio communication. These remote stations are connected to radio central, where the desired receivers and transmitters are selected.
 - (d) Cryptocenter - The functions of the shipboard cryptocenter are the same as those of the cryptocenter ashore. Additional information pertaining to the cryptocenter is contained in Chapter 5 and in Chapter 4, NWIP 16-1.
 - (e) Visual Signal Spaces - Equipment and spaces for visual communications are provided in the superstructure of the ship. Signal halyards run from the yardarm to flagbags at the foot of the mast for flaghoist signaling. Signal searchlights and semaphore platforms are located in positions where each will have the largest arc of vision and so that their total coverage will be 360°. Remote control keys for operating yardarm blinker, nancy, and searchlights are placed in convenient and protected positions.

2080. DEFENSE COMMUNICATIONS AGENCY

2081. AUTHORITY

- .1 The Defense Communications Agency (DCA) was established as an agency of the Department of Defense (DOD) by DOD Directive 5105.19 dated 12 May 1960.

2082. MISSION

- .1 The Defense Communications Agency, under the Chief, DCA, will exercise operational control and supervision of the Defense Communications System (DCS) to assure that Defense and Military long-haul, point-to-point communications needs are adequately met in a single Defense Communications System within the Department of Defense.

2083. ORGANIZATION AND COMMAND

- .1 The Defense Communications Agency is an agency of the Department of Defense under the direction, authority, and control of the Secretary of Defense. The chain of command shall run from the Secretary of Defense through the Joint Chiefs of Staff to the Chief, DCA.
- .2 The DCA, under the direction and control of the Chief, DCA, shall consist of a military commander of suitable General or Flag Rank; a Headquarters Staff; and such subordinate units, facilities and activities (including Communications Control Centers) as are specifically assigned to the Agency by the Secretary of Defense or by the Joint Chiefs of Staff by the authority and direction of the Secretary of Defense.
- .3 The Chief, DCA, is specifically delegated authority to prescribe procedures, principles, standards, and practices for activities under his operational control and supervision; prescribe or approve, as appropriate, security rules, regulations and instructions for DCS activities; obtain such reports and information from the Military Departments and other Department of Defense or governmental agencies as may be necessary to the performance of the Agency's assigned functions; directs the consolidation or elimination of DCS facilities and operations in order to achieve maximum efficiency, economy, and effectiveness; have direct access to and direct communications with any department or agency performing DCS functions over which the DCA exercises operational control and supervision; and issue instructions pertaining to the operation and maintenance of the DCS to the heads of the operating agencies of the Military Departments and other Department of Defense or governmental agencies provided that task assignments and pertinent instructions, which may be issued directly to any operating element of the DCS, are within the capacity of such elements to accomplish.

2084. FUNCTIONS

- .1 Under the direction and control of the Chief, DCA, the Agency shall perform the following functions within its assigned field of responsibility:
 - (a) Plan and, upon approval of the Joint Chiefs of Staff and the Secretary of Defense, establish the Defense Communications System.
 - (b) Exercise operational control and supervision of the communications activities and facilities comprising the DCS, to include the allocation of circuits and channels, the allocation of standby communication facilities and the supervision and direction of the restoration, allocation or reallocation of circuits and channels under emergency conditions.

2084.1 (Continued)

- (c) Translate system plans into program guidance and recommend to the Secretary of Defense through the Joint Chiefs of Staff the assignment of appropriate program priorities and program implementation responsibility. Provide support in the program/budget process of the Military Departments to appropriate elements of the Office of the Secretary of Defense, the Joint Chiefs of Staff, or the Military Departments.
- (d) Coordinate communications research and development programs of the Military Departments which are applicable to the DCS; review current status of research and development efforts in support of the DCS; recommend research and development programs or projects to the Director of Defense Research and Engineering through the Joint Chiefs of Staff required to ensure progressive improvement of the DCS.
- (e) Conduct a continuous analysis and evaluation of the effectiveness of the DCS, to include periodic exercises, inspections and tests.
- (f) Supervise the operation of special purpose communication facilities of the DCS required to support the President, the Secretary of Defense, and the Joint Chiefs of Staff in providing communications for the exercise of command, control and direction of the U.S. Armed Forces in the Alternate Joint Communication Center, the Joint War Room, and other similar activities as designated by the Secretary of Defense or the Joint Chiefs of Staff.

2090. THE DEFENSE COMMUNICATIONS SYSTEM

2091. AUTHORITY

- .1 The Defense Communications System was established within the Department of Defense by DOD Directive 4600.2 dated 12 May 1960 to provide a single Defense Communications System within the Department of Defense.
- .2 The component facilities of the DCS, other than DCA communication control centers, are operated by the Military Departments, the Unified or Specified Commands, or other DOD Agencies to whom such responsibility has been assigned, under the operational control and supervision of the DCA.

2092. INCLUSIONS

- .1 The DCS includes:
 - (a) All Department of Defense world-wide, long-haul government-owned and leased, point-to-point circuits, terminals, control facilities and tributaries required to provide communications:
 - (1) From the President to and between the Secretary of Defense, the Joint Chiefs of Staff, and other governmental agencies as directed.
 - (2) From the Secretary of Defense and the Joint Chiefs of Staff to and between the Military Departments, the Unified and Specified Commands, and other Department of Defense agencies.
 - (3) From the Military Departments to and between the fixed headquarters of their major commands, and to and between the fixed headquarters of their subordinate commands.
 - (4) From the Unified and Specified Command to and between the fixed headquarters of their component and subordinate commands.

2092.1 (Continued)

- (b) As directed, all Department of Defense circuits, trunks, loops, terminals, communication facilities, and technical control elements, either government-owned or leased, utilized to provide long-haul telecommunications from the President, Secretary of Defense, Joint Chiefs of Staff, and the unified and specified commanders when afloat, airborne, or in a land mobile environment.
- (c) All special purpose, point-to-point circuits, trunks, loops, terminals, communication facilities and technical control elements required to:
 - (1) Provide communications to the Alternate Joint Communications Center, the Joint War Room, and other similar activities as designated by the Secretary of Defense or the Joint Chiefs of Staff.
 - (2) Provide telecommunications to the alternate headquarters and emergency relocation sites of the Military Departments and those commands listed in paragraph 2092.1(a) above.
 - (3) Provide telecommunications to allied commands when and as directed.
 - (4) Provide telecommunications to other government and non-government agencies as directed.
- (d) That portion of tactical circuits and weapons systems circuits which are long-haul, point-to-point in nature, and which are routed through or contained in a Defense Communications System facility.
- (e) Those communication facilities used for extension or restoration of any component of the Defense Communications System.
- (f) Assigned operational, point-to-point circuits, trunks, terminals, and communication facilities included in, or which are a part of, active or passive space communications satellite systems.

2093. EXCLUSIONS

- .1 The Defense Communications System does not include:
 - (a) Tactical communications which are self contained within tactical organizations.
 - (b) Land, ship, and airborne circuits, trunks, terminals, loops, and communications facilities of broadcast, ship-to-shore, ship-to-ship, ground-air-ground systems, except as cited in paragraph 2092.1(b) above.
 - (c) Local communications for command, countdown, range safety, and weapon destruction at missile and air defense launch and firing pads.
 - (d) Self-contained information gathering, transmitting, and/or processing facilities which are normally local in operation and use.
 - (e) Weapons systems requirements which cannot be met through the facilities of the DCS.
 - (f) Local base, post, camp, or station cable facilities of a fixed headquarters unless otherwise designated or provided for.

2094. ASSUMPTION OF OPERATIONAL CONTROL

- .1 The Defense Communications Agency assumed operational control of the Defense Communications System on 7 March 1961.

CHAPTER THREE

COMMUNICATION RECORDS

★ 3000. COMMUNICATION FILES

3001. MESSAGE FILES

- .1 Communication Center File. An unclassified source of reference for all messages, irrespective of means of transmission, addressed to or originated by the command. It contains a copy of each plain language message, and an encrypted copy of each classified message, as received or transmitted. When an encrypted copy is not available or nonexistent, a filler or dummy referring to the cryptocenter file should be inserted. Messages are filed chronologically by date-time group.
- .2 Cryptocenter File. Contains the edited plain language version of each classified message addressed to or originated by the command, filed chronologically by date-time group. The cryptocenter file may be physically subdivided to comply with stowage requirements for classified matter. In all cases, Top Secret messages will be afforded separate stowage.
- .3 Radio Station File. A chronological record of all traffic handled by the command by radio means. It shall contain a copy of each nontactical message received, transmitted or relayed by the radio facilities of the command. These copies shall bear the operator's services, and are filed in chronological order by date-time-group.
- .4 Visual Station File. A chronological record of all traffic, except tactical signals, handled by the command by visual means. It is identical in purpose and description to the radio station file.
- .5 General Message File. A chronological record of all general messages addressed to the command. The file is normally subdivided by type of general message and each type is filed in serial number order. These files are given the classification of the highest classified message contained therein. In order to facilitate access and stowage, general message files may also be segregated by security classification with appropriate cross-references.
- .6 Messages in the above files may contain the signatures or initials of the drafter, releasing officer, communication watch officer, operator, persons to whom the message has been routed and such other information as may be required by the local command.
- .7 For convenience of stowage, filing and referencing, the Communication Center File, Radio Station File, and Visual Station File may be combined as desired.
- .8 In the case of a flagship, duplicate files may be maintained by the flagship and the embarked commander.

3002. EXAMPLE OF FILING SYSTEM

- .1 Incoming encrypted NAVOP received by radio:
 - One encrypted copy - filed by DTG in radio station file.
 - One encrypted copy - filed by DTG in communication center file.
 - Edited plain language original - filed by DTG in the appropriately classified section of the cryptocenter file.
 - One edited plain language copy - filed by serial number in the NAVOP portion of the classified general message file.

3003. CRYPTOCENTER FILES

- .1 The custodian's files and the cryptoboard file (optional) are described in Chapter 5.

3004. TAPE RELAY STATION FILES

- .1 Tape relay stations are not required to keep a permanent file of messages. All tape relay stations will keep monitor tape or page copy for 24 hours on incoming messages, 60 days on outgoing messages.

3010. COMMUNICATION LOGS

3011. ENTRIES IN LOGS

- .1 Log entries will not be erased. Any necessary changes will be made by drawing a single line or typing slant signs through the original statement and indicating the changed version adjacent to the original entry. The operator making the change will initial such changes.

3012. RADIOTELEGRAPH LOGS

- .1 Every radiotelegraph transmission on every radio frequency guarded, covered or copied shall be logged in accordance with the following instructions:
 - (a) Every transmission heard by an operator on watch (regardless of source or completeness) shall be recorded, whether or not addressed to the receiving station.
 - (b) If the transmission must be written in full on a message blank, as when the message is addressed to, is passed to, or is to be relayed by the receiving station, only sufficient details need be inserted in the radio log to identify the message.
 - (c) If it need not be written on a message blank, the transmission shall be written out fully in the radio log.
- .2 In addition to showing a complete and continuous record of all emissions transmitted or heard, the radio log shows operating conditions which occur during the day. The log should include such additional data as the following:
 - (a) Time of opening and closing of the station.
 - (b) Causes of delay on the net or circuit.
 - (c) Adjustments and changes of frequency.

3012.2 (Continued)

(d) Unusual occurrences, such as procedures and security violations.

- .3 When an operator opens a new net or circuit or starts a new day's log he shall write or type his name in the log. When an operator is relieved or closes a net or circuit he shall sign the log. An oncoming operator shall write or type his name in the log. In all instances the name or signature of the operator shall be in such form that no confusion regarding his identity will exist.
- .4 An entry shall be made in each radio circuit log at least every five minutes. If the operator is too busy to comply over a period of time, he may enter the essential data later, indicating inclusive times.
- .5 An entry shall be made each time harmful interference is noted and a report submitted to CNO. (See Janap 195 and NWIP 16-1 for further information.)

3013. RADIOTELETYPEWRITER LOGS

- .1 The page copy (or perforated tape) is the radioteletypewriter log. In the absence of automatic time stamping or indicating equipment, a time entry of the sending station shall be made on the tape or page copy at least once every thirty minutes.

3014. RADIOTELEPHONE LOGS

- .1 Complete logs shall be maintained on the following nets:
 - (a) Maneuvering Net.
 - (b) Task Unit (or Group or Force) Chain-of-Command Net.
 - (c) Combat Information Net, with the exception that standard abbreviations similar to those used to record data on CIC status boards may be logged.
- .2 Modified logs may be maintained on all other circuits and nets. The completeness of coverage and degree of textual detail will vary with the type of ship or station, availability of personnel and the category of information passing through the net or circuit. The ultimate decision as to the completeness of logs on other circuits rests with the commanding officer.
- .3 If desired, prowords and spoken operating signals may be logged by their CW equivalents.
- .4 Subject to the foregoing, radiotelephone logs are kept in the same manner as radiotelegraph logs.
- .5 The following is a sample method for keeping a radiotelephone log, showing entries for:
 - (a) Immediate Execute Method. Line 1 details the log entry for an immediate execute message.
 - (b) Delayed Execute Method. Lines 2 and 6 show the entries for a delayed execute message. The first portion (line 2) is entered as received, leaving the TOX column blank. When the command is finally executed by the message recorded in line 6, the time of execution in line 2 is filled in.

3014.5 (Continued)

- (c) Administrative Message. All message data plus the text is logged. There is no execution involved, therefore no entry in the TOX column.
- (d) Change of Watch. Each operator signs in and out, as shown in lines 4 and 5. A new day's messages are separated from previous log entries and the date indicated.

EXAMPLE - RADIOTELEPHONE LOG

	<u>CIRCUIT</u>	<u>SCREEN</u>	<u>COMMON</u>						
	<u>TO</u>	<u>FM</u>	<u>TIME</u>	<u>TEXT</u>					<u>TOX</u>
(Line 1)	BULL RUN	MAGNIFY	2302	IMMEDIATE EXECUTE BREAK TURN 180 BREAK I SAY AGAIN TURN 180 STANDBY EXECUTE					2302
(Line 2)	BULL RUN	MAGNIFY	2335	EXECUTE TO FOLLOW BREAK 135 CORPEN TACK KILO CORPEN OVER					0005
(Line 3)	BULL RUN	MAGNIFY	2345	ROUTINE TIME Ø12315Z FROM MAGNIFY TO BULL RUN BREAK (TEXT) BREAK OVER					
(Line 4)	W. G. THEBUS, RDSN								
(Line 5)	2 MAY 1958 - R. E. REDDICK, JR., RD3								
(Line 6)	BULL RUN	MAGNIFY	0005	135 CORPEN TACK KILO CORPEN STANDBY EXECUTE					0005

EXAMPLE - SAME RADIOTELEPHONE LOG USING
CW EQUIVALENTS AND ABBREVIATIONS

	<u>TO</u>	<u>FM</u>	<u>TIME</u>	<u>TEXT</u>					<u>TOX</u>
(Line 1)	BR	MAG	2302	IMMEDIATE EXECUTE BT TURN 180 IMI TURN 180 STANDBY IX					2302
(Line 2)	BR	MAG	2335	IX BT 135 CORPEN - K CORPEN BT K					0005
(Line 3)	BR	MAG	2345	R - Ø12315Z FM MAG TO BR BT (TEXT) BT K					
(Line 4)	W. G. THEBUS, RDSN								
(Line 5)	2 MAY 1958 R. E. REDDICK, JR., RD3								
(Line 6)	BR	MAG	0005	135 CORPEN - K CORPEN STANDBY IX K					0005

3015. VISUAL LOG

- *.1 The visual log contains a record of all signals from the Allied Naval Signal Book or other signal books as sent or received, including the date, time of receipt, time of delivery, time of execution, originator,

4005. (Continued)

- .4 Originators of operation plans and orders should insure that the NAVCOMMSTAs or NAVCOMMFACs designated to provide fleet support communications are included in the distribution of the basic plan or the communication annex thereto.

4006. PLANNING DUTIES

- .1 The internal organization of communications in time of war or actual battle, will vary to some extent according to the type and mission of the command. The equipment and personnel of the communication organization must be flexible so that internal arrangements, if need be, can be altered to fit the situation. Fundamentally, no communication plan is sound which relies on a single means of communication for a vital channel without consideration of an alternate means in the event of material or personnel casualty.
- .2 The Oplan and/or Oorder sets forth any definite mission for the command. It should be studied in detail immediately upon receipt. When possible any questions should be resolved by personal contact with cognizant officers of the issuing staff prior to the effective date of the plan.
- .3 The communication officer will prepare the command's communication plan from the Communication Annex to the Oplan/Oorder for distribution to cognizant personnel.
- .4 The command's communication plan should be prefaced with a brief statement of the mission or task assignment. In wartime this can be done within the scope of good security by holding a conference of assistant communication officers and distributing the plan after insuring adequate safeguards are available for protecting the plan. In peacetime, provided the security classification of the operation or exercise mission permits, this briefing should be accomplished as early as practicable after receipt of the operation plan, in order to permit the maximum amount of time for departmental planning and preparation. In the communication plan and subsequent conferences the communication officer should organize all watches. He should stress the factors that are vital to the success of the mission such as the tactics involved, and he should prescribe the special communications procedures required such as recognition or authentication.
- .5 Publications that will be used should be made available, reviewed and placed in readiness in the cryptocenter and other spaces where they may be required. They shall be accounted for on a watch-to-watch inventory basis.
- .6 Transmitter and receiver equipment should be calibrated, tested and the calibration data recorded for ready reference prior to getting underway. There shall be no radiation from the antenna when transmitters are warmed up, set on frequency and adjusted prior to radiating the initial signal when coming up on a circuit. The necessary adjustment of the final stage and adjustments of the antenna tuner (if applicable) or coupling should be made immediately after emitting the initial signal. In preparing for an operation, the exact dial settings for all the equipments to be used should be determined with frequency meters and marked. In the case of a transmitter no emission is to be radiated in this calibration process, but the final stage and coupling adjustments are to be made by the silent tuning process described in NAVSHIPS 900,000. (Care must be taken to disconnect the calibrating equipment afterwards.)

4006. (Continued)

- ★ .7 Frequency measuring equipment shall be checked monthly for accuracy of its frequency source. Signals emanated by NSS, NPM and NPN shall be used as a standard in making adjustments and these stations shall be charged with the responsibility of maintaining the accuracy of the standard.

4010. DISTRICT COMMUNICATION OFFICERS AND
COMMANDING OFFICERS OF NAVAL
COMMUNICATION STATIONS AND
FACILITIES

4011. RESPONSIBILITY

- .1 The commanding officer of a naval communication station (NAVCOMMSTA) or naval communication facility (NAVCOMMFAC) is responsible for the proper administration and operation of his command as defined in Chapter 7 of U.S. NAVY REGULATIONS. Specifically, he is responsible for the proper execution of the mission assigned his station.
- ★ .2 In the interest of economy and where feasible, the Commanding Officer of the Naval Communication Station serving a District Commandant is assigned as District Communication Officer on the staff of the District Commandant for additional duty; the Commanding Officer of a Naval Communication Station serving a Fleet, Sea Frontier, or Naval Area Commander's Headquarters, may be assigned additional duty on the staff of the Commander either as Communication Officer or for communication duties.

4012. DISTRICT COMMUNICATION OFFICER

- .1 The district communication officer is responsible for the proper planning, organization, operation, inspection, supervision and coordination of communications for all Shore Establishment activities of the Navy and Marine Corps within the district.
- .2 The district communication officer shall exercise, through appropriate channels, necessary coordination of all district communication activities. These activities include those of the Naval Communication System and communication departments of activities of the Shore Establishment.

4013. COMMUNICATION PLANS AND ADMINISTRATION

- .1 As the district communication officer, he shall coordinate the development and preparation of all district communication plans, including operations, frequency, countermeasure, logistic, emergency, casualty and catastrophe plans. He shall review and coordinate all communication plans prepared by subordinate activities.
- .2 As the district communication officer, he shall insure maximum integration and usage of communication facilities and personnel to provide the greatest possible economy and most efficient operation. He shall:
 - (a) Analyze the need for circuits and equipment to properly maintain naval communications and recommend changes thereto.

4013.2 (Continued)

- (b) Determine military characteristics, adequacy, ownership, operation and usage of telephone and other landline systems. He shall approve minor changes or recommend major changes, as applicable, to telephone systems under his cognizance.
 - * (c) Administer the engineering, issuing of orders in accordance with BUDOCKS Instructions, allocation and operation of landlines associated with the Naval Communication System and off-net facilities within the district other than those directly managed by CNO or other management Bureaus and offices.
- .3 As the district communication officer, he shall prorate the cost of landline services within the district among joint users.
 - .4 As the commanding officer, he shall exercise within his district those management and financial responsibilities directed by the Chief of Naval Operations (DNC).

4014. INSPECTIONS, ANALYSES AND STUDIES

- .1 As the District Communication Officer, he shall conduct inspections at the times when continuing surveys are scheduled by the Commandant, and more frequently if circumstances dictate, of all district communication activities and make a report on the:
 - (a) Adequacy and effectiveness of personnel and material.
 - (b) Ability to meet operational requirements.
 - (c) Conformance with established standards of service.
- .2 As the district communication officer, he shall make traffic studies and analyses in order to keep the Chief of Naval Operations and the commandant informed of the status and adequacy of communication personnel and equipment.
- .3 As the district communication officer he shall make recommendations on requests for increases or decreases of personnel and material allowances from individual commands, insuring maximum utilization of personnel and facilities, as determined by operational needs.

4015. LIAISON

- .1 As the district communication officer, he shall maintain liaison with Operating Forces' headquarters ashore within the district to ensure that adequate communication support is provided to fleet units and other elements of the Operating Forces. He shall effect coordination of communication requirements between fleet units and the Shore Establishment. He shall also maintain liaison with the Army, Air Force, Coast Guard, other Government departments and civilian organizations in the district in communication matters, including the preparation of joint plans.

4016. PUBLICATIONS AND SECURITY

- .1 As the district communication officer, he shall coordinate:
 - (a) Activities of the Registered Publication System.
 - (b) Activities of the Naval Security Group.
- .2 As the district communication officer, in accordance with current allowance lists and in coordination with the district director of training, he shall direct the issuance of RPS-distributed publications to Naval Reserve activities specifically authorized by the Commandant

4016.2 (Continued)

to hold publications.

4017. TRAINING

- .1 As the district communication officer, he shall advise and assist the director of training in the communication training within the district.
- .2 As the district communication officer, he shall exercise technical control of the Naval Reserve communication networks within the district.
- .3 As the district communication officer, he shall advise the district officer for Naval Reserve Security Group activities as necessary in exercising the management and technical control of such components. He shall assist the director of training with the training of such components.
- .4 As district communication officer, he shall process all requests for annual training duty from communication personnel of the Naval Reserve.

4018. FUNDS

- .1 As commanding officer, he shall administer the funds allotted for communication facilities.

4020. STAFF COMMUNICATION OFFICERS

4021. DUTIES OF THE STAFF COMMUNICATION OFFICER

- .1 The senior officer of the communication division is the staff communication officer or assistant chief of staff for communications, who is directly responsible to the chief of staff as described in The Navy Staff, NWP 12. His primary responsibility is the efficiency of naval communications within the command. To meet this responsibility, the staff communication officer has the following duties:
 - (a) Advise the commander and his staff on communication matters.
 - (b) Formulate communication plans and directives for the approval of the commander.
 - (c) Direct subordinate communication officers in communication matters.
 - (d) Establish and maintain efficient communications for the commander.
 - (e) Initiate training and operational methods designed to improve the efficiency of communications within the command.
 - (f) Enforce strict radio and visual communication discipline over the circuits within the command.
 - (g) Maintain a high state of communication readiness within the command, and ensure compliance with existing instructions and regulations.
 - (h) Appraise and maintain the state of communication security within the command and report the situation to the commander at frequent intervals.

4044.1 (Continued)

- (c) When the communication officer directs, conduct an inventory of the articles and equipment in his custody. This shall be done at least once a year.

4045. INSPECTIONS

- .1 Each of these officers shall:
 - (a) Daily inspect all records and logs under his cognizance.
 - (b) Check the handling of traffic under his cognizance.
 - (c) Daily inspect, for cleanliness and upkeep, the facilities, including equipment, antennas, storerooms and other assigned spaces.

4046. ADDITIONAL DUTIES OF THE RADIO OFFICER

- .1 The assistant communication officer in charge of radio shall:
 - (a) Know the effective communication plans.
 - (b) Know propagation characteristics and proper use of radio frequencies.
 - (c) Be familiar with condition, capabilities, and limitations of ship's radio equipment, including antennas.
 - (d) Ensure that equipment is calibrated, particularly on frequencies for operations, at least 24 hours prior to departure, and that equipment is maintained on frequency.

4050. ASSISTANT COMMUNICATION OFFICERS

4051. COMMUNICATION WATCH OFFICERS

- .1 Communication watch officers are normally officers of the operations department.
 - (a) In large ships, particularly in wartime, junior officers may be assigned specifically to the operations department for watch standing duty or training in communication as directed by the communication officer.
 - (b) In smaller vessels, the duties of the CWO will be performed by the communication officer and his assistants, as necessary.
- .2 While on watch, the communication watch officer, under the communication officer, is responsible for all incoming and outgoing traffic as provided for in the ship's communication organization. It is his duty to ensure that all messages, transmitted or received, are handled rapidly and accurately, in accordance with existing regulations and orders. In performing this duty the communication watch officer shall be cognizant of the tactical situation and control communications as the communication officer's representative for the period of his watch. He shall supervise and train the personnel of the watch so that maximum information and intelligence available can be utilized by the command, informing those who need to know.

4051. (Continued)

- .3 In addition to the knowledge required of all officers performing communication duties, the communication watch officer shall have a particularly thorough knowledge of communication methods and procedures, including the internal handling of messages.
- .4 The CWO is primarily responsible for the following:
 - (a) Ensuring that messages are routed correctly and delivered promptly.
 - (b) Maintaining a tickler system for acknowledgments and replies to ensure that timely action is taken when required.
 - (c) Final authorization for transmission of encrypted messages.
 - (d) Ensuring that messages are prepared and transmitted in accordance with prescribed procedure.
 - (e) Maintaining necessary records of traffic, incoming and outgoing.
 - (f) Proper filing of incoming and outgoing messages.
 - (g) The proper operation of the cryptocenter during his watch.
- *.5 The CWO watch normally is continuous when underway and is rotated at the end of each watch period. When in port, the CWO duty may be assigned as a day's duty (24-hour period).
- .6 A CWO notebook usually is maintained in, and not removed from, the message center. Immediately upon receipt of orders, instructions and information, the CWO enters in the book all data which must be passed on to reliefs. An oncoming CWO reads and initials all new entries before relieving the watch.
- .7 The CWO should know which reports are required of the ship's communication organization and by whom and to whom they are to be made under the following conditions:
 - (a) General quarters.
 - (b) Material conditions of readiness.
 - (c) Darken ship.
 - (d) Underway and anchoring.
 - (e) Eight o'clock reports.
 - (f) Emergency drills.
- .8 In port, the CWO will have additional matters which must be followed up and checked, such as:
 - (a) General messages.
 - (b) Officer messenger trips.
 - (c) Routing of messages to officers not on board.
 - (d) Telegrams.

CHAPTER FIVE
COMMUNICATION SECURITY

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SECTION B

5100. PHYSICAL SECURITY

5101. REPORTING IRREGULARITIES

- .1 All personnel are responsible for bringing to the attention of their immediate superiors any irregularities in communications which may affect communication security.

5102. IMPORTANCE OF PHYSICAL SECURITY

- .1 Maintenance of physical security assures the maximum protection of classified material from production to destruction. Classified material may be safeguarded from compromise by:
 - (a) Proper handling on the part of everyone concerned;
 - (b) Proper stowage when not in use;
 - (c) Complete destruction when necessary.

5103. PROTECTION OF CRYPTOSYSTEMS AND CRYPTOMATERIAL

- .1 The number of cryptosystems and quantity of cryptomaterial held shall be maintained at a minimum in the following situations:
 - (a) At exposed outposts;
 - (b) In aircraft;
 - (c) In ships operating in water under enemy control of such depths that salvage operations are practicable;
 - (d) Under any other circumstances where capture is a probability.
- .2 A GUIDE to assist in maintaining the proper safeguards for classified material follows:
 - (a) Are all personnel having access to classified material periodically warned of the danger of loose talk in public and private places?
 - (b) Are the combinations on safes which contain classified material changed every six months, or whenever any person having access to a safe is detached or transferred from the office?
 - (c) Is someone appointed to inspect each safe, desk, and file at the close of every working day to make certain that everything is stowed properly? Is a record made of each inspection?
 - (d) Are classified documents and material invariably locked up when not in use?
 - (e) Are burn bags used, and are wastebaskets checked each day to make certain that they contain no classified material, including short-hand notes, carbon paper, or rough drafts? Is classified waste material promptly and properly destroyed?
 - (f) Is it determined that notes regarding classified matter are not left on memorandum pages or under blotters? Are bulletin boards kept clear of classified matter?

★ 5110. PUBLICATIONS

5111. RPS PUBLICATIONS

- .1 Distribution of publications in the Registered Publications System (RPS) is effected through Registered Publication Issuing Offices (RPIOs), Sub Issuing Offices and Mobile Issuing Offices. A list of all RPIOs is contained in Registered Publication Memoranda RPS 36.
- .2 Accountability of RPS-distributed publications shall be in accordance with RPS 4.

5112. TECHNICAL PUBLICATIONS LIBRARY

- .1 OPNAV INSTRUCTION 5605.7 series contains complete instructions on the distribution, requisitioning, and stocking of publications issued by the Forms and Publications Supply Office System (FPSO).
- .2 Instructions for the operation and accountability of a Technical Publications Library are contained in NWP 0.

5120. DESTRUCTION OF CLASSIFIED MATTER

5121. ROUTINE DESTRUCTION

- ★ .1 Publications are ordered destroyed by CSPM, RPS 36, Letter of Promulgation of the publication itself where applicable, or by other specific directives. Except in an emergency, publications shall not be destroyed without specific authorization.
- .2 The holder shall destroy superseded and obsolete publications when destructions orders are promulgated, unless a standard instruction or special correspondence authorizes retention.
- .3 Routine destruction shall be completed promptly at the specified time in order that the amount of classified material subject to emergency destruction is kept at a minimum.
- .4 The authorized methods of routine destruction and the reports of unauthorized destruction are discussed in RPS 4.

5122. EMERGENCY DESTRUCTION BILL

- .1 The commanding officer shall direct the preparation of an emergency destruction bill, the execution of which is an all hands evolution from communication officer to striker. Responsibility under the destruction bill shall be delegated by duty and watch rather than by name. Alternates for each billet shall be provided.
- .2 Publications on board ships shall be stowed habitually in weighted perforated canvas bags. Material to be destroyed first should be marked in a distinctive manner.
- .3 Emergency destruction of cryptomaterial shall be carried out in accordance with the emergency destruction bill. (Chapter 6, KAG-1.) Accurate records should be kept of all registered publications destroyed when at all possible to do so.
- .4 Insofar as conditions permit, another officer should witness destruction. However, destruction should not be delayed to a point where it cannot be completed prior to sinking.
- .5 The commanding officer shall ensure that adequate personnel are trained to act efficiently in an actual emergency. (See Chapter 6, SECURITY MANUAL.)

5123. REPORTS OF EMERGENCY DESTRUCTION

- .1 Emergency destruction of cryptomaterial should be reported to higher authority immediately if communications exist. This is very important to future planning and operations. Plain language may be used as a last resort, quoting short titles only.

EXAMPLES:

- (A) A plain language message from Shanghai on 7 Dec 1951 -
ALL COMMUNICATION PUBLICATIONS AND CONFIDENTIAL PAPERS DESTROYED EXCEPT DITOF.
 - (b) A plain language message from Guam on 9 Dec 1941 -
ALL CODES DESTROYED.
 - (c) An encrypted message from Corregidor on 6 May 1942 -
NOW DESTROYING ALL REGISTERED PUBLICATIONS AND MILITARY EQUIPMENT.
- .2 When emergency destruction of classified communication material has been accomplished, a full report should be forwarded, as soon as possible, to the next senior in both the administrative and operational chains of command and also direct to the Chief of Naval Operations. The material destroyed, and method of destruction, and the extent of destruction of items not completely destroyed shall be indicated.

5124. UNAUTHORIZED DESTRUCTION

- .1 Known destruction of publications without proper authority, either by accident or through a misinterpretation of authority, shall be reported in all cases without delay in accordance with RPS 4.

SECTION C

5200. CRYPTOSEcurity

5201. CRYPTOSECURITY OFFICER

- .1 The commanding officer shall appoint an assistant communication officer for cryptosecurity who, through the communication officer, shall serve as advisor to the commanding officer in all matters relating to cryptosecurity and the physical security of cryptomaterials. He shall be responsible to the communication officer for the accurate, secure and efficient operation of the cryptocenter. In small commands the communication officer may serve as cryptosecurity officer.

5202. CRYPTOCENTER

- .1 A cryptocenter is maintained, under direction of the cryptosecurity officer, for the purpose of having a secure place in which to encrypt and decrypt messages and store cryptomaterial (codes, ciphers and related publications) ready for immediate use.

5203. CRYPTOFILES

- .1 Edited plain language copies of encrypted messages shall be stored as required for other material of the same classification except that copies of messages marked "PARAPHRASE REQUIRED" shall be stored in accordance with Article 0603 of the SECURITY MANUAL.
- .2 Cryptocenter File. See Article 3001.2.
- .3 Cryptoboard File. The cryptoboard may maintain a file of the encrypted version of all traffic sent to the cryptocenter. Each message contains a notation of the cryptoboard action. This file is divided into sections - incoming and outgoing. It may be kept on several boards in order to segregate scheduled files.

5315.3(p)(1) (Continued)

the message should be transmitted blind or put on an appropriate broadcast schedule.

- (2) When a unit afloat calls a shore station on a ship-to-shore circuit and receives no answer within a reasonable time, the ship should deliver the message via any available station, using an indefinite shore station call sign if necessary.
- (q) Failure to maintain radio watches on designated frequencies and at prescribed times.
- (r) Transmitting at speeds beyond the capabilities of receiving operators.
- (s) Use of excessive transmitting power.
- (t) Tuning transmitters with antenna connected.
- (u) Excessive time consumed in tuning, testing, changing frequency, or adjusting equipment.
- (v) Use of excessive beam width or of a light larger or brighter than necessary.
- .4 Use of profane, indecent or obscene language shall not be tolerated.

5316. OPERATOR TRAINING

- .1 Encrypted messages transmitted by radio, wire and visual means for the sole purpose of training operating personnel may employ call sign ciphers and authenticators at the discretion of the officer conducting the exercise (OCE).
- (a) Call sign ciphers will be employed in accordance with the effective call sign encryption plan.
- (b) Texts of messages will consist of random undecipherable groups. System indicators will be taken from a list of DRILL indicators.
- .2 Every plain language message transmitted by radio, wire or visual means solely for operator training will be identified by inclusion of the word DRILL at the beginning and end of the text.
- .3 Encrypted or plain language messages for training exercises, command post or tactical exercises, or maneuvers, will be prepared in the same manner as normal traffic.

5317. MONITORING

- .1 Stations and ships shall monitor their radio transmissions when practicable in order to reduce errors in procedure and violations of circuit discipline. Net control stations should monitor the transmissions of the net.
- .2 Monitoring by central control agencies under area or higher commands provides a check on the effectiveness of monitoring by net control stations, but is not a substitute.

5318. CONTROL OF OBSCENE AND PROFANE LANGUAGE

- .1 The elimination of profanity, obscenity, and unauthorized transmissions from naval communication circuits is essential to circuit discipline and transmission security. Use of such language shall not be tolerated.

5318. (Continued)

.2 The Federal Communication Act of 1934, Section 326 is quoted in part:

"Whoever utters any obscene, indecent or profane language by means of radio communication shall be fined not more than \$10,000 or imprisoned not more than two years, or both."

.3 Unauthorized and obscene transmissions are usually unaccompanied by call sign identification, therefore every effort must be exerted to identify the offending stations. To accomplish this, the use of tape recordings, accurate log keeping, note of operator characteristics, exact frequency measurements and direction finding bearings will help in proper identification.

.4 Where positive identification can be made, all incidents involving obscenity, profanity and serious cases of prolonged "operator chatter" shall be reported through the chain of command to the appropriate fleet commander-in-chief or naval district commandant for corrective action. The report shall be by letter and include appropriate enclosures citing the violation.

.5 If positive identification cannot be made, copies of the logs or recordings will be forwarded through the chain of command to the appropriate fleet commander-in-chief or naval district commandant concerned in order that he may be kept apprised of circuit discipline in his area.

5320. PROTECTION OF MEANS OF TRANSMISSION

5321. RADIO PROPAGATION FACTORS

.1 Radio waves, regardless of the frequency or emission, are at times propagated over distances beyond the normal usable ranges.

*.2 In particular, experience has shown that nominal line-of-sight distances at radio frequencies above approximately 30 megacycles are exceeded frequently. It may be assumed that, at times, signals may be propagated and intercepted:

- (a) In the 30-100 mcs band at distances exceeding 1000 miles;
- (b) In the 100-500 mcs band at distances of several hundred miles;
- (c) Above 500 mcs at distances of relatively less significance.

.3 It is essential that all concerned recognize the possibility of transmission of radio waves over extended distances, and maintain appropriate safeguards to prevent unauthorized interception.

5322. SECURITY OF RADIOTELEPHONE TRANSMISSIONS

.1 Careless or excessive use of radiotelephone is a serious hazard to communication security. Precautions in the use of radiotelephone are set forth in AFSAG 1248.

5323. SECURITY OF VISUAL TRANSMISSIONS

.1 Visual communication ordinarily is preferable to radio except when in close contact with enemy units at night.

.2 Transmission by visual means of a classified message in plain language shall be authorized only after careful consideration has been given to the necessity for sending in plain language and to the possibility of interception by unauthorized persons.

.3 Relative security of various visual systems:

- | | | | |
|-----------|-----------------------------------|-------------|-------------------------------------|
| (a) Day - | (1) Semaphore | (b) Night - | (1) Infra-red communication systems |
| | (2) Directional flashing light | | (2) Directional Flashing light |
| | (3) Panels | | (3) Pyrotechnics |
| | (4) Flaghoist | | (4) Nondirectional flashing light |
| | (5) Pyrotechnics | | |
| | (6) Nondirectional flashing light | | |

.4 The aperture of flashing light equipment shall be kept as small as

CHAPTER SIX

MEANS AND METHODS OF COMMUNICATIONS

SECTION A

6000. TYPES OF NAVAL COMMUNICATIONS

6001. OPERATIONAL COMMUNICATIONS

- .1 Communications directing or affecting the actual movement of forces, ships, troops and aircraft to or in the area of combat, whether real or simulated, are operational. Weather and other vital reports affecting the safety of life, ships, forces or areas also are operational.
- .2 Examples:
 - (a) Tactical communications.
 - (b) Combat intelligence, enemy reports, or information having vital bearing upon the disposition, movement or employment of forces.
 - (c) Strategic or vital weather reports.
 - (d) Control of communications, cryptography, and deception and counter-measures.
 - (e) Hydrographic information.
 - (f) Combat logistics. (Orders requiring logistic provisions of immediate importance to operations in progress.)

6002. ADMINISTRATIVE COMMUNICATIONS

- .1 Administrative communications are communications which deal with routine matters, personnel, routine reports, logistic requirements and similar subjects.
- *.2 PRIORITY is the highest precedence which will normally be assigned to administrative traffic.

6003. MEANS OF TRANSMISSION

- .1 Naval messages may be transmitted by physical delivery, by telecommunications, or by any combination of the two.
- .2 Where time considerations permit, physical delivery will be used in preference to telecommunications. This action, however, should not violate the policy that correspondence (letters, speedletters, etc.) will be used whenever possible.

6010. PHYSICAL DELIVERY

6011. DESCRIPTION

- .1 Physical delivery, as the name implies, is transportation of the message from the communication center of the originator to that of the addressee. U.S. Mail, guardmail, Armed Forces Courier Service, and local messenger are examples of such transportation. Plane, message drop, boat, diplomatic pouch or any other available system of transportation may be used with due regard to the security of the matter involved.

6012. ADVANTAGES

- .1 Physical delivery is of great value in relieving congestion over communication circuits, particularly in the case of long messages wherein no immediate action is required. In addition, when circuits are heavily loaded and the distances involved are comparatively short or mail service is regular and good, delivery will in many cases be faster by proper employment of physical delivery. This is particularly true as regards classified messages which, if sent by a telecommunications means, would have to be encrypted and decrypted.

* 6013. PROCEDURE

- .1 Messages to be mailed are prepared by the originator in exactly the same manner as any other message.
- .2 When a classified message is to be sent to selected addressees in plain language by mail and to other addressees in encrypted form, the copies sent by mail shall be processed in accordance with the rules that govern the processing of plain language copies at cryptocenters.
- .3 When encrypted call signs and/or address groups have been used in conjunction with unclassified text, security precautions set forth in NWIP 16-1, Chapter 20, and ACP 121, Chapter 6, must be applied.
- .4 All copies of messages forwarded by mail will bear the date-time group, and, where applicable, the general message serial number. Ensure that all copies of classified messages bear the true date-time group vice external date-time group.
- .5 All copies of messages forwarded by mail will bear a communication/signal center stamp or the signature of a responsible person.
- .6 If the message is delivered directly to the office of destination, receipt of delivery together with the time of delivery will be obtained, and this data should be entered on the file copy of the message prior to permanent filing by the office of origin. If the message is not to be delivered directly, the time of placing into a delivery system, location, and system (e.g. air mail, ARFCOS, etc.) will be entered on the file copy of the message prior to permanent filing.
- .7 The envelopes containing copies of messages will be addressed to the commanding officer of the ship or command marked "DELIVER TO MESSAGE CENTER". When forwarded to Army or Air Force activities, the envelopes will be addressed to the activity itself.
- .8 The physically delivered copy shall be clearly marked "DELIVER TO MESSAGE CENTER IMMEDIATELY UPON RECEIPT FOR HANDLING AND DISTRIBUTION".
- .9 When two or more mail addressees are known to be served by a common message center, only one copy of a message need be mailed. This copy should be addressed to the command having direct operational control of the message center.
- .10 When telecommunications is required to some addressees, no saving is effected by mail delivery to other commands served by the same message center as a telecommunications addressee.

6020. TELECOMMUNICATIONS

6021. TELECOMMUNICATIONS

- .1 The term telecommunications embraces any transmission, emission, or reception of signs, signals, writing, images and sound or intelligence of any nature by visual or oral means, or by wire, radio or other electromagnetic systems.

6021. (Continued)

- .2 Telecommunications means are as follows:
 - (a) Sound.
 - (b) Visual.
 - (c) Electrical (wire or radio).
 - (1) Telegraph.
 - (2) Teletypewriter.
 - (3) Telephone.
 - (4) Facsimile.
 - (5) Other emissions.

6030. SOUND

6031. SIGNALING BY SOUND

- .1 Use of sound for communication is limited to certain prescribed sound signals, such as the signals prescribed for vessels by the RULES OF THE ROAD, for air raid alerts, etc. When locally arranged sound signals are used in special circumstances, care must be exercised that they do not conflict with more commonly used signals and thereby confuse ships or stations not familiar with the special signal.
- .2 Instructions for sound communications between ships in convoy are contained in WARTIME INSTRUCTIONS FOR MERCHANT SHIPS--VISUAL SIGNALING AND TACTICS (ACP 148).

6032. UNDERWATER SOUND DEVICES

- .1 Ships so equipped may anticipate the use of underwater sound for communications.
- .2 Sonar communications shall be conducted in accordance with radiotelegraph and radiotelephone procedure as appropriate.

6040. VISUAL

6041. VISUAL SYSTEMS

- .1 Visual communications are those means wherein the receiver detects optically the intelligence transmitted. Types of visual means are:
 - (a) Flashing Light.
 - (1) Directional.
 - (2) Nondirectional.
 - (3) Infra-red communications.
 - (b) Semaphore.
 - (c) Flaghoist.

6042. INTERCEPTION OF VISUAL COMMUNICATIONS

- .1 Commanders must control the use of flashing light and other easily intercepted plain language visual communications in areas where interception by enemy forces, agents, or other unauthorized persons is possible.
- .2 Where practicable, visual means will be used for communication in preference to radio. At night, when consideration must be given to the possibility of divulging the ship's position or when there is probability of enemy interception, line-of-sight radio is preferable.

6043. VISUAL SILENCE

- .1 The officer in tactical command (OTC) will prescribe visual silence when it is deemed necessary. Under conditions of visual silence there shall be no signaling by visual means between sunset and sunrise except:
 - (a) Essential recognition signals.
 - (b) Essential messages transmitted by means of infra-red communications.
- .2 Night cruising orders should be issued early enough to permit their transmission to all addressees before sunset.
- .3 The commander should be informed of the status of visual traffic at nightfall so that important messages requiring relay may be transmitted by other means, or that the originator be advised of delay in delivery.

6044. VISUAL RESPONSIBILITY

- .1 In visual communications, relaying is accomplished automatically when the call-up is made by using a collective call sign. A message to be relayed should be passed on item for item when possible. The object is a minimum lag between the originator's transmission of each item and its accurate delivery to the last addressee.
- .2 The general rule for determining the responsibility for any situation is that each addressee is responsible for the delivery of the message to addressees beyond himself in the general direction away from the originator. No rule set forth herein, or prescribed by responsible commanders, shall be interpreted as restricting the initiative of any ship in relaying a message to an addressee failing to respond when called. It is the duty of any ship to expedite the transmission of a message by relay when it is evident that she is in a better position to effect the necessary relay than the ship specifically responsible.
 - (a) Single Line Formations. Any given ship is responsible for other ships in the direction away from the originating ship.
 - (b) Multiple Line or Circular Formations and Dispositions. Each task force (group) commander is responsible for his own task group (unit) commanders and also for other task force (group) commanders in a direction away from the originating ship. In turn each task unit commander is responsible for the division or line leaders of his own unit and for other unit commanders and ships in a direction away from the task group commander. The division or line leader is responsible for the ships of his own division or line, and each ship of the division or line is responsible for the ships in the division or line in a direction away from the leader.
 - (c) Dispositions. In any disposition or formation the chain of visual responsibility shall be governed by the rules set forth above unless modified by responsible commanders.
 - (d) Alterations. When a maneuver alters the position of units and ships relative to the OTC the responsibility for relaying signals does not alter until all ships complete the maneuver. Screening ships should assume responsibility for delivery of recent screen traffic to ships joining or rejoining in their sector of the formation.
- .3 The potential efficiency of the visual installations in various ships or types should be taken into consideration when prescribing sectors of visual responsibility.

6111. (Continued)

- (a) Each net will be established in accordance with instructions from competent authority.
- (b) Prior to activating a net, any special instructions will be promulgated to each station.
- (c) Procedure prescribed for the means employed will be used.
- (d) Stations are required to report to the NCS prior to leaving the net or securing the net for a period of time, giving the approximate time of re-entering the net. Emergency situations should be considered separately.

6112. NET CONTROL STATION

- .1 The NET CONTROL STATION is a station designated by appropriate authority to direct and control the operation and flow of all traffic on the net. The station serving the senior command normally is designated as the NCS. It may be any station on a net, however, which can best fulfill the functions of exercising circuit discipline and expediting traffic.
- .2 An NCS is charged with the following responsibilities:
 - (a) Expediting traffic on the net.
 - (b) Maintaining circuit discipline.
 - (c) Limiting transmissions to the essential minimum.
 - (d) Resolving disputes incident to traffic handling.
 - (e) Monitoring traffic to determine and initiate corrective action of procedural discrepancies.
- .4 Authority of the NCS extends only to the net operation. It is not intended that the NCS have jurisdiction over the local administration of individual stations within the net. Within its scope of authority, decisions of the NCS are final.

6113. ALTERNATE NET CONTROL STATION

- .1 In order to provide for emergency situations an alternate NCS should be appointed. The designated alternate NCS should take charge of the net when the normal NCS is inoperative for any reason. When in control of the net, the alternate NCS will assume the NCS's responsibilities.

6114. FREE NET

- .1 When operational factors permit, the net may operate as a FREE NET, in which case the NCS authorizes member stations to transmit traffic to other net stations without obtaining prior permission from the NCS.
- .2 FREE NET operation does not relieve the control station of the responsibility for maintaining circuit discipline.

6115. DIRECTED NET

- .1 When operational requirements dictate that net stations obtain the NCS's permission prior to transmitting on the net, it is advisable to operate as a DIRECTED NET. Normally, directed nets are necessary when complicated traffic patterns or security factors exist which warrant direct control of each transmission by the NCS.
- .2 Transmissions on a directed net may be accomplished in accordance with predetermined schedules.

6116. TYPES OF NETS

.1 The type of net and method of NCS operation are determined from consideration of operational factors involved. In reaching a decision, it should be remembered that certain equipment and net arrangements are more rapidly adaptable to free interchange of messages than others.

.2 By usage, radio nets may be classified into three types:

(a) Command net is one linking any commander with his immediate subordinates in the chain of command and such other units as may be designated.

EXAMPLE: TASK FORCE COMMAND - Activated by the task force commander; guarded by task group commanders.

(b) Common net is one linking all ships or troop units of a designated task organization.

EXAMPLE: TASK GROUP COMMON - Activated by the task group commander; guarded by ships or troop units within the task group.

(c) Functional net is one normally used to connect directly those personnel delegated control of a specified function for which the net is provided.

EXAMPLE: PICKET REPORTING NET

*6117. NET TRANSMISSIONS

- .1 When deemed advisable, the NCS should prescribe the speed of transmission on a radiotelegraph circuit, or the qualifications of the operators to be employed during specific periods.
- .2 When authorized by the NCS, and operators hold speed key certificates, speed keys may be employed on manually operated radiotelegraph nets if traffic conditions warrant and operator capabilities permit.

6120. SHIP-TO-SHORE CIRCUITS

6121. USE OF SHIP-TO-SHORE CIRCUITS

- .1 Ship-to-shore circuits are the primary means for delivery of traffic from individual ships and afloat commands to shore addressees.
- .2 Ship-to-shore frequencies shall not be used for point-to-point, or ship-to-ship operation, or for any purpose other than ship-to-shore communication. Exception may be made only for traffic of extreme urgency and importance.
- .3 In the event that radio silence has to be broken to transmit a message of importance to operations, one of the measures below may serve to minimize the significance of the transmission to the enemy.
- (a) If the presence of the force has been discovered, or is believed to have been disclosed to the enemy, the regular ship-to-shore communications, using cryptographic channels, may be employed. But either call sign encryption or codress procedure and indefinite call signs in the call-up should be used.
- (b) An aircraft or ship capable of fairly long range radiotelegraph communications may be sent to a position some distance from a task force to transmit important traffic to shore stations via ship-to-shore circuits.

6121. (Continued)

- .4 Where it is contemplated to handle ship-to-shore traffic on tactical circuits, instructions for the handling of such traffic should be specific, with channels designated for the flow from each echelon of command. In cases not covered by such specific instructions, the ship-to-shore frequencies should be used.

6122. LOCAL HARBOR NETS

- .1 Local harbor nets are provided in fleet ports where visual and other means do not suffice.
- .2 The Senior Officer Present Afloat will designate the net control station and prescribe rules for the administration and operation of the net.
- .3 If not already provided, and the Senior Officer Present Afloat determines that its need is justified, he may establish a local harbor net.

6123. LOCAL SHIP-TO-SHORE CIRCUITS

- .1 Where circumstances require a local ship-to-shore radio circuit, and regular shore naval radio facilities are not adequate, such a circuit may be instituted at the direction of the SOPA. This special circuit should be utilized primarily for official traffic.
- .2 The following rules will govern the administration of local ship-to-shore circuits:
 - (a) A fleet frequency designated by SOPA will be used.
 - (b) The shore station installation will be augmented by fleet personnel.
 - (c) SOPA will designate a call sign to be used.

6124. REPLIES TO COMMANDS ASHORE

- .1 A commander afloat may disregard instructions received from a commander ashore to reply or report by message, if in his opinion the sending of the message reply or report is prejudicial to the mission, is contrary to communication restrictions currently effective, or the tactical situation does not permit.

6130. POINT-TO-POINT CIRCUITS

6131. FIXED CIRCUITS

- .1 Point-to-point circuits are those fixed radio and wire circuits established for communications between shore stations or facilities.
- .2 Point-to-point circuits of the Naval Communication System are usually multi-channel with trunk line capacity for large traffic loads.
- .3 Fixed stations operating point-to-point circuits shall employ a separate daily series for each channel with each fixed station with which they are in communication.

6132. HOURLY IDENTIFICATION

- .1 All Navy fixed radio stations are required to send their international call signs on each frequency employed in nontactical point-to-point service at the beginning and end of operation, and at least once an hour during continuous operations. Stations engaged in tape relay operation may comply by using their international call signs during

6132. (Continued)

th hourly exchange of number comparisons.

- .2 In order to comply as far as practicable with international treaties to which the United States is signatory, and in cooperation with the Federal Communications Commission, identification will be made as follows:
- (a) Radiotelegraph transmissions shall be identified by sending the prosign DE and the call sign in International Morse Code.
 - (b) Radiotelephone transmissions shall be identified by speaking the proword THIS IS and the letters of the call sign.
 - (c) Radioteletypewriter transmissions shall be identified by transmitting the prosign DE and the call sign. Identification will be made on each channel of multiple channel circuits.
 - (d) Radio-facsimile transmissions shall be identified by any or one of the preceding methods after removing the facsimile signal. Pictures need not be interrupted to comply with the hourly identification.
 - (e) When using twin channel single sideband with radiotelephone on one channel, identification shall be made only as in sub-paragraph (b) above.

6133. DOMESTIC POINT-TO-POINT FIXED OPERATION

- .1 Policy for domestic point-to-point fixed operation is contained in JANAP 195.

6134. CONFERENCE CIRCUITS

- .1 Teletypewriter conference circuits (TELECON), are provided for employment on circuits as specifically authorized by the Chief of Naval Operations (DNC). Teletype conference procedure is set forth in Subsection 13040.

6135. USE OF POINT-TO-POINT CIRCUITS BY FORCES AFLOAT

- .1 Forces afloat at or near advance bases or staging points should use fixed circuits for delivery of traffic to rear areas rather than high frequency ship-to-shore circuits. If not at anchor in the harbor, such traffic may be delivered to shore stations via low power local ship-to-shore or harbor nets. When in port, it should be delivered by visual or guard boat.
- .2 When filed, the message should be encrypted, if required, and ready to be transmitted.

6140. AMATEUR RADIO

6141. AMATEUR RADIO STATIONS AFLOAT

- ★ .1 Amateur radio stations on board naval vessels are prohibited except when specifically authorized by the Chief of Naval Operations (DNC). Such authorized amateur radio stations are to be operated in compliance with regulations stated in OPNAV INSTRUCTION 2070.2 series.
- ★ .2 In general, the Chief of Naval Operations encourages amateur radio operations on board U.S. Navy ships when such operations can be conducted in consonance with the operational employment schedule and where security considerations can be met. Requests for specific authorization for each individual case should be submitted to the Chief of Naval Operations (DNC) via the normal chain of command well in advance of

6141.2 (Continued)

desired operations. Approval, if granted, will authorize the operation of the amateur radio station for a limited period only, and may authorize the use of installed Navy radio equipment. Operators of all amateur radio stations must hold a valid amateur radio license issued by the Federal Communications Commission (FCC). The Chief of Naval Operations (DNC) does not assign amateur call signs for shipboard operation. Authorization will normally be granted for operations using the FCC assigned call sign of one of the licensed operators on board. Requests for authority to operate should include the name and call of the operator whose call will be used. All other licensed operators aboard may operate from this station provided that logs are signed and countersigned by the operator whose call sign is being used. Compliance with FCC regulations for Maritime Mobile Operations is mandatory for all amateur stations so authorized.

- .3 Transmissions from naval ships to amateur radio stations are prohibited, except:

- (a) In an emergency.
- (b) Upon specific authorization by the Chief of Naval Operations (DNC).

6142. AMATEUR RADIO STATIONS ASHORE

- .1 The following general provisions govern the installation and operation of amateur radio stations within U. S. naval reservations in areas where the conduct of communications is subject to regulations by the FCC. Detailed instructions governing the installation and operation of amateur radio stations within U. S. naval reservations are contained in OPNAV INSTRUCTION 2070.2:

- (a) Amateur radio equipment may, at the discretion of the commander, be placed in the same compartment with naval radio equipment, provided the prescribed technical standards are met.
- (b) Interference with naval communications and other hazards must be avoided.
- (c) All amateur station installations within a naval reservation shall be made with the commander's approval. Records will be kept of all amateur stations installed within a command.
- (d) Amateur stations located within naval reservations and licensed to an individual residing outside the reservation will be authorized only for use in connection with training of the Naval Reserve or morale of naval personnel.
- (e) Stations operating within the amateur frequency bands require amateur station licenses. Naval Reserve stations, operating on government (U. S. Navy assigned) frequencies, do not require amateur licenses.
- (f) Individuals desiring a license for an amateur station to be installed on a naval reservation shall prepare the usual FCC application. The application will be forwarded via official channels to the District or River Command Commandant. If approved, the commandant will forward the application to the FCC office having cognizance of licensing in the area.
- (g) Amateur applications must be prepared in the name of an individual without indication of military status.
- ★ (h) FCC regulations require that the applicant have absolute responsibility for the control of any transmitter when used in the amateur

6142.1(h) (Continued)

service and that the transmitter be used only with a personal aim and without pecuniary interest. Other licensed operators may use the station provided that they operate under the station's designated call sign and that the logs are signed by the actual operator and countersigned by the custodian of the station.

- (i) Although the amateur licensee is legally responsible for all transmissions made by his transmitter, the commander concerned may regulate the time during which an amateur station on a naval reservation under his command may be operated, and at his discretion may revoke authority for operation.
- (j) Some measure of censorship or control should be exercised by the command so as to prevent transmissions injurious to Navy interests.
- (k) Amateur radio stations within naval reservations shall transmit no information relative to the use, availability, or arrangement of government equipment and facilities.

6143. ASHORE AT OVERSEAS BASES

- .1 Authorization for the installation and control of the operation of amateur radio stations within naval reservations overseas, in areas not subject to FCC regulations, shall be vested in the area commander, subject to such rules as may be prescribed in the area by the cognizant regulatory authority. Appropriate provisions of paragraph 6142.1, above, shall be observed.

6144. MERCHANT SHIPS UNDER NAVAL CONTROL

- ★.1 The use of amateur radio stations on board merchant ships, when under naval control, is permitted when authorized by the Chief of Naval Operations (DNC). Amateur radio stations on board merchant ships under naval control shall meet the same criteria established for U. S. naval ships.

6145. PEACETIME OPERATION WITHIN AMATEUR FREQUENCY BANDS

- .1 Joint military policy provides that during normal peacetime conditions amateur frequency bands will not be employed for military communications in the continental U.S. and possessions except as authorized by the Interdepartment Radio Advisory Committee or by special agreement with the FCC.
- .2 Within interference range of the continental U.S. and possessions, frequencies in the high frequency amateur bands (3500-4000 kc., 7000-7300 kc., 14,000-14,400 kc.) shall not be employed without prior coordination with the Chief of Naval Operations.
- .3 Various types of military transmitting equipment, such as handie-talkie, may be supplied with crystals which operate within the amateur frequency bands. The existence of these crystals does not authorize operation on the amateur frequencies concerned.

6150. CALIBRATION OF EQUIPMENT

6151. CALIBRATION

- .1 All transmitters and receivers will be calibrated to all frequencies within their range which are allocated by the frequency plan to be used by the fleet, force, type or unit.

6151. (Continued)

- .2 During wartime, calibration of transmitters will be made while in port at bases as far from the enemy as practicable, preferably during upkeep or training periods.
- .3 During calibration, antennas will be grounded and the transmitter will be tuned through all stages preceding the antenna stage. Final tuning of the antenna stage will require actual emissions on the air. The lowest possible power should be utilized and due consideration should be given to calibrating the antenna stages when distant transmissions are least possible. Generally speaking, for frequencies below 15 mc., antennas should be tuned around midday; between 15 and 30 mc., well after dark. VHF and UHF antennas may be tuned in the daytime. Prior to tuning the antenna stage the operator shall monitor the frequency concerned to insure that further tuning will not hamper communications on that frequency.



6221.1 (Continued)

weather broadcast schedules are not specifically addressed (i. . the broadcast station transmits to a general call - CQ) whereas MERCASTS and press schedules are specifically addressed (i.e. station transmits to a specific call sign - NUKO, NERK, ETC.).

6222. HYDROGRAPHIC INFORMATION

- .1 Hydrographic information relating to Western Atlantic waters is broadcast in the HYDROLANT series, either numbered or unnumbered, according to general or local interests. A similar series, HYDRO PAC, is issued for Pacific waters.

6223. MERCHANT SHIP BROADCASTS (MERCAS T)

- .1 The MERCAS T schedules are used primarily for delivering messages to ships of the Military Sea Transportation Service while at sea; to merchant ships routed by the Naval Control of Shipping Organization, or when prior arrangements have been made.
- .2 Unless otherwise directed, MERCAS T schedules are not copied by:
 - (a) MST S contract operated tankers, which shall be governed by the Tanker Operating Instructions (TANKOPINS). MST S contract operated tankers follow commercial practices, hence their communications are governed generally by commercial procedures.
 - (b) Alien manned MST S ships. Detailed instructions shall be issued by the appropriate MST S authority.
- .3 Due to the operating requirements peculiar to the several categories of ships copying MERCAS T schedule, the method of conducting these broadcasts differs from that followed by specifically addressed broadcasts in the following:
 - (a) Use of a traffic list. The traffic list is normally the first item to be transmitted, and consists of the call sign and date time group (transmitted twice) of each message awaiting transmission, listed in order of precedence. Ships directed to copy MERCAS T will copy the traffic list of all appropriate schedules. When all messages addressed to the ship, as indicated by the traffic list, have been copied or if no messages addressed to the ship are included in the traffic list, the ship may cease copying this schedule.
 - (b) Use of different message forms. MST S ships-in-commission (USS) and MST S ships-in-service (USNS) (Civil Service Manned) (CS) use both the naval and international commercial form. MST S ships-in-service (USNS) (Contract operated tankers, Alien manned ships), and merchant ships sailing under NCSORG control or other arrangements use the international commercial form only.
 - (c) Messages normally will be transmitted at a speed between 17 and 29 words per minute.
 - ★ (d) Restriction of the use of operating signals. Operating signals taken from the military portion of ACP 131 ("Z" signals), as well as international "Q" signals, may be used for traffic addressed only to MST S ships in commission (USS). International "Q" signals will be employed for traffic addressed to all other categories of MST S ships and merchant ships.
 - ★ (e) The following table will serve as a guide in transmitting messages on MERCAS T to the several categories of MST S ships:

6223. (Continued)

	AUTHENTI- CATION	ADDRESS GROUPS	PLAIN LANGUAGE ADDRESS	Z SIGNALS	JANAP 195
<u>MSTS SHIPS:</u>					
Commissioned (USS)	YES	YES	YES	YES	YES
	Copy MERCASST at sea. Make guardship or other arrange- ments while in port.				
Non-commissioned					
Civilian-manned (USNS) (CS)	NO	YES	YES	NO	NO
	Copy MERCASST at sea. Permitted to secure in port if suitable arrangements for delivery of traffic are made locally.				
Contract-operated Tankers (USNS)	NO	NO	YES	NO	NO
	Copy MERCASST only when routed by NCSORG or when operat- ing under other special conditions. All other times guard commercial facilities. The extent of MERCASST coverage is contained in the movement report.				
Alien-manned (USNS)	NO	NO	YES	NO	NO
	Copy MERCASST only when directed by cognizant area commander. Detailed instructions will be promulgated.				

MERCHANT SHIPS (SS):

Time chartered or Voyag chartered	NO	NO	YES	NO	NO
	Normally copies established commercial facilities. When special operations require it, arrangements will be made to augment or replace the commercial facilities by pro- viding for the use of Navy facilities, in which case all activities concerned will be informed.				
Space chartered	NO	NO	YES	NO	NO
	Copy MERCASST only in emergencies as listed in HO 205, Appendix A, Sections 1 and 2.				

- .4 MSTS commissioned ships (USS), in addition to copying MERCASST, also copy the general message schedules of the fleet broadcast appropriate to the area.

6224. PRESS

- .1 Press is transmitted on General Broadcasts at scheduled times. This material is purchased by the Navy from the press associations with the general provision that it will not be placed into competition with the normal press association outlets and commercial subscribers of the associations. The press may be copied by any U.S. Naval ship, including USNS MSTS ships for consumption by members of the Armed Forces, their dependents, other passengers sponsored by the Department of Defense who are being transported in ships of the Military Sea Transportation Service, and Civil Service crewmen of USNS ships. It may also be used by naval personnel at remote shore activities outside the Continental U.S., provided no source of commercial press is available.

6224. (Continued)

- .2 Where disclosure to unauthorized persons is a possibility, all copies of naval press should be marked FOR OFFICIAL USE ONLY. DESTROY AFTER IT HAS SERVED ITS PURPOSE. THIS PRESS MUST NOT FALL INTO UNAUTHORIZED HANDS.
- .3 Special arrangements may be made for the copying of commercial press.

SECTION D

6300. EMERGENCY, DISTRESS AND SAFETY TRAFFIC

6301. INTERNATIONAL REGULATIONS

- .1 Regulations concerning emergency, distress and safety traffic are promulgated by the International Telecommunication Union (ITU) in its publication, INTERNATIONAL TELECOMMUNICATION AND RADIO CONFERENCES, ATLANTIC CITY, 1947. Pertinent extracts as quoted in Chapter 5 of RADIO AIDS TO NAVIGATION (HO 205) and in COMMUNICATION INSTRUCTIONS-DISTRESS AND RESCUE PROCEDURE (ACP 135) should be understood clearly.

6302. NAVAL VESSELS IN DISTRESS

- .1 Communications originated by naval vessels will be transmitted on appropriate naval communication channels whenever practicable rather than on international and national distress frequencies.

6303. DISTRESS FREQUENCIES

- ★.1 Emergency and distress frequencies:
 - (a) 500 KC - International calling and distress frequency.
 - (b) 2182 KC - International distress and calling frequency for the Maritime Mobile Service (Telephony)
 - (c) 8364 KC - International lifeboat, life raft, and survival craft frequency.
 - (d) 121.5 MC - International aeronautical emergency frequency for the VHF band.
 - (e) 243.0 MC - Aeronautical emergency frequency for UHF band.
- .2 The International Calling and Distress Frequencies (500 kc. and 8364 kc.) are the normal intra-convoy frequencies for emergency communications. This does not preclude the use by commanders of escort units of a suitable frequency for the convoy tactical and warning net when the ships conveyed are suitably equipped.

6304. DISTRESS WATCHES AFLOAT

- .1 Every detachment or independent ship or unit shall maintain a guard or cover of the emergency and distress frequencies unless exempted by one of the following:
 - (a) Interference with military effectiveness. If the OTC or the officer ordering the movement determines that maintaining such guard or cover will interfere with the military effectiveness of the ship or

6304. (Continued)

unit, he may exempt the ship or unit from this requirement.

(b) Ships in port or operating in local operating areas. The SOPA may authorize ships in port and ships operating in specified local operating areas under his jurisdiction to secure watch on distress frequencies, provided he has determined that adequate coverage is maintained by guardship, or by a shore radio station in the vicinity.

- .2 As a minimum requirement, the distress frequencies (500 kc. and 8364 kc.) will be covered by loudspeaker watches during working hours. Particular attention shall be paid to the silent periods observed on 500 kc. A log shall be maintained covering at least the silent periods. When sufficient personnel are available a continuous or split-phone watch with log shall be maintained on the distress frequencies. For ships copying the one or two-operator periods of the fleet broadcast schedule, working hours will be considered to be the times of these broadcasts. For ships carrying three or more operators, working hours will be considered to be continuous.
- .3 If equipment is available, and subject to the provisions of Article 6304.1, a continuous guard or cover shall be maintained on the aeronautical emergency frequencies (121.5 mc. VHF and 243.0 mc. UHF).

6305. DISTRESS WATCHES ASHORE

- .1 All naval shore radio stations open to public correspondence shall maintain a continuous receiver watch on 500 kc. They shall be particularly alert on the frequency during silent periods. A list of Navy and Coast Guard shore radio stations maintaining guard on 500 kc. and 8364 kc. is contained in JANAP 195.
- .2 In order to enhance safety at sea and in the air each naval district commandant shall maintain such additional watches on distress frequency as may be appropriate.
- .3 All Air Force communication centers and air defense control centers guard the distress frequencies.

6306. INTERNATIONAL FORM

- .1 When answering a distress message, the following international form shall be used:
 - (a) Call sign of distress ship (three times), the prosign DE, call sign of own ship (three times), RRR SOS.
 - (b) At the discretion of the commanding officer, a ship receipting for a distress message will give its name, position in latitude and longitude and the maximum speed at which it is proceeding toward the vessel in distress.
- .2 The vessel making the distress call shall be the control station for distress traffic. Any station, however, may impose silence on all stations in the zone of any one station causing interference with the distress traffic. The operating signal QRT, followed by the word DISTRESS and addressed either TO ALL (CQ) or to any one station, will be used.

CHAPTER SEVEN
PREPARATION OF MESSAGES

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7011.1(b) (Continued)

Relay of Class E messages between Navy coastal radio stations on the same coast is authorized when a Naval ship travels from one broadcast area into another. Relay of Class E messages between Atlantic and Pacific coastal radio stations by Naval communications is prohibited.

A modified version of the Class E message privilege is provided to addressees outside the continental U.S. Such messages are designated as Class D. They are handled over Navy circuits without charge.

7012. NAVAL STATIONS OPEN TO COMMERCIAL MESSAGES

- .1 The following naval shore radio stations are open to commercial messages (Class D) between ship and shore:
 - (a) Kodiak (NHB).
 - (b) Balboa (NBA).
 - (c) Guam (NPN).

7013. RED CROSS MESSAGES

- .1 The American Red Cross is entitled to use, without charge, the facilities of naval communications for sending and receiving messages regarding Red Cross administration and emergency welfare in connection with Red Cross activities, functions, and duties as prescribed in Article 0738 of U.S. NAVY REGULATIONS.
- .2 In each specific case this privilege is subject to the approval of the commanding officer having cognizance of the communication office to which a message is presented for transmission. He shall refuse to accept such messages for transmission or relay when, in his opinion, the handling of such messages would be detrimental to naval administration or operations.
- ★.3 Red Cross messages are handled as Class B messages and normally are in plain text. Red Cross messages concerning death, serious illness, and critical injury to U.S. military personnel or their immediate family, may be assigned a precedence up to and including PRIORITY on the facilities of naval communications. All other Red Cross messages normally shall be assigned DEFERRED precedence. However, Red Cross messages handled by naval communications during a civilian disaster, where the Navy is assisting, may be given equal precedence with military traffic at the discretion of the senior officer present at the scene of disaster.
- .4 Red Cross messages shall not be accepted for transmission unless delivery can be effected entirely by naval communications, except as provided below.
- .5 When emergencies or disasters occur involving relief work by the Red Cross, the district commandant or senior officer in the area affected may forward Red Cross messages over naval circuits whether in the interest of armed forces personnel or not, provided such messages will not involve other line charges and are handled as directed. If other line charges are involved, commanders should take such action as deemed appropriate and necessary to insure delivery, advising the Chief of Naval Operations of the pertinent details of his action.

7020. GENERAL MESSAGES

7021. DEFINITION

- .1 A general message is one which has a wide standard distribution. It is assigned an identifying title. Each message of a given title carries a serial number in a sequence which covers a calendar year.
- .2 While the commands directly concerned receive general messages as action addressees, it is their responsibility to determine what action, if any, need be taken.
- .3 Addressees not under the jurisdiction of the originator, or in an area outside the one covered by a general message, receive copies purely for information.
- .4 A copy of each general message appropriate to the command is placed in the general message file, segregated by types and filed according to serial numbers.
- .5 General messages shall be retained until canceled or superseded. It is the responsibility of the originating office to cancel each general message it has initiated as soon as it is practicable.
- .6 Except for general message series incorporated into the Navy Directive System and those incorporated into RPM or CSPM, originators of each series of general messages shall promulgate, as the first message of that series for the calendar year, a list of the previously issued messages of that series which remain effective. This message shall be unclassified even if some of the messages listed are category B, unless classification is necessary because of other information in the message.
 - (a) General messages incorporated into the Navy Directive System in accordance with SECNAVINST 5215.1, i.e. ALNAV, ALNAVSTA, ALSTACON, ALSTAOUT, NAVACT, NAVOP and such others as may be prescribed by issuing authorities are canceled as follows:
 - (1) By a superseding message or directive.
 - (2) By cancellation date indicated in the text of the message.
 - (3) At the expiration of 90 days from the release date if neither (1) nor (2), above, has occurred.
 - (b) Those general messages whose contents have been incorporated into RPM or CSPM shall be considered canceled.
- .7 Distribution of general messages shall be in accordance with the charts on pages 7-8 and 7-9. The Chief of Naval Operations will be accorded automatic distribution on all general messages contained in the charts mentioned above. The Chief of Naval Operations may be accorded distribution of those general messages authorized by Article 7023 at the discretion of the originating authority.

7022. TYPES OF GENERAL MESSAGES

- .1 Types of general messages are as follows:
 - (a) ALCOAST. Originated by the Commandant, Coast Guard. ALCOAST is the Coast Guard equivalent to ALNAV. The Navy is responsible for delivery to Coast Guard units operating directly with the Navy.
 - (b) ALCOM. (To all commands) Originated by the Chief of Naval Operations (usually DNC). ALCOM designates those general messages which were designed for, but not restricted to, the promulgation

7022.1(b) (Continued)

of communication information. ALCOMs will not be sent by rapid means to naval missions, advisory groups, aid groups, attaches or liaison officers unless specifically requested by the drafter or releasing officer. When distribution of a classified ALCOM to any of the above activities is considered unnecessary or undesirable, the drafter or releasing officer will specifically indicate this fact and an unclassified filler sheet rather than the ALCOM will be mailed to the nonreceiving activity.

- (c) ALCOMLANT. Originated by the Chief of Naval Operations (usually DNC). ALCOMLANT is a subdivision of the ALCOM series for the Atlantic-Mediterranean areas.
- (d) ALCOMPAC. Originated by the Chief of Naval Operations (usually DNC). ALCOMPAC is a subdivision of the ALCOM series for the Pacific area.
- (e) ALDIST. Originated by the Commandant, Coast Guard, to provide instructions including those of policy level, or information of limited applicability, primarily to Coast Guard district commanders.
- (f) ALJAP. Originated by Communications Electronics Directorate/Joint Staff. ALJAP designates those general messages which promulgate information pertaining to CED/JS-adopted publications when rapid dissemination to all branches of the armed forces is required. (Ordinarily, when information from the CED/JS is peculiar to a single service, such information is promulgated by the service concerned).
- (g) ALLANTFLT. Originated by CINCLANTFLT. ALLANTFLT is the equivalent of the ALNAV or NAVOP within the commands under CINCLANTFLT.
- (h) ALMAR. Originated by the Commandant of the Marine Corps to all Marine Corps activities.
- (i) ALMARCON. Originated by the Commandant of the Marine Corps to Marine Corps activities within the continental United States.
- (j) ALMSTS. Originated by COMSTS for distribution in accordance with COMSTS Instruction 2110.2.
- (k) ALNAV. Originated by the Secretary of the Navy (SECNAV). ALNAV designates those general messages which normally concern the functions of the Naval Establishment, including the Marine Corps. ALNAVs are unclassified.
- (l) ALNAVSTA. Originated by the Secretary of the Navy. ALNAVSTA designates those general messages, similar to ALNAV in content, which require wide dissemination to the shore establishment of the Navy and Marine Corps, including the shore-based elements of the operating forces. ALNAVSTAs are unclassified.
- (m) ALPACFLT. Originated by CINCPACFLT. ALPACFLT is the equivalent of the ALNAV or NAVOP within the commands under CINCPACFLT.
- (n) ALSTACON. Originated by the Secretary of the Navy. ALSTACON designates those general messages which contain administrative information requiring wide dissemination to all stations within the continental U.S. ALSTACONs normally are unclassified.
- (o) ALSTAOUT. Originated by the Secretary of the Navy. ALSTAOUT designates those general messages which contain administrative information requiring wide dissemination to all stations outside the continental U.S. ALSTAOUTs are unclassified.

(Article 7022 continued on Page 7-10)

GENERAL MESSAGE DISTRIBUTION KEY LIST

LINE	COMMAND OR ACTIVITY	LINE	COMMAND OR ACTIVITY
1.	OPERATING FORCES UNDER OPERATIONAL AND/OR ADMINISTRATIVE CONTROL OF CINCLANTFLT/CINCPACFLT. COMMANDERS OF ALL: FLEETS, FORCES AND TYPES; TASK, FORCES, GROUPS, UNITS AND ELEMENTS; SPECIAL COMMANDS, GROUPS, UNITS AND DETACHMENTS; ADMINISTRATIVE COMMANDS AND UNITS, FLOTILLAS, GROUPS, SQUADRONS AND DIVISIONS; FLEET AIR COMMANDS, WINGS, TASK GROUPS, GROUPS, SQUADRONS, UNITS AND DETACHMENTS; COMMISSIONED VESSELS; COMDT MARINE CORPS, COMDT COAST GUARD.	18.	COMALSEAFRON, COMHAWSEAFRON.
2.	FLEET MARINE FORCE UNITS (AIR/GROUND).	19.	COMs 1, 3, 4, 5, 6, 8, PRNC, SRNC.
3.	PROSPECTIVE COMMANDING OFFICERS OF VESSELS FITTING OUT AND OFFICERS-IN-CHARGE OF NEW CONSTRUCTION.	20.	COM 9.
4.	BASEGRAM DELIVERY AUTHORITIES.	21.	COM 10.
5.	NAVAL MISSIONS, ADVISORY GROUPS, AID GROUPS, ATTACHES AND LIAISON OFFICERS.	22.	COMs 11, 12, 13.
6.	NAVAL BASES, OPERATING BASES, STATIONS AND FLEET ACTIVITIES.	23.	COMs 14, 17.
7.	BUREAUS AND OFFICES OF THE NAVY DEPARTMENT.	24.	COM 15.
8.	NAVAL COMMUNICATION CENTERS, STATIONS, FACILITIES, UNITS; RADIO STATIONS AND FACILITIES; SECURITY STATIONS.	25.	CINCLANFLT.
9.	MARINE CORPS ACTIVITIES.	26.	CINCPACFLT.
10.	NAVAL AIR BASES AND STATIONS.	27.	CINCARIB (SEE ALSO LINE 29), CINCAL.
11.	NCSSO's	28.	CINCUSNAVEUR.
12.	COMSTS.	29.	CINCLANT, CINCARIB (SEE ALSO LINE 27), CINCNELM.
13.	MSTS COMMANDS AND OFFICES.	30.	CINCPAC.
14.	ALL MSTS SHIPS; ALL COM MILITARY DEPARTMENTS (SEE ARTICLE 1.9 COMSTS INSTRUCTION 2110.2).	31.	COMASTARREACOGARD.
15.	COMASTSEAFRON AND SECTORS.	32.	COMWESTARREACOGARD.
16.	COMWESTSEAFRON AND SECTORS.	33.	COGARDISTCOMs 1, 2, 3, 5, 7, 8, 9.
17.	COMCARIBSEAFRON AND SECTORS.	34.	COGARDISTCOMs 11, 12, 13, 17.
		35.	COGARDISTCOM 14.
		36.	Special additional distribution for JANAFAPAC only: CINCUSAREPAC, CINCPACAF, COMUSKOREA, COMUSJAPAN, COMTAIWANDEFCON (US), CINCPACREP RYUKYUS, CINCPACREP MAREO, CINCPACREP PHILIPPINES, CEMAAG JAPAN, CEMAAG REPUBLIC OF CHINA, CHJUSMAGPHIL, CEMAAG VIETNAM, CEMAAG CAMBODIA, CHJUSMAG THAILAND, POLO FUCHU, PEO LAOS, MEDT BURMA, MILTAG INDONESIA. Info: CNO, JCS, DEPTAF, DEPTAR, USARMA VIETNAME, COMWESTSEAFRON.

★ DISTRIBUTION CHART FOR GENERAL MESSAGES

S - SEE ARTICLE 7022.1 (b)

0 - APPLICABLE AS APPROPRIATE

P - PACIFIC

A - ATLANTIC

X - APPLICABLE TO ALL

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
ALCOAST				X																																				
ALCOM	X	X	X	X	S	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALCOMLIANT	A	A	A	X		A	X	A	A	A	A	A	A		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALCOMPAC	P	P	P	X		P	X	P	P	P	P	P	P		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALDIST																																								
ALJAP	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALLANTFLT	A	A	A	X		A	A	A		A	A	X	A		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALMAR				X					X																															
ALMARCON									0	X																														
ALMSTS													X	0																										
ALNAV	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALNAVSTA						X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALPACFLT	P	P	P	X		P	P	P	P	P	P	P	P		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALSTACON						0	X	0	0	0	0	0	0		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ALSTAOUT						0	X	0	0	0	0	0	0		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
FLTOP	X														X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
JANAFPAC																																							X	
NAVACT	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NAVOP	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

7022.1 (Continued)

- (p) FLTOP. Originated by the Chief of Naval Operations. FLTOP designates those general messages concerning fleet units and their operational commanders.
- (q) JANAFAC. Originated by CINCPAC. Addressed to U. S. commanders within the Pacific Command on matters of joint interest. Redistribution is accomplished at the discretion of the receiving U. S. Major Commands.
- (r) NAVACT. Originated by the Secretary of the Navy. NAVACT designates those general messages which are similar to ALNAV in content except the Marine Corps is excluded.
- (s) NAVOP. Originated by the Chief of Naval Operations. NAVOP designates those general messages which are similar to ALNAV in content except attaches, missions, observers and minor shore activities, which are excluded.

.2 Mercast General Messages

- (a) MERCAST. Originated by the Chief of Naval Operations. MERCAST is the merchant ship equivalent to an ALNAV. Distribution: Ships guarding MERCAST schedules, MSTs, naval port control officers and NCSOs.
- (b) MERCASTLANT. Originated by CINCLANTFLT. MERCASTLANT is the merchant ship equivalent to an ALLANTFLT.
- (c) MERCASTPAC. Originated by CINCPACFLT. A MERCASTPAC is the merchant ship equivalent to an ALPACFLT.

7023. HOLIDAY AND CONGRATULATORY MESSAGES

- .1 General messages of a holiday or congratulatory nature are not acceptable for delivery by rapid means, unless originated by the Chief of Naval Operations, the Commandant of the Marine Corps, or higher authority. As an exception to this policy, Fleet, Force or Type Commanders may at their discretion issue a combined Christmas - New Year's greeting within their respective commands.
- .2 All other commanders desiring to send holiday greetings or messages of a congratulatory nature must utilize mail.
- .3 Messages of this nature shall not be transmitted in such a manner as to incur commercial charges.

7024. SEA FRONTIER, NAVAL DISTRICT, RIVER COMMAND, FLEET, FORCE, AND TYPE GENERAL MESSAGE SERIES

- .1 Commanders of sea frontiers, commandants of naval districts and river commands, and commanders of fleets, forces, and types are authorized to establish a general message series within their respective commands.

7025. GENERAL MESSAGES FOR MINOR SHORE ACTIVITIES

- .1 General messages for minor Navy and Marine Corps shore activities will be transmitted by rapid means when served by a direct teletypewriter network. Otherwise, such messages normally will be sent to the lower echelons by mail or other appropriate local means as determined by the refile authority. Commercial refile will be employed only in those cases when the originator considers rapid delivery to the lower echelons necessary.

7030. SPECIAL CATEGORIES OF MESSAGES

7031. ALL SHIPS PRESENT MESSAGES

- .1 ALL SHIPS PRESENT messages are those addressed to all ships present within visual signaling range. These messages normally will emanate from the senior officer present afloat. The SOPA prescribes local instructions governing the initiation, transmission and relay of ALL SHIPS PRESENT messages.

7032. Q MESSAGE SYSTEM

- .1 The Q message system serves as the classified portion of the navigational warning systems of allied nations. (Reference: AHP 1.)
- .2 Q messages should not be confused with Q signals.

7033. HYDRO AND NOTAM MESSAGES

- .1 The U.S. Navy Hydrographic Office originates messages for which wide, non-standard distribution is indicated. These messages may be serially numbered and are transmitted on hydrographic broadcasts. HYDROLANTs contain information relating to the Atlantic, Mediterranean and Indian Oceans. HYDROPACs contain information relating to the Pacific Ocean.
- .2 Military and civil agencies concerned with the safety of aircraft originate NOTAMs. They contain information relating to the establishment, discontinuance, condition or change in any aerological facility or service, or to a hazard within a specified area. NOTAMs are distributed to air stations and facilities upon whose operations the specific information in each message may have effect.

7040. THE U.S. NAVY BASEGRAM SYSTEM

7041. DEFINITIONS

- .1 BASEGRAM is a message designation connoting a means of delivery for those general messages which are not of sufficient operational importance to warrant immediate delivery to forces afloat by fleet broadcasts, but for which rapid delivery to the maximum extent practicable is desirable.
- .2 A Basegram Authority is a shore commander, designated by competent authority, responsible for providing plain-text copies of basegrams to forces afloat upon call.

7042. PURPOSE

- .1 The purpose of the Basegram System is to reduce the volume of message traffic transmitted by fleet broadcasts in order to keep the relatively limited broadcast facilities available for messages which must be delivered to afloat forces by rapid means. The Basegram System provides a method for all afloat forces to obtain general messages from designated basegram authorities located in ports from which U. S. Navy ships normally operate.

7043. BASEGRAM HANDLING INSTRUCTIONS

.1 Originators

- (a) General message originators will assign the designation BASEGRAM to those general messages for which this means of delivery is acceptable. The first word of the text following the general message identification will be the word BASEGRAM.
- (b) These instructions do not modify directives for originators to use mail correspondence when the time factor permits.

.2 Communication Centers

- (a) The communication center serving the originator will place the operating signal ZFP meaning BASEGRAM in the message instructions of messages so designated.
- (b) Basegrams will be delivered by rapid means to designated basegram authorities for ultimate pickup by afloat forces and to appropriate broadcast stations for purposes of originating a procedure message announcing the basegram.
- (c) Basegrams will also be transmitted over normal point-to-point circuits to the shore commands and activities contained in the address in the same manner as prescribed for any other message.

.3 Broadcast Stations

- ★ (a) Broadcast stations will receive basegrams by rapid means. They will normally originate and broadcast a procedure message for each basegram, indicating that the specific general message has been routed to basegram authorities.
- (b) When the classification of the general message permits, the procedure message may indicate the subject matter:
- EXAMPLE: ZFO ALNAV 23
Concerns promotion of LTs to LCDRs
- (c) The procedure message may refer to more than one general message.
- (d) Broadcast stations may place basegrams on the Fleet Broadcasts provided that ALL other traffic has been cleared and free circuit time exists.

.4 Basegram Authorities

- (a) Basegram authorities will maintain a stock of plain-text copies of basegrams, edited and paraphrased as necessary, for pickup by afloat forces.
- (b) Stocks of the following series of general messages as appropriate will be maintained by basegram authorities:
- ALNAV, NAVOP, ALCOM, ALCOMLANT (Atlantic & NELM), ALLANTFLT (Atlantic & NELM), ALJAP, ALCOMPAC (Pacific), ALMAR, NAVACT, ALPACFLT (Pacific).

7043.4 (Continued)

- (c) Basegrams will normally be provided on a one copy per command basis. However, in the case of unusually long basegrams, limited numbers of extra copies should be provided by basegram authorities whenever possible.
- (d) Basegram authorities should request missing basegram general messages when not promptly received.
- ★ (e) Basegram authorities may also deliver basegrams by mail to forces afloat deployed in their area when local conditions cause mail to be the most expeditious means of delivery or when such forces are scheduled to enter other non-basegram ports where normal mail service is provided.

.5 Afloat Commands

- (a) Upon return to port, at periodic intervals while in port, and immediately prior to departure, afloat commands will obtain plain-text copies of available basegrams from the nearest basegram authority.
- (b) Within the command, basegrams will be handled in the same manner as other general messages received.
- (c) A copy of each broadcast procedure message announcing a basegram will be filed by afloat commands in the appropriate general message file until it is replaced by the actual general message basegram.
- (d) Each afloat command will maintain a general message receipt log for each addressed general message series. This log shall indicate by consecutive general message number those general messages not yet received and those general messages for which only basegram procedure messages have been received. Afloat commands should utilize this log to determine appropriate general messages to be obtained from basegram authorities.

7044. DESIGNATED BASEGRAM AUTHORITIES

- ★.1 The below-listed basegram authorities have been designated for the ports indicated. Additions and deletions will be made by the fleet commanders concerned, as required. U.S. authorities marked by an asterisk also act as NATO basegram authorities when so directed by the Chief of Naval Operations.

LIST I -- ACTIVE

PACIFIC

<u>Port</u>	<u>Basegram Authority</u>
Balboa, C.Z.	CO NAVCOMMSTA Balboa
San Diego, Calif.	CO NAVCOMMSTA San Diego (Headquarters Building, foot of Broadway)
Long Beach, Calif.	CO NAVSTA Los Angeles (Admin. Building, Long Beach)
San Francisco, Calif.	CO NAVCOMMSTA San Francisco (Federal Office Building)
Seattle, Wash.	OIC NAVCOMMU Seattle
Bremerton, Wash.	CO NAVSHIPYD, Puget Sound
Adak, Alaska	CO NAVSTA Adak

PACIFIC

LIST I -- ACTIVE

<u>Port</u>	<u>Basegram Authority</u>
Kodiak, Alaska	CO NAVSTA Kodiak
Pearl Harbor, T.H.	CO NAVCOMMSTA Pearl
Midway Island	CO NAVSTA Midway
Guam, Marianas Is.	CO NAVSTA Marianas
Sangley Point, Luzon, P.I.	CO NAVSTA Sangley Point
Subic Bay, Luzon, P.I.	CO NAVSTA Subic
Sasebo, Japan	COMFLEACT Sasebo
Yokasuka, Japan	COMFLEACT Yokosuka
Christchurch, New Zealand	COMNAVSUPPFOR ANTARCTICA (Advance Headquarters), Christchurch

ATLANTIC

<u>Port</u>	<u>Basegram Authority</u>
Boston, Mass.	*COMNAVBASE Boston
Newport, R.I.	*COMNAVBASE Newport
New London, Conn.	*COMSUBBASE New London
New York, N.Y.	*COMNAVBASE New York
Philadelphia, Pa.	COMNAVBASE Philadelphia
Norfolk, Va.	COMFIVE-NAVCOMMSTA Norfolk
Little Creek, Va.	CO NAVPHIBASE Little Creek
Charleston, S.C.	*COMNAVBASE Charleston
Mayport, Fla.	CO NAVSTA Mayport
Key West, Fla.	*CO NAVSTA Key West
Guantanamo Bay, Cuba	CO NAVSTA Guantanamo
San Juan, P.R.	CO NAVSTA San Juan
Roosevelt Roads, P.R.	CO NAVSTA Roosevelt Roads

ELM

London, England (Includes delivery by mail to ships deployed in the Northeast Atlantic)	NAVSUPPACT London
Naples, Italy (Includes delivery by mail to ships deployed in the Mediterranean and Middle East)	NAVSUPPACT Naples

7066. DATE-TIME GROUP

- .1 The date-time group is expressed as six digits and a zone suffix. The first pair of digits denotes the date, the second pair the hours, and the third pair the minutes. In abbreviated form the first two digits, denoting the date, may be omitted if not required. The first to the ninth day of the month is represented by 01 to 09, respectively.
- .2 Duplicate date-time groups shall not be used by the same originator.
- .3 The time included in the DTG is the time (GMT) at which the originator prepared the message for transmission. Normally, it is inserted by the message center or cryptocenter.

★ 7070. TEXTS OF MESSAGES

7071. DEFINITION

- .1 The text is that part of a message which contains the thought or idea the originator desires to communicate. It is the reason for the existence of all other parts of the message.

7072. HANDLING INSTRUCTIONS IN THE TEXT

- .1 The text may contain only such internal instructions as are necessary to facilitate additional handling in order to effect final delivery. Passing instructions in the text shall specifically state:
 - (a) The title of the passing activity,
 - (b) Whether the passing activity is to retain the message for action, information or pass only,
 - (c) Title of the activity that the message is being passed to, and
 - (d) Whether the message is being passed for action or information.

EXAMPLE: - M - 161616Z -
 FM NFDR -
 TO DTSY
 GR13 BT
 NAVSTA SFRAN NOT ADEE PASS ACTION DIRECTOR RECRUITING
 AREA 8. YOUR 152359Z AFFIRMATIVE BT

- .2 The activity designated in the internal handling instructions as a passing agency shall normally be indicated as an action addressee in the external heading.
- .3 When commercial refile is intended to effect delivery to the text addressee, the message must be addressed or routed for this purpose to the appropriate (commercial refile) communication center.
- .4 The use of personal names or titles to indicate originator and/or addressee in the text of a naval message is prohibited when the message address alone will suffice. It is to be assumed that the command to which the message is addressed will make the necessary internal routing.
- .5 When the message address alone will not suffice, the official title or personal name may be included in the text to indicate the originator and/or addressee.

7073. RESTRICTIONS ON SUBJECT MATTER IN OFFICIAL NAVY MESSAGES

- .1 The use of shipping designators in a message shall be restricted to logistical matters where the originator is assured that the addressees have access to the appropriate shipping designator publications. Shipping designators are not intended for general use in messages in lieu of names of geographical locations.
- .2 Official Navy messages, whether handled over naval circuits or refiled commercially may not be used as the vehicle for handling unofficial personal matters. It is to be noted that personal requests for hotel or travel reservations may not be contained in official Navy messages unless the request is made incidental to or in connection with related official business.
- .3 The attention of drafters and originators is directed to Article 4400.8 of the Joint Travel Regulations and Section VII, Article 240.10 of the Navy Civilian Personnel Instructions for restrictions applicable to certain types of personal communications.

7074. SPECIAL MESSAGE DISTRIBUTION INSTRUCTIONS

- *.1 Occasions will arise where messages between commanders must receive special distribution. A commonly understood method of designating such distribution must be employed. Phrases so utilized should be concise and known by the addressees and must be placed at the beginning of the text. The following phrases with the meaning indicated are authorized for general use:
 - (a) EXCLUSIVE. Messages so marked are to be delivered only to the person whose name or designation appears immediately following the word "EXCLUSIVE", or in the absence of the person so addressed, to his authorized representative. Such messages must be handled only by specially designated personnel and must be classified.
 - (b) FOR. This instruction is to be followed by the name or title of a particular individual or particular (sub) division/(sub) section and indicate that the text of the message is to receive the attention of that individual or (sub) division/(sub) section without necessarily limiting the normal distribution. Messages thus marked are to be unclassified or classified in accordance with the rules set forth in appropriate regulations. An indication of the originator may be given by the use of the word "FROM" followed by the name or title of a particular individual or particular (sub) division/(sub) section.
- .2 The above does not prohibit the use of other special phraseology for directing message distribution. When other phrases are used all addressees must be cognizant of the phrase and its meaning with regard to message distribution.

7075. BREVITY

- .1 The text of a message must be clear, accurate, and brief. Brevity must not be attained at the cost of accuracy; rather, brevity will be achieved through the proper choice of words and good writing techniques. Stereotyped phrases should be avoided. However, uncommon phrases and modes of expression must not be carried to the point where the meaning becomes ambiguous or obscure.
- .2 It is both the privilege and responsibility of the officer who drafts a message to word it so that it expresses unmistakably the thought he desires to convey.

7075. (Continued)

- .3 Abbreviations within the texts or messages will be limited to those whose meanings are self-evident, unequivocal, or which are recognizable by virtue of long established usage. Exceptions may be made in the case of currently authorized abbreviations in messages on routine administrative or technical matters which will be routed only to persons familiar with the abbreviations employed.
- .4 In cases of doubt the rule that clarity always takes precedence over brevity will be followed. (See Annex Bravo).

7076. REPETITION

- .1 A word may be repeated in the drafted text to prevent mistaken identity or incorrect spelling, but not solely for the purpose of emphasis.

EXAMPLE of correct use:

MIYAZAKI RPT MIYAZAKI.

★ 7077. PUNCTUATION

- .1 Punctuation shall be used when essential for clarity.
- .2 When punctuation is essential, the drafter should use the punctuation symbols listed in Article 9043.
- .3 The letter X shall not be used for punctuation.

7078. REFERENCES

- .1 Messages are identified by name of originating command and date-time group. General messages will be identified by title and number.
- .2 The use of references in message texts shall be avoided unless essential. When used, the following provisions and instructions apply:
 - (a) References normally will consist of YOUR, MY or the authorized abbreviated title of a third party, followed by the date-time group of the message or the serial number of a letter or document. Use of the date of such correspondence, in addition to the serial number, often is advisable, especially when it is not of recent issue or when the subject cannot be identified readily from the content of the message.
 - (b) When reference is made to the date-time group of other than the current calendar month or year, the month and year (if non-current) shall be added. When reference is made to the originator's reference number of other than the current calendar month or year, the day, month and year (if non-current) shall be added. The month will be abbreviated by use of the first three letters and the year by the last two digits.

EXAMPLE: MY 141512Z JUN 51
 - (c) When referring to a message which has been readdressed, only the original date-time group will be used for reference purposes.
 - (d) When references are placed in a message destined for several addressees, care must be taken that such references are available to all addressees. In cases where a reference is not held by all and the originator determines that those addressees do not need it, the

7078.2(d) (Continued)

abbreviation NOTAL, meaning "not to, nor needed by, all addressees" shall follow the reference. When the referenced message has been transmitted by rapid means to some addressees and mailed to others the abbreviation SOMAIL, meaning "Some addressees by Mail" shall be used following the date-time group of the referenced message.

- (e) When referring to messages originated by or sent to other services, nations or Allied commands, and the referenced message has an originator's reference number, the date-time group and the originator's reference number followed by the day, month and year (if non-current) will both be listed as elements of reference.

- ★.3 A message is classified according to its own content, and therefore may be given a lower classification than the message to which it refers. With the advent of the insertion of the true date-time group (TDTG) procedure in all off-line encrypted messages and the discontinuance of message category markings (except under certain circumstances given in Articles 2111 and 2112, KAG-1B), unclassified replies to classified messages by true date-time group are permitted, provided the text of the reply permits. Inasmuch as message category markings are still required for plain language text copies of messages received from Allied nations, unclassified references/replies to such messages are to be governed accordingly. Originators' reference numbers, commonly called "Cite Numbers", are not authorized for intra-Navy use.

7079. DATE AND TIME IN TEXT

- .1 When it is necessary to indicate a date alone in a message, it will be expressed by one or two figures indicating the day of the month followed by the first three letters of the name of the month and the last two figures of the year, when necessary.

EXAMPLE: 9 OCT or 9 OCT 50

- .2 A night will be described by the two dates over which it extends.

EXAMPLES: NIGHT 29/30 SEP 50; NIGHT 30 SEP/1 OCT 50

- ★.3 Times included in the text of a message will be supplemented by the designation letter for the time zone used. Where practicable, the time 0000 or 2400 should be avoided.
- .4 When several times of the same zone are used in a message, a covering phrase may be used in lieu of individual zone designators when no confusion will result.

EXAMPLE: ALL TIMES DELTA

7080. INTERNAL ROUTING OF MESSAGES

7081. INVIOABILITY OF MESSAGES

- .1 Internal routing of messages and the location of message files must be such as to prevent the contents of any message from being divulged to any persons other than those who need to know.
- .2 Messages, both for delivery and for filing, should be placed on covered boards.
- .3 Messengers shall be instructed not to allow under any circumstances the contents of messages which they are distributing to be seen by persons other than those authorized.

7081. (Continued)

- .4 Unclassified messages are considered official Navy business and as such all copies except those required for files shall be destroyed when no longer required by those to whom delivered. Classified messages shall be accounted for and destroyed in a manner commensurate with the classification, content or special marking, as applicable.

7082. DESIGNATION OF ACTION AND INFORMATION OFFICERS

- .1 A list of cognizant officers should be prepared and made available to the communication watch officer to enable him to select the appropriate action officer for internal routing purposes.
- .2 Some message centers, particularly those at large shore stations, maintain a file of routing cards arranged according to subject matter to facilitate accurate internal routing. Each card shows which activities are interested primarily in that subject. Also each card indicates those activities which need such messages for information.
- .3 If a mistake has been made in selecting the action officer, the officer first so designated should indicate immediately the correct action officer so that the message may be delivered for action without further delay. In many commands the original action officer is further responsible for obtaining the concurrence of the one he considers to be the correct action officer.
- .4 The action officer should inform the CWO if any officers not designated in the routing require the knowledge of the message.
- .5 If action is required by more than one officer, the one with paramount interest should be designated as action officer. This officer is then responsible for the cooperation of all concerned in the prompt preparation of the reply or execution of the necessary action.

7083. COPIES OF MESSAGES

- .1 The communication organization should provide for copies of messages in sufficient number to ensure that the information is disseminated to all officers who need to know. In large ships or stations, it generally is considered sufficient if one copy is made for the head of a department or office. If additional copies of category A messages, classified no higher than CONFIDENTIAL are desired, they should be prepared within the department or office itself. Additional copies of category B messages of any classification shall be made only by the cryptocenter and shall be serially numbered, receipted for, and subject to instructions prescribed for their accountability.

7084. TICKLER SYSTEM

- .1 While the action officer is responsible for taking all action which a message may require, the communication center should maintain a tickler system on messages requiring acknowledgement or reply. After a reasonable time, if the action has not been taken, the action officer should be notified.



CHAPTER EIGHT
STATION AND ADDRESS DESIGNATORS

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CHAPTER EIGHT

STATION AND ADDRESS DESIGNATORS

8000. GENERAL

★ 8001. DEFINITIONS

- .1 Any combination of characters or pronounceable word(s) designated for use in message headings to identify a command, authority, unit, or communication facility, or to assist in the transmission and delivery of messages may be classed as a station or address designator.
- .2 Station and Address designators encompass four categories, namely: CALL SIGNS, ADDRESS GROUPS, ROUTING INDICATORS and PLAIN LANGUAGE.
- .3 Definitions of the below categories and specific types are contained in the ACP 167 series.

★ 8002. CALL SIGNS AND ADDRESS GROUPS

- .1 Call signs and address groups consist of many different types as listed below. To avoid confusion, when using the term Call Sign or Address Group in other than a general sense, it should be qualified by referring to the specific type call sign or address group involved.

(a) Call signs (which may be individual or collective):

- (1) Indefinite.
- (2) International.
- (3) Net.
- (4) Tactical.
- (5) Visual.
- (6) Voice.
- (7) Signal letters of ships and signal letters or identification numbers of aircraft when used as international call signs.

(b) Address Groups (which may be individual or collective):

- (1) Conjunctive.
- (2) Geographic.
- (3) Address Indicating Groups (AIGs).
- (4) Special Operating Groups (SOGs).

8003. ROUTING INDICATOR

- .1 A routing indicator is a group of letters, generated according to a prescribed plan, assigned to identify a station within a tape relay network. Routing indicators consist of two types, i.e., world-wide and theater.

8004. PLAIN LANGUAGE

- .1 Plain language address designators consist of the assigned title, short title or abbreviation of the command, authority, or unit originating or being addressed by message.

8010. COMPOSITION AND ASSIGNMENT

8011. COMPOSITION OF CALL SIGNS (OTHER THAN VOICE)

- .1 International call signs are formulated in accordance with the table in Article 609, ACP 121. The first one or two characters of each call sign identify the nationality of the using station. Three or more letters generally identify stations as follows:

Three letters - fixed and land stations

Four letters - ship stations

Five letters - aircraft stations

- ★.2 Tactical call signs are formulated from the following letter-numeral combinations:

Letter number number letter)	Allocated as tactical call
Letter number number number)	signs for other than task
Number number letter letter)	organizations
Number number letter number)	
Number letter number letter)	
Number letter number number)	
Number letter letter letter)	
Number letter letter number)	
Letter letter number letter)	
Letter letter number number)	

Letter number letter number)	Allocated for Call Signs for task
Letter number letter letter)	organizations
Letter letter letter number)	

- .3 Visual call signs are formulated from the type and number of the ship or unit.

★8012. POLICY FOR ASSIGNMENT OF CALL SIGNS

- .1 Fixed and land radio station call signs are assigned to elements of naval communications and components thereof in accordance with the following plan:

(a) Individual three-letter assignments to:

- (1) Naval communication activities.

(a) NAVCOMMSTAs/NAVCOMMFAcS.

(b) NAVRADSTAs/NAVRADFAcS and NAVCOMMUS operating independently.

- (2) Communication department facilities at principal shore activities (other than air) not a part of the Naval Communication System:

(a) NAVSTAs/NAVFACs/FLEACTs.

(b) NAVSHIPYDs/NAVSUBASEs.

(c) Naval Bases and Marine Corps Bases.

(d) District Commandants--for deriving call signs with numeral suffixed to identify intra-district stations.

- (3) Communication department facilities at principal aviation shore activities, not a part of the Naval Communication System:

8012.1(a)(3) (Continued)

- (a) Naval Air Stations, Naval Air Facilities, and Naval Auxiliary Air Stations.
- (b) Marine Corps Air Stations and Marine Corps Air Facilities.
- (4) Miscellaneous:
 - (a) Principal Marine Corps supporting establishments, other than air.
 - (b) Naval Reserve master control stations.
 - (c) Experimental and/or other activities performing radio transmitting and/or receiving functions, operating independently.
 - (d) Collective and indefinite meanings and special purposes.
- (b) Numeral suffixes to:
 - (1) Satellite radio transmitting and/or receiving facilities:
 - (a) Those a part of a NAVCOMMSTA/NAVCOMMFAC located remotely therefrom for intra-communications.
 - (b) Those under jurisdiction of a District Commandant or River Commander located remotely from a designated parent station.
 - (c) Those transmitting and/or receiving facilities employed for security, industrial control, local port or harbor communications, degaussing stations.
 - (d) Miscellaneous commands of the operating forces utilizing the facilities of a NAVCOMMSTA/NAVCOMMFAC or designated parent station.
 - (2) Portable and mobile communications facilities other than ships and aircraft, such as communications trucks, jeeps, vans, etc.
 - (3) Numeral suffixes are not to be assigned for the sole purpose of identifying terminal equipment, such as facsimile.
 - (c) Subordinate components controlling any of the transmitters (including emergency) of the parent activity will employ the basic three-letter call sign of the parent activity.
 - (d) When a communication activity controls the keying of transmitters located at another communication activity, identification of both the controlling station and the controlled station(s) shall be indicated. The call sign of the controlling station shall be followed by the call sign(s) of the controlled station. The call signs shall be separated by a slant sign.
- .2 Assignment authority: Individual three-letter "N" call signs will be assigned by the Chief of Naval Operations. District Commandants and Commanders of Naval Forces are authorized to assign and promulgate numeral suffixes to the call signs of radio stations under their jurisdiction. The Chief of Naval Operations shall be informed of permanent local assignments or those required to be known outside the assignment area for confirmation in the ACP 114 series.
- .3 Requests: Requests for assignment of individual three-letter "N" call signs or three-letter plus numeral suffixes, shall be forwarded to the appropriate assigning authority via the chain of command.

8012. (Continued)

- .4 Listing in publications: Communication activities to which call signs have been assigned will be listed by the geographical location of the control site, followed by the nomenclature of the activity represented. Local assignments of a temporary nature will not be listed in the ACP 114 series.
- .5 Coast Guard Listings: Consistent with the above Navy policy, the Commandant U.S. Coast Guard will assign international three-letter "N" call signs in accordance with the following plan:
- (a) Coast Guard activities requiring three-letter "N" call signs:
 - (1) Primary, secondary, and basic radio stations.
 - (2) Air Stations.
 - (3) Loran net control stations.
 - (4) Indefinite and collective meanings.
 - (b) Coast Guard activities to be assigned numeral suffixes to call signs:
 - (1) Bases.
 - (2) Air detachments.
 - (3) Depots.
 - (4) Moorings.
 - (5) Loran stations (not net control).
 - (6) Lifeboat stations.
 - (7) Light stations and light attendant stations.
 - (8) Captains of the port.
 - (9) Mobile.
- .6 Individual four-letter assignments are made to all U.S. naval ships as determined by the Chief of Naval Operations.
- .7 Instructions for the assignment of tactical call signs are contained in effective call sign publications.

8013. CALL SIGN ALLOCATION PLAN FOR COMMUNICATION RESERVE

- .1 The following call sign allocation plan is set up for the guidance of responsible commanders in assigning call signs to the Communication Reserve systems within their jurisdiction. These call signs for use in reserve communications transmitted by radio, wire or visual systems, will be assigned to Air Force, Army, Coast Guard, Marine Corps, Navy or Joint Reserve circuits (communication nets) as prescribed herein:

8013.1 (Continued)

- (a) U. S. Air Force - The Director of Telecommunications, Department of the Air Force, will assign and promulgate call signs as required by Air Force organizations in accordance with the following plan:

- (1) Continental United States - The letters "AF", "AFA", "AFB" or "AG" followed by a digit and two or three letters. The digit indicates the area corresponding to the Federal Communications Commission (FCC) Amateur District within the U.S., thus:

AF0AA to AF9ZZ	AF0AAA to AF9ZZZ
AFA0AA to AFA9ZZ	AFA0AAA to AFA9ZZZ
AFB0AA to AFB9ZZ	AFB0AAA to AFB9ZZZ
AG0AA to AG9ZZ	AG0AAA to AG9ZZZ

- (2) Overseas - The letters "AH", "AI", "AJ" or "AK" followed by a digit and two or three letters as follows:

AH0AA to AH9ZZZ, Caribbean Air Command
AI0AA to AI9ZZZ, Pacific Air Forces
AJ0AA to AJ9ZZZ, U. S. Air Forces in Europe
AK0AA to AK9ZZZ, Alaskan Air Command

- (b) U. S. Army - The Chief Signal Officer, Department of the Army, will assign and promulgate call signs as required by Army organizations in accordance with the following plan:

- (1) Continental United States - The single letter "A" or the two letters "AA" followed by a digit and two or three letters. The digit indicates the area corresponding to the FCC Amateur District within the U.S., thus:

A0AA to A9ZZ	AA0AA to AA9ZZ
A1AA to A9ZZ	AA1AA to AA9ZZ
A0AAA to A9ZZZ	AA0AAA to AA9ZZZ
A1AAA to A9ZZZ	AA1AAA to AA9ZZZ

- (2) Overseas - Two letters other than "AA" followed by a digit and two or three letters as follows:

AB0AA to AB9ZZZ, U. S. Army, Pacific
AC0AA to AC9ZZZ, U. S. Army, Caribbean
AD0AA to AD9ZZZ, U. S. Army, Pacific
AE0AA to AE9ZZZ, U. S. Army, European Command
AL0AA to AL9ZZZ, U. S. Army, Alaskan Command

8014. (Continued)

- .6 Voic call signs from the JANAP 119 series are tactical in nature, and designed to facilitate speed and ready call association on tactical nets. Voic call signs from the JANAP 119 series are not authorized for use on administrative ship-shore circuits. Ships will utilize international call signs, spoken phonetically on such nets.
- .7 Article 8040 describes the use of station and address designators on local harbor voice nets.

8015. COMPOSITION OF ADDRESS GROUPS

- .1 Address groups are derived from the following blocks of four-letter combinations. Asterisked groups are to be used as variants only.

AMAA - AOZZ	HNAA - HNZZ	LYAA - LZZZ	XYAA - XZZZ
BAAA - BZZZ	HSAA - HSZZ	ODAA - OMZZ	YAAA - YAZZ
DRAA - DTZZ	HVAA - HVZZ	*QAAA - QZZZ	YIAA - YLZZ
EKAA - EZZZ	HZAA - HZZZ	*RAAA - RZZZ	YOAA - YRZZ
HAAA - HDZZ	JTAA - JVZZ	SAAA - SUZZ	YTAA - YUZZ
HEAA - HGZZ	JYAA - JZZZ	*UAAA - UZZZ	YZAA - YZZZ

8016. POLICY FOR ASSIGNMENT OF ADDRESS GROUPS

- .1 Address Groups are assigned to the Naval Establishment in accordance with the following plan:
- (a) All commands afloat, other than individual ships.
 - (b) All fleet, force and type commanders ashore.
 - (c) Those elements of the operating forces permanently based ashore which have a justifiable requirement for the direct addressing of messages to or from the operating forces afloat.
 - (d) Senior commands and commanders ashore. The Secretary of Defense, Secretary of the Navy, the Bureaus and Offices of the Navy Department, and District Commandants.
 - (e) Elements of the shore establishment which operate their own cryptoboard, collect and/or disseminate weather information, or have a well-justified requirement for the direct addressing of messages to or from the operating forces.
 - (f) Names of geographical locations.
- .2 Commander and Collective Address Groups - When both commander and collective address groups are not specifically assigned to an organization, the single assignment means the commander of the organization named.

8017. COMPOSITION OF ROUTING INDICATORS

- .1 Routing indicators are generated in accordance with the following plan:
- (a) The letter R, which appears as the first letter of a routing indicator, denotes a world-wide network.
 - (b) The second letter indicates the military service of the tape relay or tributary station. The letter B is allocated to the Naval Teletypewriter and Tape Relay Network.
 - (c) The third letter indicates the geographical area in which the station is located. The following letters have been reserved for as:

8017.1(c) (Continued)

A - Eastern Asiatic	M - Malaya, East Indies, Philippines and South Pacific
D - Great Britain and Iceland	Q - Middle East
E - Eastern U.S. (North America)	S - Western Asia
F - Europe	T - Northwestern Africa
H - Central Pacific	V - South Africa
K - Alaska and Aleutians	W - Western U.S. (North America)
L - Caribbean and South America	Y - Australia and New Zealand

(d) Subsequent letters indicate relay and tributary stations as follows:

- (1) Four-letter routing indicators are assigned to primary and major relay stations. When the letter P appears as the last (fourth) letter it denotes primary relay station.
- (2) Five-letter routing indicators are assigned to minor relay stations and, in some instances, to tributary stations.
- (3) Routing indicators consisting of six or more letters are assigned to tributary stations and, in some instances, to minor relay stations.
- (4) No routing indicator will consist of less than four or more than seven letters.

★ (e) The letter C and all two-letter combinations CA through CZ are reserved for suffixes to routing indicators. A meaning is prescribed for each authorized suffix. Suffixes are intended to aid the routing of tapes for processing purposes or localized action by the relay station or any of its supplementary sections and facilities. The use of these suffixes are not authorized for use on joint or combined messages unless shown in the routing columns of the encode sections of the JOINT ROUTING INDICATOR BOOK (JANAP 117). Meanings of authorized suffixes are as follows:

C - Local delivery or refile in page form is required.

CF - Section which accomplishes delivery of traffic by broadcast methods.

CI - Section which coordinates routing information.

CN - Teletypewriter conference (TELECON) facility.

CP - Circuit/facility control point.

CR - Cryptocenter.

CS - Section dealing with service messages.

CT - Section which accomplishes delivery of traffic by telephone.

CU - Section which uses tape relay methods for delivery of traffic to commercial carriers.

CW - Section which relays traffic by radio telegraph(CW).

CX - Section which uses tape relay methods for delivery of traffic to activities served by the Teletypewriter Exchange Service (TWX).

8018. POLICY FOR ASSIGNMENT OF ROUTING INDICATORS

- .1 Routing indicators, except temporary routing indicators, are assigned and promulgated by the Chief of Naval Operations (DNC) to the Naval Establishment in accordance with the following policy:

8018.1 (Continued)

- (a) All primary, major and minor relay stations of the teletypewriter network.
 - (b) All tributary stations, including TWX facilities, which are a part of the teletypewriter network.
 - (c) Mobile fleet units, temporarily based ashore when the installation of a special teletypewriter line is justified, and when such assignment will be of short duration.
- .2 Requests for assignment or change in assignment of routing indicators, except temporary routing indicators, shall be addressed to the Chief of Naval Operations (DNC). Such requests will be forwarded by the chain of command, except when time will not permit.
- .3 Requests for temporary routing indicators shall be addressed to the appropriate district commandant or area commander. When an activity is assigned a temporary routing indicator, it shall be the responsibility of that activity or its commander to notify the communication centers of primary relay stations and such other commanders who need to know.

8019. PROMULGATION OF CALL SIGNS AND ADDRESS GROUPS

- .1 The following plan will be employed to promulgate call sign and address group information:
- (a) General message (ALCOM, ALCOMLANT, ALCOMPAC), employing basegram method when appropriate, for assignments and reassignments affecting:
 - (1) Call signs for U.S. naval ships in commission or in service.
 - (2) Call signs for radio stations (other than satellite).
 - (3) Address groups for senior U.S. naval commands and major activities.
 - (4) Composition of Address Indicating Groups (AIGs).
 - (b) Messages addressed to AIG 56 or 57, for assignments and reassignments affecting:
 - (1) International call signs of merchant ships.
 - (2) Tactical call signs.
 - (3) Address groups of local application.
 - (4) Address groups assigned by the U.S. Army and the U.S. Air Force to their respective commands and activities.
 - (c) Navy Memorandum Correction or Printed Change. The Navy Memorandum Correction or Printed Change will be employed for all material which does not require more rapid promulgation. Such material ordinarily consists of:
 - (1) Assignments and reassignments affecting:
 - (a) Ships not in commission or in service.
 - (b) Commands or activities projected but not established.

8019.1(c) (Continued)

- (2) Recording of assignments made by local authorities to satellite radio stations, etc.
- (3) Tactical call signs from JANAP 119 and ACP 110 USN SUPP-1, unless circumstances dictate a more rapid means be employed.
- (4) Variant call signs and address groups, plus basic groups assigned to merchant ships, provided for encryption purposes. (When encryption of call signs and address groups is effective, variants and basic groups will be considered in the same category as the basic assignment and promulgated accordingly.)
- (5) Foreign assignments.
- (6) Deletions. (Except in unusual circumstances, deletions will not be accomplished by rapid communication means.)

★ 8020. EMPLOYMENT OF STATION AND ADDRESS DESIGNATORS

8021. GENERAL

- .1 Unencrypted call signs and address groups may be mixed with encrypted call signs and address groups in the same message heading provided the encrypted call signs or address groups are identified in accordance with call sign encryption instructions.
- .2 When encrypted messages with encrypted call signs/address groups are to be readdressed and retransmitted in their original form (without re-encryption), the original encryption or the address must not be altered, and call signs/address groups in the supplementary heading will be similarly encrypted as necessary based on the original date-time group.
- .3 The use of call signs and address groups in message texts should be avoided, except in procedure and service messages.
- .4 Inasmuch as International call signs or column 1 naval address groups are considered to be the same as plain language, no loss of security is involved in changing plain language address designators to unencrypted International call signs or address groups or vice versa. Therefore, when readdressing messages to other than forces afloat, unencrypted naval address groups or International call signs may be converted to plain language or vice versa prior to transmission.

8022. USE OF CALL SIGNS

- .1 Call signs are used primarily for establishing and maintaining communications. Depending on assignment and application, call signs also serve as address designators when the addressee is synonymous with the command, authority, activity, ship or unit to which the call sign is assigned.
- .2 Indefinite call signs are used by warships and merchant ships when transmitting codress messages, encrypted movement reports and unencrypted weather reports (including those in unclassified and international weather codes), bathythermograph messages in international form, and all transmissions incident to their handling, including the establishment of communications to shore stations. When call sign encryption is prescribed for the Navy, encrypted vice indefinite call signs will be used in the same manner as prescribed for indefinite call signs. When either indefinite or encrypted call signs are so used, units reporting shall not identify themselves in the text of weather reports.

8022. (Continued)

- .3 Tactical call signs, with the exception of task organization and aircraft tactical call signs, are intended to have a limited area of application. They should not be introduced outside of their normal area of application unless the command assigned such call signs has notified all interested commands in advance.
- .4 Call signs should not be used in the routing portion of the heading of messages relayed over tape relay facilities other than to provide transmission instructions.
- .5 When it is required to retransmit by other means a message which was originated employing visual or voice call signs, the station accomplishing the retransmission shall convert the visual or voice call signs in the address portion of the message to appropriate station and address designators authorized for use on the circuit over which onward transmission is to be accomplished.
- .6 Amplifying instructions on the use of call signs, including procedures for the expansion of basic call sign assignments, are contained in the effective editions of the individual call sign publications.

8023. USE OF ADDRESS GROUPS

- .1 The use of Address Groups is contained in Article 605, ACP 121.

8024. USE OF ROUTING INDICATORS

- .1 The use of routing indicators is discussed in Subsection 13100 (Tape Relay Procedures).

★ 8030. PLAIN LANGUAGE ADDRESS DESIGNATORS

8031. COMPOSITION

- .1 Plain language address designators are normally confined to the abbreviated title of those commands and activities listed in the Standard Navy Distribution List. When using plain language abbreviated short titles containing numerals, the numerals shall be spelled out. Numbers greater than twenty (20) shall normally be spelled out digit for digit.

EXAMPLES:

Commandant 14th Naval District	COMFOURTEEN
Commander Destroyer Squadron 10	COMDESRON TEN
Submarine Division 21	SUBDIV TWO ONE
Marine Transport Squadron 352	MARTRANSRON THREE FIVE TWO

- .2 (a) Those department heads, and other subordinates, who have been assigned joint routing indicators separate from the routing indicators assigned the parent commands (see JANAP 117) may be designated by plain language.

EXAMPLE: SUPO NAS JAX

- (b) Other than this, section/code numbers and other subordinate organizational designators will not be used in the address component.

- .3 When a conjunctive title other than a geographical location is used in connection with a parent command or activity the conjunctive title so employed shall immediately precede the abbreviated title of the parent command or activity.

EXAMPLE: ADCOM NAVTRACEN BAIN

8031. (Continued)

- .4 The abbreviation CO (or OIC) as a prefix to the abbreviated title of a command or activity will not be used. Messages are automatically intended for the Commanding Officer.

EXAMPLE: From NAS QUONSET
 To ASD NORVA
 Info MCAS QUANTICO
 NAS ANACOSTIA

- .5 No geographical location will be used except when necessary to complete the title.

8032. GENERAL

- .1 Plain language address designators may not be mixed with call signs and/or address groups in the same address component. An address component must contain all plain language address designators or all call signs and/or address groups.
- .2 The use of plain language address designators in the heading of encrypted messages in codress format is prohibited, except when commercial (non-military) refile is involved. If necessary to refile a codress message to one or more of its addressees by commercial means, the plain language designators of only such addressees which the commercial company must serve shall appear in the message heading. The plain language address designator of the station filing the message may be shown as the message signature, if this is required by the commercial company's regulations.

8033. AFLOAT

- .1 Plain language address designators are prohibited in the headings of messages originated by or addressed to the forces afloat except:
- (a) As authorized in Section 8040.
 - (b) When call signs or address groups have not been assigned to all addressees.
 - (c) When call signs or address groups having been assigned have not been promulgated to all addressees.
- .2 The intent of the above policy is to require the maximum use of call signs and address groups in the headings of messages transmitted on ship-shore circuits and fleet broadcasts. Requests for the assignment of a call sign or address group should be submitted to the Chief of Naval Operations, via the normal chain of command, when the lack of an assigned call sign or address group results in recurring exceptions to the above policy.

8034. ASHORE

- .1 Subject to the requirements of any call sign encryption plan in effect plain language address designators may be used:
- (a) In the transmission instructions and address component of messages originated by and addressed only to activities ashore including fleet activities based ashore.
 - (b) In the transmission instructions and address component of messages transmitted on circuits which are secure by on-line cryptographic equipment.
 - (c) In the encrypted address component of a message prepared in codress form (i.e. when address is encrypted within the text).

8040. USE OF STATION AND ADDRESS DESIGNATORS ON LOCAL HARBOR VOICE NETS

8041. SECURITY OF ADDRESS NOT REQUIRED

- .1 When security of address is not required for messages transmitted on local harbor voice nets the following procedure is prescribed:
- (a) U.S. and U.S.-controlled ports:
 - (1) Ships' names and abbreviations of unclassified administrative command titles will be used as voice call signs. As a general rule, the "USS" prefix, hull designations and numbers, and first names and/or initials of ships need not be included in the voice call unless essential for clarity (such as initial contact with control authority). When their use is essential for clarity, phonetic equivalents for letters and initials are unnecessary.
 - (2) In the interest of standardization, authorities (ashore and afloat) controlling local harbor common voice nets will be identified by the word CONTROL. When communications on such circuits extend beyond the harbor boundaries and a possibility of confusion may exist, the appropriate geographical place name of the harbor will precede the words CONTROL.
 - (3) Similarly, on local harbor voice nets established for other specific purposes, such as for degaussing, tug, and shipyard services, the controlling authority will be identified by the word CONTROL preceded by the appropriate functional word describing the service.
 - (4) Examples of varying combinations:
 - (NORFOLK) CONTROL THIS IS (*USS) ROANOKE
 - COMDESRON TWELVE THIS IS (NORFOLK) DEGAUSSING CONTROL
 - (NEWPORT) CONTROL THIS IS (*WC) LAWE
 - (PORTSMOUTH) SHIPYARD CONTROL THIS IS (*USS) FORRESTAL
 - (FRANKLIN *D) ROOSEVELT THIS IS (CHARLESTON) CONTROL
 - (NEW YORK) TUG CONTROL THIS IS *LSM ONE SIX ZERO
 - (NORFOLK) FUEL CONTROL THIS IS (*USNS) ROANOKE

NOTE: Words in parentheses should not be used unless essential for clarity or to avoid ambiguity. Portions of examples marked with an asterisk (*) are spoken without phonetics.
 - (b) Other than U.S.-controlled ports:
 - (1) Unless otherwise directed by the cognizant port authority, U.S. naval ships will conform with existing international practice by utilizing phoneticized international call signs on voice nets.

8041.1(b) (Continued)

- (2) Since international call signs are not assigned to U.S. administrative commands and task organizations, identification of these command titles when required shall be placed in the address component of the message. The call-up will contain the international call sign of the ship in which the command is embarked.

(c) Task organization components

Task organization component identities should normally be avoided on local harbor voice circuits unless exclusive tactical circuits are employed. When circumstances warrant the disclosure of task organization identities on local harbor voice circuits, voice call signs from JANAP 119 series may be employed to preclude using lengthy and cumbersome plain language equivalents.

(d) Sortie and entry under direction of a U.S. OTC

The foregoing procedures are also applicable during routine and emergency sortie and entry of ships, unless the OTC at his discretion directs the use of voice call signs from JANAP 119 series in order to facilitate communications.

8042. SECURITY OF ADDRESS REQUIRED

- .1 When security of address is required for messages originated by ships and commands in a harbor, the initial delivery of such messages should be accomplished by communication means which will not disclose that portion of the address component requiring protection. Under these circumstances, delivery by hand to the local shore radio station, or in the absence thereof, to the designated guardship provides sufficient security protection.

8050. EMBARKED FLAG

8051. USE OF THE COMMANDER'S ADDRESS GROUP

- .1 When a flag officer or other commander to whom an address group has been assigned is embarked in a ship, such address group will be employed by the ship for calling and answering on all military circuits except those which the flagship may be guarding while functioning as an individual unit. Task organization or tactical call signs when assigned to the ship or to an embarked commander will be used in a like manner where appropriate.
- .2 When a commander temporarily shifts his flagship, he may designate specific nets and circuits on which the temporary flagship will use his address group for calling and answering. The permanent flagship will use its international call sign on those specified nets and circuits. On any given net, one station and one station only will use the commander's address group for calling and answering.

8052. USE OF CONJUNCTIVE ADDRESS GROUP "ADMINISTRATIVE OFFICE OF _____"

- .1 When a commander is temporarily absent from his flagship or headquarters, leaving his administration behind, his administrative staff shall retain the use of his address group (and/or routing indicator) and all traffic addressed to the commander shall be routed to the administrative flagship/headquarters by communication activities concerned.
- .2 The administrative staff is responsible for the proper screening of all traffic and for forwarding messages which require the commander's personal attention. Such traffic destined for the commander shall be transmitted to the ship or station at which he is temporarily located, with appropriate passing instructions in the heading or text.

CHAPTER NINE
GENERAL OPERATING PROCEDURES

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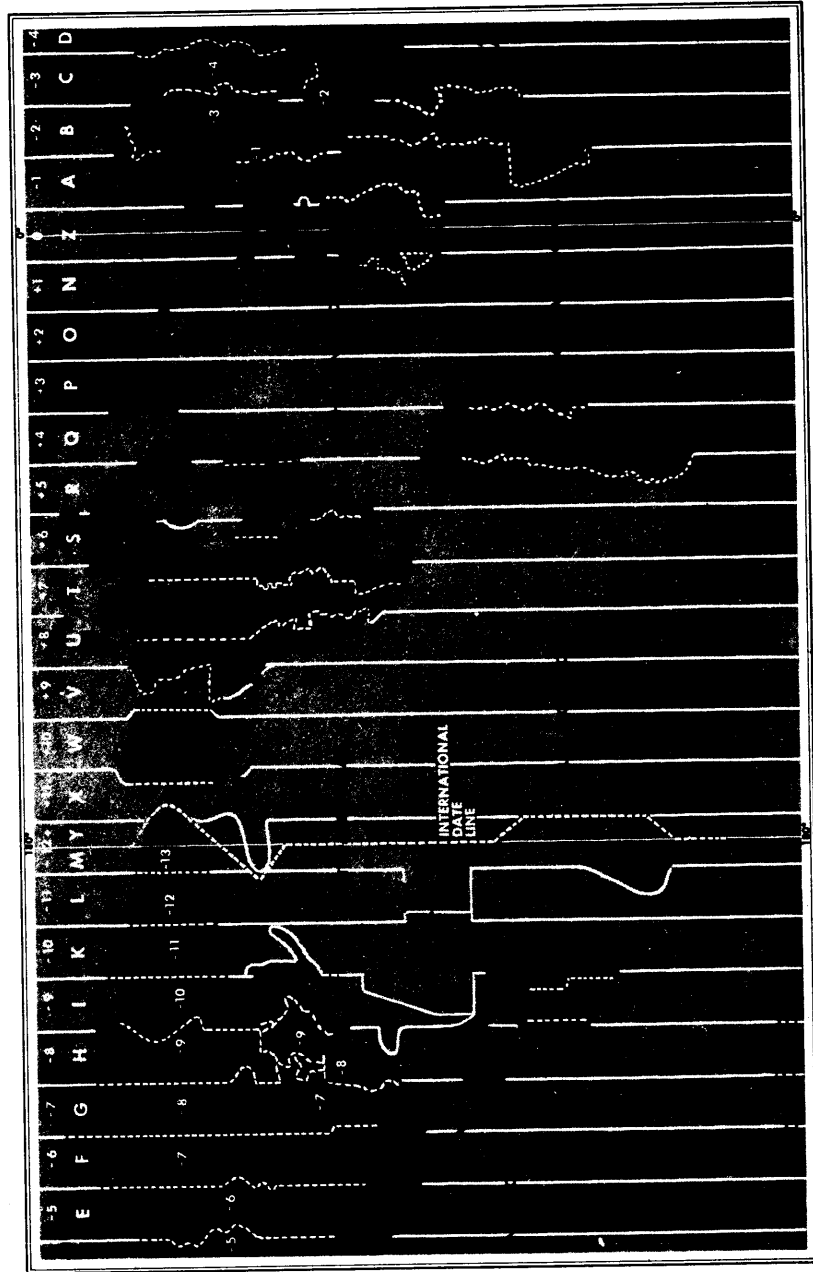
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TIME ZONE CHART



NOTE: Zone boundaries sometimes deviate slightly to accommodate national boundaries, etc. For time midway between zones, use both letters.

9038. (Continued)

- .2 The date-time group is expressed as six digits and a zone suffix. The first pair of digits denotes the date, the second pair the hours, and the third pair the minutes. In abbreviated form the first two digits, denoting the date, may be omitted if not required. The first to the ninth day of the month are represented by 01 to 09 respectively.
- .3 An ABBREVIATED PLAINDRESS message may carry no date-time group or the DTG may be replaced by a time group transmitted after the precedence designation or before the final instructions.
- .4 The use of date and time in commercial messages is contained in Articles 312 and 313 of DNC 26.

9039. MESSAGE INSTRUCTIONS

- .1 The message instructions contain any operating signals which pertain to the message itself, and which must be transmitted to all addressees.

9040. PREFIX, TEXT AND ENDING

9041. ACCOUNTING SYMBOLS

- .1 Messages which are forwarded over commercial means incur commercial charges. In order to provide a means of determining the agency responsible for such charges, accounting symbols are employed in message headings. These accounting symbols are a combination of letters used to indicate the agency, service or activity which assumes financial responsibility for the message.
- .2 The Navy employs accounting symbols as follows:
 - (a) NAVY for messages in joint form to the Army, Air Force or other Government agencies which involve refile with U.S. commercial communication carriers.
 - (b) GOVT NAVY for messages in commercial form which involve refile with U.S. commercial communication carriers.
 - (c) U.S. GOVT NAVY for messages in commercial form which involve refile with foreign commercial communication carriers.

★.3 The service, agency or other government activity originating a message is accountable for any commercial charges incurred in handling the message. Therefore, the appropriate accounting information shall be indicated on the message. If the accounting symbol is not included and the message requires commercial refile, such accounting information will be inserted by the station effecting commercial refile.

★.4 Messages between the services, or those handled for other government agencies, will also indicate the appropriate accounting symbol.

9042. GROUP COUNT

- .1 The group count involves only those groups appearing in the text. Each sequence group of characters uninterrupted by a space is counted as one group.

★.2 Punctuation and symbols are not counted unless spelled out or abbreviated.

9042.2 (Continued)

EXAMPLES:

	Group Count		Group Count
BRAY HYPHEN CORBIE	3	CG	1
BRAY-CORBIE	1	125-3/4-55-X56	1
NEWYORK	1	35 DASH 567P	3
XFUYQ	1	MR C D ADAMS	4
LCNYR NKLYP JVRNW	3	BF6 231845Z	2
/FRANCE/	1	21 POINT 6	3
PAREN FRANCE PAREN	3	21.6	1
125/3	1	(CHICAGO ILLINOIS)	2

- .3 Proper names of countries, cities or streets consisting of two or more separate words normally should be written and counted as one group, such as SANSALVADOR, SANDIEGO, SALTLAKECITY. When written separately they will be transmitted and counted as separate groups, such as FIFTH AVENUE.
- .4 The following text is counted as 20 groups:
SHIPMENT BRAY HYPHEN CORBIE SHOULD HAVE BEEN MARKED BRAY-CORBIE.
FUTURE SHIPMENTS FOR PAREN FRANCE PAREN SHOULD BE MARKED /FRANCE/
PERIOD
- .5 Commercial group count is described in Chapter 2 of DNC 26.

★ 9043. TRANSMISSION OF PUNCTUATION

- .1 Punctuation will be processed and transmitted exactly as drafted, provided the means of communication and the cryptosystem permit. When this cannot be done, communication personnel will substitute the authorized abbreviation, if there is one, or spell out the punctuation.
- .2 The separative sign is not to be used in the text to represent a hyphen or dash. When a separation is necessary in the text, the hyphen equivalent (DU) shall be used.
- .3 Punctuation equivalents:

<u>Name</u>	<u>Symbol</u>	<u>Abbreviation</u>	<u>Morse</u>
Apostrophe	'		.----.
Colon	:	CLN	---...
Comma	,	CMM	---.---
Hyphen	-		-....-
Parenthesis	()	PAREN	-.-.-.-
Period	.	PD	...--.
Question mark	?	QUES	...--..
Quotation marks	"	QUOTE/UNQUOTE	-.-.-.-
Slant sign/Virgule	/	SLANT	-....

NOTE: 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.

9044. ENDINGS OF MESSAGES

- .1 The message ending may contain the time group (abbreviated plaindress only); the prosigns B, C, CFN, AS; operating signals; address designations as required; the prosigns K or AR as appropriate.

9045. DESIGNATING SELECTED STATIONS TO RECEIPT

- .1 When in direct communications and a number of stations are called, the time required for receipting should be reduced by requiring less than all of the stations to receipt for the message. The call signs of these stations are placed in the message ending immediately preceding the prosign K. These stations receipt for the message in normal fashion. The remaining stations do not receipt.
- .2 Although only the designated stations receipt, any station may request repetitions, verifications, etc. in the usual manner.
- .3 This procedure may be used in any direct communication means. It is particularly useful in tactical voice nets.

9050. LONG MESSAGES

9051. TRANSMISSION SECTIONS

- .1 Any lengthy message the transmission of which in its entirety would unduly monopolize circuit time, and every message which exceeds 900 groups, 90 lines of typewritten text or five teletypewriter pages, shall be divided into sections for transmission.
- .2 In applying this rule, a group is one complete word or encrypted group; lines are identified as textual lines as they appear on the original message form or in the encrypted version submitted to the communication center; pages are identified as 10 textual lines for the first page and 20 for each succeeding page with the exception that the last page may contain less.
- .3 Transmission sections are not to be confused with encryption parts as employed in encrypted messages.
- .4 Messages to be forwarded in transmission sections will be divided as follows:
 - (a) At a convenient point, but not beyond the maximum number of groups or lines prescribed, separate the text at the end of a sentence or encrypted group.
 - (b) Unencrypted Messages. Prior to the text, insert in plain language: SECTION ____ OF _____. Each additional transmission section will be preceded by an identical message heading except that it will contain a different station serial number and group count (if employed) for the particular transmission section; in the text, insert in plain language SECTION ____ OF _____. Repeat the process as required. The final transmission section is identified FINAL SECTION OF _____.
 - (c) Encrypted Messages will be divided at the end of a cryptopart. A transmission section may contain more than one cryptopart. The same process as outlined for unencrypted messages is applicable so that the transmission would appear: SECTION ____ OF PART ____ OF _____, and the final section would read FINAL SECTION OF PART ____ OF _____ or FINAL SECTION OF _____ FINAL PART OF _____ where the final cryptopart starts concurrently.
 - (d) The section number inserted at the beginning of the text will differ for each transmission section. The first transmission of a message

9051.4(d) (Continued)

separated into three sections would appear: SECTION ONE OF THREE.

.5 Transmission of multiple page messages over teletypewriter circuits is discussed in Article 13012.

★.6 Tape relay procedure for processing transmission sections is outlined in Article 13153.

9060. DUPLICATE MESSAGES

9061. INTENTIONAL DUPLICATION OF MESSAGES

.1 On occasion it may be necessary to send an exact duplicate of a message previously transmitted. In such cases the operating signal ZFG, meaning THIS MESSAGE IS AN EXACT DUPLICATE OF A MESSAGE PREVIOUSLY TRANSMITTED, must be placed in the message instructions.

9062. SUSPECTED DUPLICATE MESSAGES

★.1 When a tributary station of the Tape Relay Network receives a duplicate transmission of a multiple-address message originated by a Navy activity, and the message bears no indication that it is a suspected duplicate, the tributary station shall inform the originating station by a numbered service message. In all other cases, the tributary should notify the Relay Station serving it by means of a numbered service message.

(a) The relay station will ensure that all relays for which it is responsible have been made. If the message was received twice, the relay station will use a service message bearing a channel number to notify the tributary or relay station that made the duplicate transmission. That station will then determine whether all relays for which it is responsible have been made.

(b) When a relay station detects the reception of a duplicate transmission of a message it will release the second one as a suspected duplicate. By means of a service message bearing a channel number, the tributary or relay station that made the duplicate transmission will be notified. That station will then determine whether all relays for which it is responsible have been made.

Note: Under either of the two foregoing conditions, no action is required by the station which made the first duplicate transmission provided all relays have been made and the messages, in fact, are exact duplicates.

★.2 An example of a service message for handling suspected duplicate messages is contained in Article 13144.

9070. COMMON PROCEDURES

9071. GENERAL

.1 The remainder of this chapter prescribes procedures which are common within the U.S. Navy to all means of rapid communication unless otherwise specified.

9072. OPERATING PRECAUTIONS

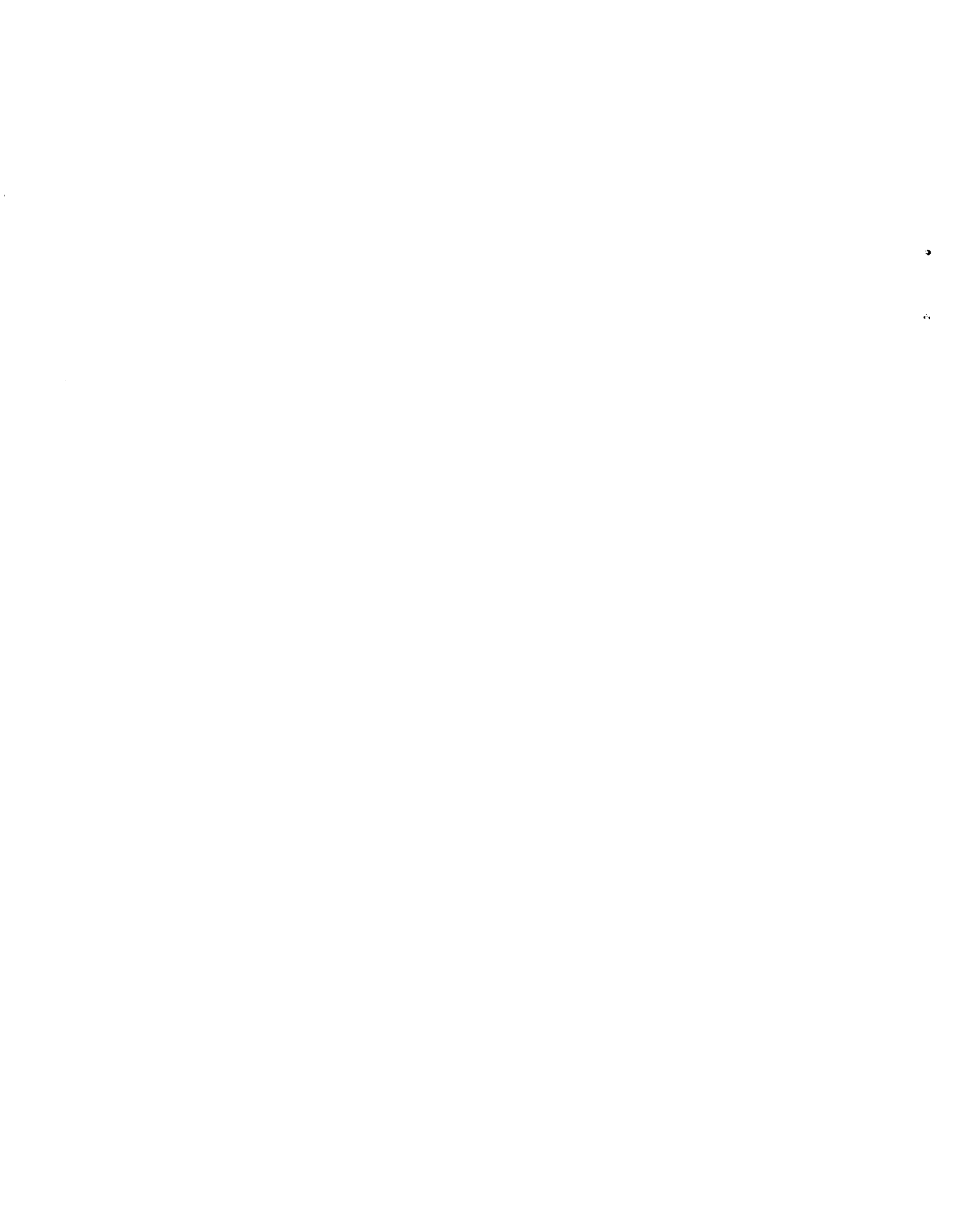
- .1 Attainment of reliability, speed and security depends, to a large extent, on the operator. It is essential that he be well trained, maintain circuit discipline and thoroughly understand his responsibilities.
 - (a) In tape relay procedure, care with which receiving operators scrutinize and handle incoming tapes, in a large measure, determines the overall speed of traffic handling.
 - (b) When garbles or mutilations are recognized and corrected before onward transmission, it permits immediate recognition and correction of equipment irregularities and prevents subsequent delays.
- .2 Adherence to prescribed procedure is mandatory. Departures or variations in prescribed procedure invariably create confusion, reduce reliability and speed and tend to nullify security precautions.
- .3 Unnecessary transmissions must be suppressed by active and continuous supervision.
- .4 No transmission shall be made unless authorized by proper authority.
- .5 Radio operators must listen through for a clear circuit before transmitting.
- .6 Specific malpractices which endanger communication security are set forth in Article 5315.

9073. ACCURACY IN TRANSMISSION

- .1 Operators shall transmit messages exactly as written. Abbreviations shall not be substituted for plain language, or plain language substituted for abbreviations.
- .2 When employing manual means, each character shall be transmitted clearly and distinctly. Speed of transmission shall be governed by the prevailing conditions and the capabilities of the receiving operator.
- .3 Accuracy in transmission is far more important than speed. The difference in time required to send a message at one speed and that required to transmit it five words per minute faster is slight. Even this slight gain in time may be nullified by any added time required for repetitions.
 - (a) The speed at which the receiving operator can copy without having to obtain repetitions is the speed at which the transmitting operator will transmit. When transmitting to more than one station, the governing speed of the transmitting operator is that of the slowest receiving operator.
 - ★ (b) The speed of transmission for message headings on manually operated circuits should be slower than the speed of transmission of message texts.

9074. SPEED KEY REQUIREMENTS

- .1 In the interest of morale and pride of accomplishment, radiomen should be encouraged to qualify for speed key certificates within their commands.
- .2 The following commanders shall be the sole issuing agency of certificates:
 - Navy - Fleet commanders; naval force commanders; type commanders; commandants of naval districts and river commands.
 - Marine Corps - Commandant of the Marine Corps; Commanding General, Department of Pacific; Commanding Generals, FMF commands.
 - (a) The above commanders, at their discretion, may set up boards within their commands to conduct examinations for speed key certificates.
 - (b) Certificate cards shall include the name and service number of the operator, date of issue and title of issuing officer. They shall be serially numbered.
 - (c) A notation of the operator's qualification shall be made in his service record.
 - (d) Records shall be maintained of certificate cards issued and revoked.
- .3 No radio operator should be permitted to use a speed key until he has met the following qualifications:
 - (a) Send clearly the headings of messages, with hand and speed key, at 15 words per minute, for a period of one minute. One error, properly corrected, may be allowed each transmission--one error with a hand key; one error with a speed key.
 - (b) Send distinctly with hand key 20 groups of five-letter code in 70 seconds. One error, properly corrected, may be allowed provided the total time of text does not exceed 70 seconds.
 - (c) Send distinctly with speed key 25 groups of five-letter code in 75 seconds. Two errors, properly corrected, may be allowed provided the total time of text does not exceed 75 seconds.
 - (d) Send distinctly with speed key 60 words of plain language in 2 minutes (each set of consecutive 5 letters being counted as a word). Two errors, properly corrected, may be allowed provided the total time of text does not exceed 2 minutes.
 - (e) The speed key used to complete the above requirements should be adjusted to make not more than 12 dots per second.



9075. INTERNATIONAL MORSE CODE

- .1 All naval telecommunications except semaphore, teletypewriter and radiotelephone, employ the use of the INTERNATIONAL MORSE CODE. The characters used are:

(a) Letters -

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

(b) Figures -

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

- ★.2 The following special characters, which are authorized for military use, include some abbreviations and signals that have international definitions. The military definitions and applications are set forth below:

<u>AA</u> - Unknown station
<u>AR</u> - End of transmission
<u>AS</u> - Wait
<u>BT</u> - Long break
<u>HM</u> - Emergency silence (3 times)
<u>IMI</u> - Repeat
<u>INT</u> - Interrogative
<u>IX</u> - Execute to follow
<u>IX</u> (5-second dash) - Executive Signal (5-second dash)

- .3 Special abbreviations used in visual procedure:

OL - Show steady light ---

PT - Call signs follow -----

9076. FORMATION OF CHARACTERS IN MORSE CODE

- .1 Characters used in Morse code are formed in the following units of duration:

- DOT is used as the unit of duration.
- DASH is equal to three units.
- An element is either a DOT or a DASH.
- The space between elements is one unit.
- The space between characters is three units.
- The space between groups is seven units.

9080. OPERATING SIGNALS & PROSIGNS

9081. OPERATING SIGNALS ("Z" AND "Q")

- .1 Operating signals are a concise code designed primarily for use by communication personnel in exchanging information incident to the handling of messages or in establishing communications. They are employed in the heading or ending of messages. They are also used in procedure messages and other forms of messages between communication personnel.
- .2 Operating signals possess no security and therefore they must be regarded as the equivalent of plain language.
- .3 The "Z" signals are designed to cover military requirements and should be used whenever necessary in military communications. "Q" signals may be used in military communications where no suitable "Z" signal exists. "Q" signals only may be used in non-military communications.
- .4 Meanings of "Z" and "Q" operating signals may be amplified or completed by the addition of appropriate call signs, time groups, complementary groups, etc. Call signs used to complement an operating signal normally follow the signal, but under certain conditions, such as clarity or to effect separation, they may be placed ahead of the operating signal. Plain language is prohibited except when no other method is provided to complete the meaning.
- .5 When desired, an operating signal may be given an interrogative sense:
 - (a) When communicating with military stations: by inserting the prosign INT before the "Z" and "Q" signal.
 - (b) When communicating with non-military stations: by inserting the prosign IMI after the "Q" signals and data used with it.
- .6 Operating signals should not normally be used in radiotelephone procedure. Instead, the operating information will be conveyed by concise phrases. When it is necessary to relay operating signals over voice circuits, they are transmitted by their phonetic equivalents.

9082. PROSIGNS AND PROWORDS

- .1 Prosigns are procedure signs consisting of one or more letters or characters or combinations thereof. They are used to facilitate rapid communication by conveying in condensed standard form certain frequently used orders, instructions, requests, reports and information related to communications.
- .2 Prowords are word equivalents of prosigns, for use in radiotelephone procedure.
- .3 Operating personnel shall not under any circumstances substitute prosigns, prowords or combinations thereof for the textual component of a message received for transmission without the consent and approval of the originator.

9083. LIST OF PROSIGNS AND PROWORDS

- .1 The following authorized list of prosigns and prowords may be used as prescribed. (A bar over a prosign indicates that the prosign is to be transmitted as a single character-that is, without pause between letters):

9097. C - THAT IS CORRECT

.1 The prosign C used alone means YOU ARE CORRECT.

(a) NCFX transmits a message to NTSY who questions the accuracy of the fifth group:

NCFX DE NTSY INT 5 - XABMO K

(b) If the questioned group is correct, NCFX transmits:

NTSY DE NCFX C K

(c) NCFX transmits a repeat back message to NTSY. After NTSY repeats the message back correctly, NCFX transmits:

NTSY DE NCFX C AR

★.2 C followed by identification data means THIS IS A CORRECT VERSION OF THE MESSAGE, OR PORTIONS INDICATED.

(a) Correcting a portion of the message in the final instructions:

32 GALONS OF OIL
BT
 C WA 32 - GALLONS
AR

(b) Before receipting for a message from NTSY, NCFX questions the reception of the fifth group:

NTSY DE NCFX INT 5 - BATIO K

NTSY checks and finds the group is incorrect. NTSY transmits:

NCFX DE NTSY C 5 - BATSO K

9098. DE - THIS IS

.1 The prosign DE is used only in the call and means THIS TRANSMISSION IS FROM THE STATION WHOSE DESIGNATION FOLLOWS.

(a) A complete preliminary call (to establish communications):

NTFJ DE NTSY K

.2 Examples of the use of the prosign DE are shown in Subsection 9130.

9099. EEEEEEEE - Error

.1 To correct errors, a succession of eight or more E's is transmitted and means AN ERROR IN TRANSMISSION HAS JUST BEEN MADE. In correcting errors in the heading the error sign will be made, the operator will retransmit the last prosign or operating signal that was correctly transmitted, and the transmission will continue. To correct an error within the text the error sign is made, the last word or group correctly transmitted is retransmitted, and transmission is continued. To correct an error in a message, the text of which is taken from a Naval Signal Book, the error sign is made, the operator retransmits the last BT or TACK correctly sent, and then continues with the transmission.

9099.1 (Continued)

NOTE: The phrase "eight or more E's" is intended to facilitate operations. It shall not be construed as permitting transmission of an excessive number of E's.

- (a) NTSY, transmitting a message, makes and corrects an error in the heading:

NTFJ DE NTSY -
M - 130830Z -
FM NBA -
TO NTSY
NUYG EEEEEEEE
TO NTSY
NUYO -
INFO NTFJ
GR18
BT etc.

- (b) NCFX, transmitting a message to NAYS, makes and corrects an error in the text:

NAYS DE NCFX -
R - 201827Z
GR14
BT
LXOBO ISELA VOK EEEEEEEE ISELA VOUJ NULUH etc.

- ★(c) NEBG transmitting to NCFX, makes and corrects an error in the text of a procedure message:

NCFX DE NEBG IMI AB 2 EEEEEEEE AB 32 K

- (d) NEBG transmitting to NCFX, makes and corrects an error in the preliminary call:

(1) NCFD EEEEEEEE NCFX DE NEBG K

(2) NCFX DE NEDEEEEEEEE DE NEBG K

- .2 To cancel transmission while in progress, a succession of eight E's followed by the prosign \overline{AR} means THIS TRANSMISSION IS IN ERROR, DISREGARD IT. This method of cancelling a transmission cannot be used after the transmission has been receipted for. A procedure message containing operating signals or a service message must be used for this purpose. (See Article 9157).

- (a) NTSY, while transmitting a message to NCFX, discovers that the message should not be sent and cancels the transmission:

NCFX DE NTSY -
M - 171525Z -
FM NTSY -
TO NUYO
EEEEEEEE \overline{AR}

- .3 The above procedure is not applicable to tape relay operations. The procedure to be used in tape relay is contained in Article 13172.

- .4 The equivalent proword for EEEEEEEE is CORRECTION. The equivalent proword for EEEEEEEE \overline{AR} is DISREGARD THIS TRANSMISSION.

9101. F - DO NOT ANSWER

- .1 The prosign F used in the transmission instructions means STATIONS CALLED ARE NOT TO ANSWER THIS CALL OR TO RECEIPT FOR THIS MESSAGE OR OTHERWISE TO TRANSMIT IN CONNECTION WITH THIS TRANSMISSION.

9104. (Continued)

- .6 For encrypted text messages with a group count exceeding 50 groups, the following procedure is used: If the receiving station is considered to be incorrect, the transmitting station repeats the original group count and transmits the identity of the first, eleventh and every subsequent tenth group followed by the initial letter of that group (the identity of the group will be separated from the initial letter of that group by a separative sign).
- (a) NTSY transmits a message containing 76 groups to NCFX. NCFX questions the group count:
NTSY DE NCFX $\overline{\text{INT}}$ GR75 K
- (b) NTSY checks and finds the group count correct as transmitted, then transmits:
NCFX DE NTSY GR76 $\overline{\text{BT}}$ 1-D 11-L 21-H 31-P 41-Q 51-M 61-W 71-F $\overline{\text{BT}}$ K
- (c) NCFX then requests a repetition of the ten groups in which it has a miscount.
NTSY DE NCFX $\overline{\text{IMI}}$ 31 TO 40 K
- .7 Subject to the above checking of the group count (lettering), the group count of the transmitting station is final.

9105. GRNC - GROUP NO COUNT

- .1 The prosign GRNC means THE GROUPS IN THE TEXT OF THIS MESSAGE HAVE NOT BEEN COUNTED. This prosign is included in the prefix if it is necessary to indicate that the groups have not been counted.
- .2 GRNC will be included in messages bearing an accounting symbol when the groups are not counted.
- .3 The prosign GRNC will not be used on encrypted messages. In those cases where the group count has not been determined prior to transmission, GRNC will be placed in the prefix and the actual group count will be transmitted in the final instructions as a correction and will be inserted in the message prefix by the receiving operator.

EXAMPLE:

NJSS DE NAM - P - 081104Z -
FM PKWN -
TO NJSS
GRNC
 $\overline{\text{BT}}$
TEXT
 $\overline{\text{BT}}$
C GR117 K

9106. $\overline{\text{HM}}$ $\overline{\text{HM}}$ $\overline{\text{HM}}$ - SILENCE

- ★.1 $\overline{\text{HM}}$ transmitted three times or the proword SILENCE transmitted three times means CEASE TRANSMISSION ON THIS OR INDICATED CIRCUIT IMMEDIATELY. SILENCE WILL BE MAINTAINED UNTIL DIRECTED TO RESUME.
- .2 Stations do not answer or receipt for a transmission imposing emergency silence.
- .3 Emergency silence may be imposed or lifted by a station only when authorized by competent authority.
- .4 When an authentication system is in force, a station must always authenticate a radio transmission which:
- (a) Imposes emergency silence

9106.4 (Continued)

- (b) Lifts emergency silence
- (c) Calls a station during a period of emergency silence

.5 Emergency silence is lifted by addressing the station concerned and transmitting the operating signal meaning NEGATIVE followed by HM HM HM.

9107. II - SEPARATIVE SIGN

- ★.1 The separative sign is employed in radiotelegraph, but not in teletype or radiotelephone procedures.
- .2 In visual procedure the separative sign is employed except in directional flashing light procedure where a flash is given for every word, group or prosign.
- .3 II, written as a short dash, is used to prevent mistakes in reception which might occur if letters or figures of adjacent groups are run together. The sign is used in messages as follows:
 - (a) Before and after all prosigns in the procedure and preamble components of the heading except DE, AA, NR and GR.
 - (b) To separate each element of the address component, such as between preamble and the prosign FM, between the designation of the originator and the prosign TO, between the designation of the action addressee and the prosign INFO, and between the designation of the information addressee and the prosign XMT.
 - (c) Between the call and the beginning of the repetition of a message to be repeated back.
 - (d) To separate the address component from the prefix when an accounting symbol is used.
 - (e) To separate call signs belonging to adjacent message components or adjacent multiple transmission instructions.
 - (f) The separative sign is used in procedure messages to separate portions of the text.
 - (g) The separative sign shall not be used in the texts of messages to indicate hyphen.
 - (h) In visual signaling, between code groups, except in directional flashing light when a flash is given for each code group.

9108. IMI - SAY AGAIN - I SAY AGAIN

- .1 The prosign IMI means REPEAT or I REPEAT MESSAGE OR PORTIONS OF A MESSAGE AS INDICATED.
- .2 IMI without identification data means REPEAT ALL OF YOUR LAST TRANSMISSION.
 - (a) NCFX requests a repetition of the entire transmission just completed by NUYO:
 NUYO DE NCFX IMI K
- ★.3 IMI followed by identification data means REPEAT THE INDICATED PORTION OF YOUR TRANSMISSION.

EXAMPLE A:

NTFJ DE NTSY IMI AB MOVEMENT K

9131.2 (Continued)

- (b) When there are both action and information addressees in the call line, the information addressees must be indicated additionally in the transmission instructions by use of the operating signal ZFH2, followed by the designation of the information addressees.

NCFX NUYO DE NTSY -
 ZFH2 NUYO -
 R - 161512Z
GR18
 BT

- (c) When all addressees are information addressees they are indicated by the inclusion of the operating signal ZFH2 with no address designations following.

NCFX NUYO DE NTSY -
 ZFH2 -
 R - 161512Z
GR18
 BT

NOTE: ZFH2 means THIS MESSAGE IS PASSED TO YOU FOR INFORMATION.

- .3 For sake of expediency, call sign and/or address groups need not be arranged in alphabetical order in the address component of intra-Navy messages.

9132. READDRESSING MESSAGES

- .1 An addressee may readdress a message to others not included in the original address, provided no alteration is made to the precedence, message instructions, address, prefix or text of the original message.
- .2 PROCEDURE:
- (a) A supplementary heading is added to the message preceding the original preamble. The supplementary heading will show the readdressing addressee as the originator and will contain action and/or information addressees, a precedence prosign, a date-time group and, when necessary, message instructions and transmission instructions.
- (b) Only that part of the original message preceding the preamble is omitted.
- (c) The new precedence assigned applies to the supplementary address.
- (d) The preamble of the original message indicates the beginning of the original message as received by the addressee who is readdressing it.
- ★ (e) If an encrypted message with encrypted address designations is to be readdressed, the original encryption of the address must not be altered. Address designations in the supplementary heading also shall be encrypted based on the original date-time group.
- (f) When readdressing CODRESS messages, the originator and addressees of the readdressed heading will be indicated by call signs or address groups.
- (g) Readdressed messages are filed under the original DTG. The readdressal DTG will not be used as a textual reference.

9132. (Continued)

- .3 If the message to be readdressed carries a DTG which is other than the current month, the abbreviation of the month of origin may be added to the original DTG. This is the only alteration permitted to the preamble, address, prefix or text of an original message.

★ (a) Message as received on 18 June:

NABC DE CUSP - T - P - 181906Z -
 FM CUSP -
 TO PINK
 GR131 BT TEXT BT AR

Message later readdressed on 19 July:

NSS DE PINK - T - M - 192101Z -
 FM PINK -
 TO STAR
 -P - 181906Z JUN -
 FM CUSP -
 TO PINK
 GR131 BT TEXT BT K

- .4 If the readdressal authority knows that all new addressees hold the original message in their files, the operating signal ZEW1 and/or ZEW2 should be used rather than retransmitting the original message.

EXAMPLE: NSS DE PINK - T - M - 192101Z -
 FM PINK -
 INFO STAR
 BT
 ZEW2 WR NR1136 BT K

- ★.5 If it is considered necessary to inform any of the original addressees or the originator that the message has been readdressed, a brief service message should be used rather than including them as information addressees in the supplementary heading. However, should any of the original addressees or the originator be guarding the same circuit over which the readdressed message will be passed they may be included in the supplementary heading in lieu of originating a separate service message.
- ★.6 An originator desiring to add addressees to a message recently transmitted will normally do so by a procedure message if it is definitely known that the new addressees hold the message in their files. If an appreciable length of time has elapsed or if there is doubt that a new addressee holds the message in his files, a readdressal should be used.
- .7 If an addressee finds it necessary to repeatedly readdress messages, the originator should be advised of the new addressees appropriate for inclusion in the address of such messages.

9133. USE OF OPERATING SIGNALS TO READDRESS OR INVITE ATTENTION TO MESSAGES

- .1 The operating signals ZFH and ZEW may be used in procedure messages to disseminate messages to non-addressees.
- .2 The passing authority must be an addressee of the message he desires to pass.
- .3 A date-time group will not be used in such procedure messages when in direct communication.
- .4 EXAMPLES:

(a) PKWN DE NABT ZFH1
 - P - 061942Z -
 FM STAR -
 TO NABT
 GR138
 BT TEXT BT K

9133.4 (Continued)

(b) Using a transmission identification number:

NJSS DE SPQX ZEW2
NR 836 K

9134. READDRESSING PLAINDRESS MESSAGES

.1 Original message received by NUYO from NTSY in direct communication and the call served as address:

NUYO DE NTSY -
P - 221421Z
GR16
BT
TEXT
BT

(a) Message readdressed by NUYO to NWFD for action, call not serving as address of supplementary heading:

NWFD DE NUYO -
O - 221445Z -
FM NUYO -
TO NWFD -
P - 221421Z -
FM NTSY -
TO NUYO
GR16
BT
TEXT
BT

.2 Original message received by NUYO from NTSY, call not serving as address:

NUYO DE NTSY -
P - 271634Z -
FM NTSY -
TO NTFJ -
INFO NUYO
GR32
BT
TEXT
BT

(a) Message readdressed by NUYO to NWFD for information:

NWFD DE NUYO -
M - 281832Z -
FM NUYO -
INFO NWFD -
P - 271634Z -
FM NTSY -
TO NTFJ -
INFO NUYO
GR32
BT
TEXT
BT

9135. READDRESSING ABBREVIATED PLAINDRESS MESSAGES

.1 Original message received by NUYO from NTSY in ABBREVIATED PLAINDRESS form:

NUYO DE NTSY
BT
TEXT
BT
1141Z

9135.1 (Continued)

(a) Message readdressed by NUYO to NWFDF for information:

NWFDF DE NUYO -
 M - 251245Z -
 FM NUYO -
 INFO NWFDF -
 FM NTSY -
 TO NUYO
 BT
 TEXT
 BT
 1141Z
 K

9136. READDRESSING CODRESS MESSAGES

- .1 A supplementary heading is inserted in front of the preamble. The supplementary heading may indicate action and/or information addressees. It will contain a precedence prosign, a date-time group and, when necessary, transmission instructions.
- .2 All that part of the original CODRESS message preceding the preamble in the heading is omitted.
- .3 The prosign FM is used in the supplementary heading as required.
- .4 CODRESS message as received by NUYO:

NUYO DE NTFJ -
 P - 231314Z
 GR71
 BT
 TEXT
 BT

(a) Message readdressed by NUYO to NWFDF for action:
(NWFDF and NUYO in direct communication)

NWFDF DE NUYO -
 O - 231425Z -
 P - 231314Z
 GR71
 BT
 TEXT
 BT

- .5 CODRESS message as received by NUYO which contains specific transmission instructions indicating NUYO is to decrypt the message and to relay it to NUBJ:

NUYO DE NTSY -
 T - NUBJ NUYO -
 P - 141414Z
 GR60
 BT
 TEXT
 BT

(a) Later NUYO desires to readdress the message to NWLV for action and NWFDF for information with ROUTINE precedence as follows:

9155.1 (Continued)

- (a) In local delivery the missing or doubtful portions will be indicated by appropriate notation on the message.
- (b) In forwarding, the appropriate operating signals will be included.
- .2 A station delivering or forwarding a message subject to correction is responsible for obtaining and forwarding corrections.

9156. METHODS OF REQUESTING INFORMATION

- .1 There are three methods available for requesting information relative to the whole or to a part of a message which has been received for. Each method serves a different purpose.
 - (a) Repetition or Rerun is used between operators when a message or portion has been received incorrectly or incompletely. It is requested by procedure message using operating signals.
 - (b) Check is used between cryptocenters when a message or portion cannot be decrypted. It is requested by an encrypted service message.
 - (c) Verification is used between addressee and originator when the meaning of a message is not understood. A request for verification may be initiated only by an addressee. It may be made by procedure message using the prosign J, or by service or regular message.
- .2 Requests for repetitions, checks and verifications shall be kept at a minimum consistent with reliable communications in order to avoid overloading circuits and protect security. Careful attention to detail on the part of communication and cryptographic personnel, coupled with proper operating technique, will do much to reduce the number of service messages required to effect the delivery of a correct message to addressees.
- .3 When necessary, repetitions or verifications may be obtained by the use of appropriate procedure signs or operating signals in the form of procedure messages. In some cases, it may be desirable or necessary, as in the case of some CODRESS messages, to draft a complete message requesting the desired information. In any case, the station making the request must provide the originating station with appropriate information to aid in locating the message or portion being questioned.
- .4 Each service message requesting a rerun (ZDK) of Broadcast messages will contain all outstanding missing numbers for the broadcast concerned, and will, in addition, contain a cancellation of any previous rerun request (ZDK).

9157. CORRECTION AND VERIFICATION PROCEDURE

- .1 Before receipt is obtained:
 - (a) When an error or omission is noticed by the receiving operator before receipt has been given, or when a message has not been completely or correctly received, corrections or repetitions will be requested by means of the appropriate prosigns or prowords prior to receipting.
 - (b) If a transmitting operator must repeat or correct any portion of a message after it has been transmitted but before receipt has been obtained, he shall do so by means of the appropriate prosigns and prowords, and the repetitions or corrections as required.
- .2 After receipt is obtained:
 - (a) A procedure message or a service message will be employed to obtain repetitions or send corrections.

9157.2 (Continued)

- (b) A procedure message or a service message may be assigned the precedence considered necessary to ensure accomplishment of its purpose.

9158. EXAMPLES

.1 Original transmission by NTSY:

YOBV DE NTSY -
 M - 271545Z -
 FM NTSY -
 TO NUYO -
 INFO NCFX
 NTFJ
 GR11
 BT
 KJAPY CBOQU ALAJY QLUPY RFOQO IMUCO
 TKAWG PGUXO SXAVA DRATU HSOBO
 BT
 K

Request for repeat of last transmission:

NTSY DE NUYO IMI K

Answer:

NUYO DE NTSY -
 YOBV DE NTSY -
 M - 271545Z -
 FM NTSY -
 TO NUYO -
 INFO NCFX
 NTFJ
 GR11
 BT
 KJAPY CBOQU ALAJY QLUPY RFOQO IMUCO
 TKAWG PGUXO SXAVA DRATU HSOBO
 BT
 K

.2 Request to repeat all before the text of the last transmission.

NTSY DE NUYO IMI AB BT K

Answer:

NUYO DE NTSY
 AB BT -
 YOBV DE NTSY -
 M - 271545Z -
 FM NTSY -
 TO NUYO -
 INFO NCFX
 NTFJ
 GR11
 BT
 K

9159.1(a) (Continued)

★

Answer:

NTSY DE NTFJ
 C 281545Z
 - M - 281545Z -
 FM NTFJ -
 TO NUYO -
 INFO NTSY
 GR7
 BT
 PROCEED ON DUTY ASSIGNED. MAKE MOVEMENT REPORTS
 BT
 K

- (b) NUYO desires NTFJ to verify and repeat all before the text of message indicated.

Request:

NTFJ DE NUYO
 J 281545Z AB BT K

Answer:

NUYO DE NTFJ
 C 281545Z AB BT
 - M - 281545Z -
 FM NTFJ -
 TO NUYO -
 INFO NTSY
 GR8 BT
 K

- ★ (c) NUYO desires NTFJ to verify and repeat all after DUTY

Request:

NTFJ DE NUYO
 J 281545Z AA DUTY K

The originator NTFJ discovers he has made an error in the original message and desires to correct to read: MAKE OWN MOVEMENT REPORT.

NTSY NUYO DE NTFJ
 C 281545Z AA DUTY -
 ASSIGNED. MAKE OWN MOVEMENT REPORT BT C GR8 K

- .2 When the text of an ABBREVIATED PLAINDRESS message is such that its meaning normally would be determined prior to receipting for its transmission and it is necessary to request a verification, such a request may be made by use of the prosign J in lieu of first receipting.

9159.2 (Continued)

EXAMPLE:

Message transmitted to collective call YOBV (NABC, NTSY, NUYO):

YOBV DE NTFJ
 IX BT
 TURN NINE
 BT K

Prior to receipting, NABC desires verification:

NTFJ DE NABC J K

After verifying with the originator NTFJ sends:

NABC DE NTFJ
 - C - IX BT TURN NINE BT K

9160. MESSAGE REFILE

9161. MESSAGE REFILE

- .1 A message which is to be retransmitted by a means different from that by which it was received must be converted into the proper form, except as in paragraph .3 below.
 - (a) The procedure component is deleted or changed as necessary.
 - (b) Visual and voice call signs are converted to CW call signs and/or address groups if the message is to be retransmitted by CW or RATT.
 - (c) Confirmations in the message ending which agree with the text will be deleted. If time permits, confirmations which differ from the text will be referred to the originator. Otherwise, they will be retained and forwarded in the final instructions preceded by the operating signal meaning CONFIRMATION AS RECEIVED IS AT VARIANCE WITH TEXT.
 - (d) Tape relay time of filing, when appearing, is deleted.
 - (e) Routing indicators and operating signals indicating delivery by other means when appearing in format lines 7 or 8 are deleted.
- .2 When transmitting a refiled message containing incomplete groups, the slant sign will be used to indicate the missing characters. Care should be exercised to ensure that confusion does not result from use of the slant sign in plain language messages. When the location of the missing characters cannot be readily determined, the slant sign will be transmitted at the beginning of the questionable group.
- .3 To reduce reprocessing, messages received in tape relay procedure for transmission by radioteletypewriter broadcast may be handled as follows:
 - (a) Check tape for garbles, etc., and delete format lines 1 through 4.
 - (b) After the broadcast number identification, begin transmission with line 5 of the NTX message format. End the transmission with 2 carriage returns and 8 line feeds following format line 15.
 - (c) Messages containing an address indicating group (AIG) or in CODRESS form are handled similarly except for necessary inclusion of the address indicating group or the specific address groups of the CODRESS addressees.

9185. EXECUTING A PORTION OF AN EXECUTIVE MESSAGE

- .1 To execute a portion of an outstanding executive message the desired portion to be executed will be retransmitted and followed by the executive signal. Absence of the prosigns \overline{IX} \overline{BT} in the message instructions indicates that it is part of a message previously transmitted:

OMNY DE PKWN SPEED 16 \overline{IX} (five-second dash) \overline{AR}

9186. CANCELLATION OF EXECUTIVE MESSAGES

- .1 The signal NEGAT is used to cancel unexecuted executive messages. NEGAT alone cancels all messages transmitted to the same call and waiting execution. NEGAT followed by identification data cancels only the identified messages or identified portions of messages. Executive method messages cannot be cancelled once the executive signal has been transmitted.

9187. REPETITIONS, VERIFICATIONS, CORRECTIONS OF EXECUTIVE MESSAGES

- .1 A station desiring a repetition or a verification of a portion of an executive message will request that the entire message be repeated or verified and repeated.
- .2 An executive message found to be incorrect must be cancelled and a new message transmitted.

9200. BROADCAST AND INTERCEPT METHODS

9201. SCHEDULED TRANSMISSIONS

- .1 General principles for conducting broadcast and intercept method transmissions are set forth in Subsection 6200.
- .2 It is necessary that all stations conducting scheduled transmissions commence their transmissions on time. Each station prior to commencing a schedule normally shall make a preliminary test.

9202. TEST CALLS

- .1 Test calls consist of a series of V's followed by the prosign DE, the broadcast station's call sign and, when employed, letter designation (sent three times) for five minutes before each scheduled time.

EXAMPLE:

VVV VVV VVV DE NSS NSS NSS WWW (For five minutes preceding the schedule)

9203. COMMENCING BROADCAST SCHEDULES

- .1 Broadcasts shall be made on specified frequencies and at specified times. Any changes in either frequency or time shall be transmitted once at the beginning and once at the end of the regular broadcast during a period of forty-eight hours preceding the change.
- .2 Not Specifically Addressed Traffic. After running the call tape for approximately five minutes, the broadcast shall be commenced at precisely the prescribed time by the general call CQ transmitted three times, the prosign DE transmitted once, and the call sign of the transmitting station transmitted three times. The prosign BT shall be used to separate the call from the first item of the broadcast.

EXAMPLE:

CQ CQ CQ DE NSS NSS NSS BT

- .3 Specifically Addressed Traffic. After running the call tape for approximately five minutes, precisely at the prescribed time, the transmission begins:

NERK NERK NERK DE NSS NSS NSS
 W NR156 W NR156 -
 P P - 191845Z 191845Z -
 FM FM NUYO NUYO -
 TO TO NWLV NWLV -
 GR17 GR17 BT
 (TEXT) BT AR

W NR157 W NR157 -
 O O - 191915Z 191915Z -
 GR75 GR75 BT
 TEXT BT AR

NERK NERK NERK DE NSS NSS NSS QRU AR

NOTE: When plain language designations are used in the address component, the prosigns will be sent twice and the plain language designations only once.

9203.3 (Continued)

- (a) When a message must carry double transmission identification data, it will appear as W NR162/S154 to indicate Washington primary fleet broadcast message serial number 162; submarine serial number 154.

.4 Correction of errors.

- (a) To correct errors made in the text during transmission employing automatic equipment the error sign (EEEEEEEEE) will be made by hand followed by a repetition of the last group correctly transmitted and the group in which the error was made. This group will be followed by IMI a repetition of the group in which the error was made and the next succeeding group and IMI transmitted by hand. Automatic transmission will be resumed by repeating the last group transmitted by hand. Example:

(Auto) DCHAV MCGKO PUITR COBD

(Hand) EEEEEEEEE PUITR COVDA IMI COVDA XGSWY IMI

(Auto) XGSWY RUQPF MZHSL etc. etc.

- (b) When two or more groups have been transmitted before discovering the error, the correction shall be made by the use of the prosign C upon completion of the transmission of the message and prior to transmitting AR.

9204. COMMENCING INTERCEPT SCHEDULES

- .1 The intercept method is defined in Article 6203.
- .2 Precisely at the scheduled time, and assuming that neither station has a message to transmit, NBA begins the schedule, using BRAVO transmission identification numbers:

NPL DE NBA B NR228 B NR228 K

NPL, using KIL0 transmission identification numbers, transmits:

NBA DE NPL - NPL DE NBA B NR228 B NR228 - NBA DE NPL
K NR287 K NR287 K

NBA transmits:

NPL DE NBA C - NBA DE NPL K NR287 K NR287 K

NPL indicates that the schedule is completed:

NBA DE NPL C AR

- .3 Precisely at the time for the next schedule, and assuming that NBA has two messages arranged for transmission in order and NPL has one message awaiting transmission, NBA begins:

NPL DE NBA
B NR229 B NR229 -
P P - ~~031056Z~~ ~~031056Z~~ -
FM FM NTSY NTSY -
TO TO NTFJ NTFJ
NUYO NUYO
GR15 GR15 BT
(TEXT) BT AR (Continued on next page)

9204.3 (Continued)

B NR230 B NR230 -
 M M - 031115Z 031115Z -
 FM FM NCFX NCFX -
 TO TO NAYS NAYS -
 GR25 GR25
 BT TEXT BT K

NPL transmits:

NBA DE NPL -
 NPL DE NBA B NR229 B NR229 -
 P P - 031056Z 031056Z -
 FM FM NTSY NTSY -
 TO TO NTFJ NTFJ
 GR15 GR15 BT
 (TEXT) BT AR
 B NR230 B NR230 -
 M M - 031115Z 031115Z -
 FM FM NCFX NCFX -
 TO TO NAYS NAYS
 GR25 GR25 BT
 (TEXT) BT AR
 NBA DE NPL K NR288 K NR288 -
 M M - 031118Z 031118Z -
 FM FM NWFD NWFD -
 TO TO NUYO NUYO
 GR18 GR18 BT
 (TEXT) BT K

NBA transmits:

NPL DE NBA C -
 NBA DE NPL K NR288 K NR288 -
 M M - 031118Z 031118Z -
 FM FM NWFD NWFD -
 TO TO NUYO NUYO
 GR18 GR18 BT
 (TEXT) BT K

NPL transmits:

NBA DE NPL C AR

9210. AIR-GROUND COMMUNICATIONS

9211. TERMINATING AIR-GROUND TRANSMISSIONS

- .1 When a ground station is communicating with several aircraft on a common frequency, it is often impossible for one aircraft to determine when communication between other aircraft and the ground station has terminated. Because of these difficulties, the following rules, when prescribed, will apply to air-ground communications:
- (a) Every sequence of transmission between a ground station and aircraft must conclude with a final transmission, ending in the prosign AR by the ground station even when the last transmission made by the aircraft ended with the prosign AR. Thus, if the aircraft transmits R AR, the ground station will reply R AR.
 - (b) In air-ground communication, a ground station, from time to time, may indicate to all stations on this frequency that no transmissions are in progress, and that it is free to communicate with any station by transmitting the prosign DE and its call sign followed by the prosign AR.

9220. SPECIALIZED FUNCTIONAL PROCEDURE

9221. EXPLANATION

- .1 Specialized procedures may be prescribed for use on functional CW nets. These procedures use to the maximum extent abbreviated CW equivalents of the voice brevity code (ACP 165), shortened calls and "round-robin" series of transmissions from stations in the net.

9222. PICKET REPORTING NET

- .1 The Picket Reporting Net is the CW or RATT equivalent of a voice air defense net for exchanging raid and ECM information.
- .2 The net will be guarded by all pickets in the inner and intermediate picket lines of the sector and controlled by the sector AD ship. The force AD ship, the other sector AD ships, and the guided missile ships will listen and thus be able to maintain their air summary plots. Once the net is established by the sector AD ship, each picket will transmit all raid information on hand, ending the message with AR. The next station will take his turn on the net; if he has nothing to send, he will identify himself and transmit an AR. When a complete round of reports indicates that all ships have nothing to report, the sector AD ship may transmit SR (meaning "stop reports"). The circuit will remain manned and ready, and when any ship sends a report, the sequence reporting starts again. Each ship should wait 5-10 seconds after receiving AR before it starts its transmission. The major portion of traffic on the picket reporting net will be raid and ECM information. However, to coordinate raid information between adjacent pickets and to clarify raid reports, brief messages may be sent by units during their turn in the cycle. The answer will come back in sequence. In order to achieve rapidity of communications, a brevity code will be used to the maximum extent possible.
- .3 All raid reports sent via the picket reporting net will be in the following form:

From _____
 Raid designation _____
 Grid posit _____
 Course, speed, size, altitude _____
 Time _____

If, for example, a ship occupying picket station Bravo wished to report a bogey which she had designated "Bravo thirteen", and which was located at Golf position NKDL4119, on course 215, speed 490 knots, composed of few aircraft at an altitude of 36,000 feet, at 1442 local time, the report would be drafted as follows:

PB B13 NKDL4119 C215S49FBA36 T42 AR

- .4 If it is desired to report a number of bogies, which will normally be the case, the individual bogey reports will be separated by "Slant" and AR transmitted at the end of the report.
- .5 Friendly posit reports and ECM reports will be sent via this net.

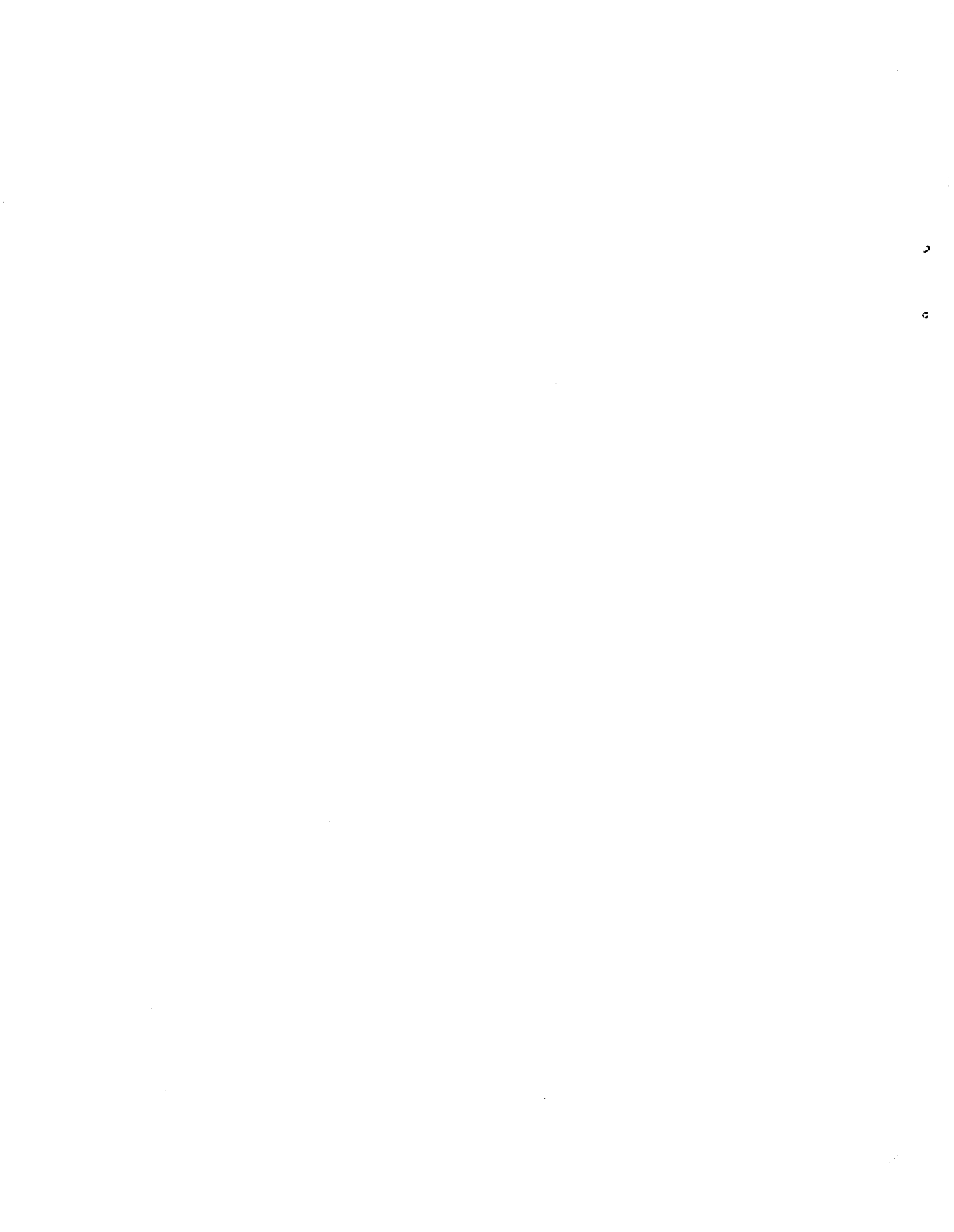
9

6

CHAPTER ELEVEN

RADIOTELEPHONE PROCEDURES

Radiotelephone procedures will be in accordance
with the effective edition of ACP 125.



12003. EXCHANGE OF VISUAL CALLS

- .1 The procedures prescribed in the International Code of Signals, Volume I (H.O. 103) shall be used when exchanging calls with unknown ships, merchant ships, and non-Allied naval ships.
- .2 Many of the prosigns prescribed in ACP 129 for visual signaling are either not recognized in H.O. 103 or have different meanings and shall not be used when signaling unknown ships, merchant ships and non-Allied naval ships. Approximately 18 of these prosigns conflict with signals from H.O. 103. Misinterpretation of these prosigns can result in a serious international situation. For example, the prosigns K and OL are assigned the meanings "You should stop your vessel instantly" and "Heave to or I will open fire on you", respectively, in the signal tables of H.O. 103. These prosigns must be used with caution when signaling with other naval ships in the vicinity of unknown ships, merchant ships and non-Allied naval ships. Even though H.O. 103 provides that the international code group indicator "PRB" shall precede code groups from H.O. 103, when transmitted by means of Morse code, the possibility exists that an inexperienced signalman may misinterpret these prosigns.
- .3 When the identity of an unknown ship has been established as an Allied naval ship, the visual signaling procedures prescribed in the appropriate ACPs may be used provided no possible confusion can arise on board other ships in the vicinity.
- .4 Ships entering or leaving port at night where other naval vessels are berthed should flash their international call sign (or address group), preceded by DE at frequent intervals to avoid unnecessary exchanging of calls with all ships desiring information. During hours of daylight ships will hoist their signal letters (international call sign).
- .5 When prescribed, ships on entering port will exchange calls for SOPA. This shall be accomplished by flashing their ship's international call sign (or address group) preceded by DE as in paragraph 1 above. SOPA may initiate the exchange of calls if desired or if SOPA is unable to see incoming ships, he should designate intervening ships to exchange calls and subsequently inform him. Operating signals to facilitate such a relay are:
 - (a) ZOL, meaning I WILL RELAY YOUR CALL SIGN TO SOPA WHOSE CALL SIGN IS _____.
 - (b) ZGG3, meaning CALL SIGN OF INCOMING VESSEL IS _____.

12004. CALLING, ANSWERING AND RECEIPTING ALLIED NAVAL VESSELS

- .1 The identity of the calling station usually is apparent, and it is necessary only to gain the attention of the station being called. This normally is done by making, until answered, the call sign of the receiving station. When it is desirable to identify the calling station, the full call is used. This consists of the call sign of the station called, DE and the call sign of the calling station.

Abbreviated call:	Full call:
NTFJ (until answered)	NTFJ DE NTSY
- .2 The identity of an unknown station may be established by using the prosign AA as explained in Article 9091.
- .3 The answer normally consists of the prosign K. (But see Art. 12003 above.)
 - (a) If necessary to distinguish which of several station is being answered, the prosign K should be preceded by the call of the station answered.

12004.3 (Continued)

- (b) Where more than one station is being called in the same direction or during low visibility, it may be necessary for the answering station to indicate his own identity when answering. This is done by transmitting the prosign DE followed by his own call and the prosign K. This method also is used in answer to the prosign AA.
- (c) When required, a full answer consisting of the call of the calling station, and the prosign DE, followed by the call of the station answering, may be employed.
- (d) In flashing procedure, when giving an immediate receipt to a message in response to the prosign K, the prosign R may be used singly without an ending sign K or AR.

12005. DIRECTIONAL PROCEDURE

- .1 In directional procedure, the transmitting station waits for the receiving station to make a flash for each prosign, word, code group or operating signal. If the receiving station fails to flash, the transmitting station repeats.
- .2 Although directional procedure is normally employed when using a directional light, it may also be employed when using a non-directional light if the call is that of a single station.
- .3 EXAMPLE of a non-executive message originated by F51 and sent direct to D63 for action:

F51 makes

D63 D63 (until answered)
 BT
 ZULU
 FOXTROT
 BT
 1515Z
 K
 FLASH

D63 makes

K
 FLASH
 FLASH
 FLASH
 FLASH
 FLASH
 FLASH
 R

12006. DOUBLE-FLASH PROCEDURE

- .1 Double-flash procedure is for use in port and for use with aircraft when a recorder is not available. A station called which desires to use double-flash procedure transmits the appropriate operating signal ZJJ, meaning USE DOUBLE-FLASH PROCEDURE. In double-flash procedure, the first flash indicates the receipt of a word or group; the second flash indicates that the word or group is recorded and that the receiving station is ready to receive the next word or group.

12007. NONDIRECTIONAL PROCEDURE

- .1 Nondirectional procedure permits one station to transmit to a number of other stations simultaneously by means of a light showing over a wide arc. If responses are required after the original call up, they are given after the transmission is completed.
- .2 Nondirectional procedure seldom is used at night in a war owing to danger of enemy interception. It may be used by day or night in circumstances where this risk is negligible.
- .3 Nondirectional procedure differs from directional light as follows:

CHAPTER THIRTEEN
TELETYPEWRITER AND TAPE RELAY PROCEDURE

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13023.1 (Continued)

THIS IS AN EXAMPLE OF A MESSAGE	(2CR) (LF)
PREPARED FOR RADIOTELETYPEWRITER	(2CR) (LF)
TRANSMISSION BY THE BROADCAST METHOD	(2CR) (LF)
BT	(2CR) (LF)
C (when necessary)	(2CR) (LF)
(5 Spaces) (2CR) (8LF)	(2CR) (LF)
HR NR433	(2CR) (LF)
DAMP	(2CR) (LF)
M 091434Z	(2CR) (LF)
GR75	(2CR) (LF)
BT	(2CR) (LF)
(TEXT)	(2CR) (LF)
BT	(2CR) (LF)
(5 Spaces) (2CR) (LF)	(2CR) (LF)
NERK NERK NERK DE NPM NPM NPM HR HR HR	(16 LTRS)
	(2CR) (LF)

13024. INTERRUPTION OF CALL TAPES

- .1 When during the period of continuous operation, or on a definitely assigned period basis, the call tape is employed as outlined in Article 13022, a call shall be employed prior to resuming transmission of messages. After the call tape has been interrupted, NPM transmits:

(2CR) (LF)
NERK NERK NERK DE NPM NPM NPM ZUJ (2CR) (LF)

NOTE: Transmission of the message then proceeds as outlined in Article 13023, starting with the station serial number.

13030. MANUAL SWITCHING SYSTEMS

13031. MANUAL SWITCHING CENTRALS

- .1 Manual switching systems are engineered in such a manner that each station connected to a switching central switchboard can communicate with other stations connected to the same switchboard by manual cross connection or patching.
- .2 Several switching centrals may be connected together through trunk or tie lines and a station connected to one switching central can communicate with other stations connected to several switching centrals by appropriate patching procedure.
- .3 The procedure for handling messages through switching centrals is the same as in other methods of manual teletypewriter operation except for the requirements contained in paragraphs 1 and 2 above.

13032. SPECIAL ABBREVIATIONS

- .1 The following special abbreviations are authorized for use to and by manual teletypewriter switchboards:
- BKD (Booked) - Your call has been booked. Used by switchboards after BOOK has been requested.
- BOOK (Book) - It is requested that this call be booked. Followed by the precedence of the message awaiting transmission and used to book call when the called station is engaged.
- ENGD (Engaged) - The station called is engaged. Used by switchboards to indicate to the calling station that the connection it requires cannot be made because the called station is engaged. The calling station then may transmit BOOK followed by the precedence of the message it wishes to transmit.
- 000 (Out of order) - The circuits to the station called are out of order. Used by switchboards to indicate to the calling station that the connection it requires cannot be made because the circuits are out of order.

13101.2 (Continued)

- ★ (d) Routing indicators will not be used in the address component of intra-Navy multiple-address and book messages. The operating signal indicating delivery by other means will be used in the address component of multiple-address messages prepared for transmission via tape relay. Routing indicators will be employed in the address component of joint and combined multiple-address messages.
- (e) The U.S. Navy will use routing line segregation in accordance with ACP 127, and it will be accomplished by relay stations, employing only those routing indicators in the routing line applicable to that transmission.

13102. STATION DESIGNATIONS

- .1 Calling and routing in tape relay networks will be accomplished by the use of authorized routing indicators.
- .2 Routing indicators are the only tape relay station designations authorized for use in format lines one, two and three.
- .3 Routing indicators to be used in the headings of messages transmitted over world-wide tape relay networks will be selected from JANAP 117 and supplements thereto.
- .4 Routing indicators may be used in lieu of address designations in procedure messages and service messages (except cryptoservice messages) addressed to activities within tape relay networks. Service messages addressed to commands served by TWX must bear a complete address.
- .5 Routing indicators are never encrypted.

13103. CALLED STATIONS

- .1 The station called in the routing line is responsible for local delivery and/or refile and is also responsible for making all indicated corrections prior to delivery or refile.
- ★.2 In multiple-address and book messages the stations called in format line two are responsible for local delivery and/or refile as indicated either by the routing indicators preceding the addressee designations, by transmission instructions, or by predetermined delivery responsibility. When delivery to an addressee in a multiple-address message has been accomplished prior to introducing the message into a tape relay network, the station originating the message tape will indicate such delivery by the operating signal ZEN preceding the designation of that addressee. When a station is given specific transmission instructions, that station is not relieved of delivery responsibility to other addressees in the message address for whom the station has predetermined responsibility except on misrouted multiple-addressed messages. In that case a station called in the routing line is responsible for delivery to those addressees following the transmission instructions only.

13104. TRANSMISSION IDENTIFICATION

- .1 Station serial number is a number assigned by a station to identify a transmission or message and may contain a combination of letters and numbers. Station serial numbers shall be assigned to messages in consecutive order at the point of entry into a tape relay network, regardless of destination, starting with number one at 0001Z daily. Such numbers shall be recorded on the message file copy.

13104.1 (Continued)

(a) When there is more than one channel or perforating position, a separate numerical series followed by a letter designation for each channel or perforating position may be employed as follows:

(1) When transmitted on first channel or position:

DE RJWBAB 167A

(2) When transmitted on second channel or position:

DE RJWBAB 167B

(b) When required, the station serial number may include a date, expressed in digits, separated from the number by a slant:

DE RJWBAB 167/09

.2 Channel numbers will be employed by stations to provide a method whereby a number sequence check-off system may be maintained between stations to protect the continuity of service. Where other than automatic numbering devices are employed, the appropriate number tab will be transmitted ahead of each message tape. In the case of a tributary station, the station serial number may serve as the channel number of the transmission to the relay station.

.3 Channel numbers will be prepared as follows:

(a) By stations operating into fully automatic switching centers:

(1) Using automatic numbering devices, automatic number rolls, or, where authorized, manual keyboard numbering:

(1 BLANK) (START OF MESSAGE INDICATOR ZCZC) (2 STATION DESIGNATION LETTERS) (1 CHANNEL LETTER) (FIGS) (3 NUMERAL CHARACTERS) (1 LTR)

(2) Using tab number rolls:

(1 BLANK) (START OF MESSAGE INDICATOR ZCZC) (2 STATION DESIGNATION LETTERS) (1 CHANNEL LETTER)(FIGS) (3 NUMERAL CHARACTERS) (8 LTRS)

(b) By stations operating into semi-automatic relay stations:

(1) Using automatic numbering devices, automatic number rolls, or, where authorized, manual keyboard numbering:

(5 BLANKS) (2 or more* STATION DESIGNATION LETTERS) (1 CHANNEL LETTER) (FIGS) (3 NUMERAL CHARACTERS) (1 LTR)

(2) Using tab number rolls:

(5 BLANKS) (2 or more* STATION DESIGNATION LETTERS) (1 CHANNEL LETTER) (FIGS) (3 NUMERAL CHARACTERS) (8 LTRS)

* Tape relay station routing indicator less "R" may be used.

13116.4(b)(Continued)

- (1) Format lines two and three of the message as normally prepared and forwarded by RBEP CR -

MM RBEKC RBFLC RBHPB RBHPCR (2CR) (LF)
 DE RBEP CR 21A etc.....

- (2) Format lines two and three of the message as prepared by RBEP CR when routing line segregation is employed by the originating station. Three transmissions would be made. The normal basic routing line is altered as follows:

MM RBEKC (2CR) (LF)
 DE RBEP CR 21A etc.....

MM RBFLC (2CR) (LF)
 DE RBEP CR 21A etc.....

MM RBHPB RBHPCR (2CR) (LF)
 DE RBEP CR 21A etc.....

13120. ROUTING DOCTRINE

13121. BASIC ROUTING DOCTRINE

.1 Routing Doctrine.

- (a) Messages shall normally be transmitted over the most direct channel to the addressee, routing being:

- (1) To local relay stations to which a direct circuit exists and to local tributary stations.
- (2) To the primary relay station (to the major relay station in some instances) of the originator's area for relay to relay station to which no direct circuit exists.

- .2 Under normal routing conditions the primary or major relay station shall route messages as indicated in the following tables when traffic is routed to Navy routing indicators only:

ORIGINATING RELAY STATION:

ROUTE DIRECT TO:

ROUTE ALL OTHER OUTBOUND TRAFFIC TO:

(a) Eastern U.S. Area Stations -

RBEG	RBEK RBEP RBWD RBWP	RBEP, except for RBEG, RBEK, RBWD and RBWP
RBEJ	RBEP	RBEP, except for RBEJ
RBEK	RBEG RBEP	RBEP, except for RBEG and RBEK
RBEP	RBEG RBEK RBEJ RBEY RBDL RBTP RBHP RBLP RBWD RBWP *RBFY	RBTP for RBTP, RBQA and RBFY RBHP for RBAT, RBHP, RBMF and RBMP RBWP for RBKA and RBWP
RBEY	RBEP	RBEP, except for RBEY

* When Activated.

ORIGINATING
RELAY
STATION: _____

ROUTE
DIRECT TO: _____

ROUTE ALL OTHER
OUTBOUND TRAFFIC TO: _____

(b) European and African Area Station -

RBDL	RBEP RBTP	RBTP for RBTP, RBFR, RBMF, *RBFY and RBQA
		RBEP, except for RBDL, RBTP, RBMF, *RBFY, RBFR and RBQA
RBTP	RBEP RBDL RBFR RBQA *RBFY	RBQA for RBQA and RBMF RBEP except RBTP, RBDL, RBFR, RBMF, *RBFY and RBQA
RBFR	RBTP	RBTP except for RBFR
*RBFY	RBEP RBTP	RBTP for RBTP, RBFR, RBDL and RBQA
		RBEP except for RBTP, RBDL, RBFR, RBQA and *RBFY
RBQA	RBTP RBMF	RBMF for RBMF, RBMP, RBHP and RBAT
		RBTP, except for RBMF, RBQA, RBMP, RBHP and RBAT

* (When Activated)

(c) Pacific Area Station -

RBHP	RBEP RBMP RBWP RBAT RBKA	RBMP for RBMP, RBMF and RBQA RBWP for RBWP and RBWD
		RBEP except for RBMP, RBMF, RBAT, RBHP, RBQA, RBWD, RBWP, and RBKA

★ (d) Southwest Pacific Area Stations -

RBMF	RBMP RBQA RBAT RBHP	RBQA for RBQA, RBTP, RBFR, and RBDL RBHP except for RBMP, RBQA, RBAT, RBHP, RBTP, RBFR and RBDL
RBMP	RBHP RBAT RBMF RBWP	RBMF for RBMF and RBQA RBWP except for RBAT, RBMF, RBQA, RBMP and RBHP

(e) Alaskan and Aleutians Area Station -

RBKA	RBWP RBHP	RBHP for RBHP, RBMF, RBMP, RBAT RBWP except for RBKA, RBHP, RBMF, RBMP and RBAT
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(f) Caribbean and South American Area Station -

RBLP	RBEP	RBEP, except for RBLP
------	------	-----------------------

13121.2 (Continued)

★ (g) West rn United States Area Stations -

RBWD	RBWP RBEP RBEG	RBWP for RBHP, RBMF, RBKA, RBMP, RBAT and RBWP RBEP except for RBEG, RBKA, RBHP, RBMF, RBMP, RBAT, RBWP and RBWD
RBWP	RBEG, RBEP RBHP, RBKA RBWD, RBMP RBAT	RBMP for RBMF RBEP except for RBWP, RBHP, RBMF, RBAT, RBKA, RBEG, RBMP and RBWD

★ (h) Asiatic Area Station -

RBAT	RBHP RBMP RBWP RBMF	RBMF for RBMF, RBQA, RBTP, RBFR and RBDL RBWP except for RBHP, RBMP, RBMF, RBTP, RBFR, and RBDL
------	------------------------	--

13122. JOINT INTERSERVICE ALTERNATIVE ROUTING

- .1 When it is desired to alternatively route traffic through the tape-relay facilities of another U.S. service, a procedure message shall be transmitted to the particular relay station through which alternative routing is desired to determine the capabilities of the station to accept such traffic.
- .2 The indicator letters J and O have been allocated to the U.S. Air Force; U to the U.S. Army.
- .3 Since routing line segregation is employed by Army, Navy and Air Force on joint transfer circuits, ZOY pilots need no longer be utilized on traffic to be alternatively routed via facilities of another service. Messages received by Navy stations from Army and Air Force stations will be protected to all stations called in format line 2 and vice versa.

13123. ALTERNATIVE INTRA-NAVY ROUTING PROCEDURE

- .1 Alternative routing may be employed within the Navy Teletypewriter Network in the event of circuit outage or overload as hereinafter outlined.
- .2 The station which desires to alternatively route traffic through another station must first ascertain whether that station has sufficient circuit capacity available to handle the alternatively routed traffic. Upon receipt of information that circuit capacity is available the station will be notified that alternative routing is commencing and will also be notified when the alternative routing is completed.
- .3 Since routing line segregation is employed within the U.S. Navy, ZOY pilots need no longer be employed on traffic to be alternatively routed via Naval Communication facilities. Messages received by a Navy Station from another Navy Station will be protected to all stations called in format line two.

13124. GENERAL ROUTING INSTRUCTIONS

- .1 All inter and intra-service multiple-address messages originated within the Navy Teletypewriter Network (NTX) will be prepared and transferred in accordance with the procedures contained in ACP 127.

13125. BASIC INTERSERVICE (U.S.) ROUTING DOCTRINE

- .1 Joint single and multiple-address messages originated within the NTX will be relayed to appropriate transfer points in accordance with the routing doctrine hereinafter outlined.
- .2 Transfer circuits are circuits connecting specifically designated transfer points authorized to transfer traffic between the tape relay networks of the various services. Transfer points are designated and authorized only by CNO (DNC) in collaboration with U.S. Army or USAF authorities. Transfer circuits shall not be established or disestablished except as directed by the CNO (DNC).
- ★ .3 Routing doctrine for traffic routed to U.S. Army, U.S. Air Force, Canadian and NATO routing indicators follows:

RELAY TO FOR TRANSFER

AREA OF ORIGINATOR	AREA OF DESTINATION	ALL U.S. ARMY ROUTING INDICATORS	ALL U.S. AIR FORCE ROUTING INDICATORS	ALL CANADIAN ROUTING INDICATORS	ALL NATO ROUTING INDICATORS
ALL	A	RBAT	RBAT		
ALL	D	RBBDL	RBBDL		
ALL	E	RBEP	RBEP	RBEP	RBEKHC
Q, T and F	F	RBFR	RBTP	RBEP	RBEKHC
ALL oth rs except Q, T and F	F	RBBDL	RBBDL	RBEP	RBFR
ALL	H	RBHP	RBHP		
ALL	K	RBKA	RBKA		
ALL	L(Puerto Rico only)	RBEJ	RBEJ		
ALL	L(Except Puerto Rico)	RBLP	RBLP		
ALL	M (Guam only)		RBMP		
ALL	M (Except Guam)	RBMF	RBMF		
ALL	Q	RBQA	RBTP		
ALL	T	RBQA	RBTP		RBFR
ALL	W	RBWP	RBWP	RBWPKT	RBFR
ALL	S	RBQA			

13126. UNITED STATES-CANADA WORKING AGREEMENT

- .1 The transfer of multiple-call traffic between Canadian transfer stations and U.S. transfer stations will be accomplished in accordance with ACP 127. When the operating signal ZVA is employed it shall be followed by all routing indicators for which transfer is intended. In order to avoid delay in delivery, such messages shall be relayed from the point of entry into the NTX to the Navy routing indicators in the specific routing pilot in accordance with current routing doctrine and without reprocessing or further piloting.
- .2 Traffic between Canada and the United States will be handled only through established transfer stations.

13132. ROUTING LINE SEGREGATION

- .1 Automatic switching employs the process of routing line segregation. Routing indicators in the routing line of multiple-call messages will be segregated or distributed in accordance with the desired transmission channel in the switching process. Under this method of operation, only the routing indicator(s) applicable to a particular transmission will appear in the routing line.
 - (a) Messages received at a station on a multi-station line will also contain the routing indicator(s) of other station(s) addressed and connected to the same line.
 - (b) Messages received at a station which has further relay responsibility will contain the routing indicator(s) for which that station has relay responsibility.
- .2 Relay stations which are not directly connected to the automatic switching system will use routing line segregation procedure on relayed messages, even though such messages are not intended for ultimate entry into the Automatic Switching System.

13133. RECEIPTS FOR FLASH AND EMERGENCY TRAFFIC

- .1 Station to station receipts for FLASH and EMERGENCY traffic are not practical in a full automatic system. Receipts for FLASH and EMERGENCY messages will be as follows:
 - (a) Messages originated by a station within the automatic switching network and addressed to another station(s) within the automatic switching network: Receipt will be from addressee(s) to originator.
 - (b) Messages originated by a station within the automatic switching network and addressed to other than a station within the automatic switching network: Receipt will be made from the station transferring the message from the automatic switching network (Gate-way(refile) station) to the originator. All messages transmitted outside the automatic switching network will be receipted for, station to station.
 - (c) Messages originated outside the automatic network destined for addressee(s) within the automatic network will be receipted for station to station from originator to Gate-way (refile) station. No receipt will be required of such messages after entry into automatic network, unless a report of acknowledgement is requested.

13134. REINTRODUCING MESSAGES AT A RELAY STATION

- .1 Messages intentionally intercepted at a relay station will include a start of message function (ZCZC) followed by the channel number under which the message was transmitted to the relay station. Such messages will be reintroduced at the relay station send position without addition of a station channel number or other change in format. However, an outgoing number will be picked up automatically as the message is transmitted from the relay station. NOTE: The reason for not manually adding a channel number when the message is reintroduced into the net at the relay station is that only the last two channel numbers are retained on a message after each relay in the automatic net. Therefore, the addition of the extra, and unnecessary, channel number would automatically delete the original incoming channel number, which is desirable for retention.

13134. (Continued)

- .2 Messages appearing at the miscellaneous intercept position will include, as the first two characters:
- (a) The incoming switching identification code followed by the channel number under which the message was transmitted to the relay station.
 - (b) The complete message received at the relay station.
 - (c) In preparing the message for reintroduction, the start of the message function "ZCZC" will be manually punched in the repaired tape followed, without intervening characters, by the channel number under which the message was transmitted to the relay station.
 - (d) The message when repaired will be reintroduced at the relay station send position without addition of a station channel number. An outgoing channel number will automatically be added at the outgoing position of the relay station.
- .3 Messages removed from monitor rolls for re-run purposes will be reintroduced from the relay station send position, with re-run pilot employing the following format:
- | | | |
|--|-------|------|
| (BLANK) ZCZCPRA171 (Automatically generated) | (2CR) | (LF) |
| RR RBEPH | (2CR) | (LF) |
| DE RBEPR 123 | (2CR) | (LF) |
| ZDK RHA 134 etc. | (2CR) | (LF) |
- .4 All messages appearing at miscellaneous intercept with mechanical errors in format line one and two, and correctable routing indicator errors, will be corrected at the relay station and reintroduced. Messages that are intercepted due to invalid routing indicators which cannot be corrected, garbled routing lines or incomplete messages should be handled as follows:
- (a) Messages assigned a precedence of "PP" and lower, send service to originating station. In case of routing line garble, send service to station from which received.
 - (b) Messages assigned a precedence of "00" and above shall be reintroduced if possible with "OPSIG" ZDG and the originating station notified by service message. In case of routing line garble, a service message shall be sent to the station from which received. The station receiving the service will be responsible for sending required corrections.
 - (c) See Article 13137 for re-run requests.

13135. RECEIPT OF AN INCOMPLETE MESSAGE BY 82B1 STATIONS

- .1 The receipt of an incomplete message by a tributary station, with or without the end of message function, (EOM), will normally be as a result of operator action at a relay station. Service action (re-run request) at the tributary station should be deferred at least 30 minutes except on a high precedence message, in which case the wait should not exceed 10 minutes to allow the relay station time to send a procedure message (ZFR) canceling transmission. It is the ultimate responsibility of the tributary station to obtain a cancel transmission (or re-run) of any incomplete message received.
- .2 Incomplete messages received by automatic relay stations shall be handled as follows:

13135.2 (Continued)

- (a) From tributaries. The relay station will switch the incomplete message to miscellaneous intercept (MI). MI, send service to the originating station:

ZUI EBA 021 RBEPN 010/102101Z ZEP

The relay station will take no further action; the originating station will resend the message to all addrees under a new channel number.

- (b) Cross office incomplete. The relay station will cancel the transmission and switch to MI. MI send service to originating station:

ZUI PCB 011 RBEPC 111/152110Z ZEP resend under a new channel NR to _____ or all addrees.

- (c) Incomplete from another automatic relay station. When DE line is complete, switch to MI. MI send service to originating station:

ZUI EBA 021 RBEKC 022/161010Z ZEP resend under new channel NR to _____.

If the relay station is unable to identify the message by DE line, a service shall be sent to the automatic relay station from which received.

- (d) Incomplete from Army or Air Force over transfer circuits. Switch to MI. MI send service to the relay station from which received:

ZUI EBA 021 RUEPC 009/101010Z ZEP

- (e) ZEP as used herein means "identified message was incompletely received by the station originating the service message".

13136. RECEIPT OF A MESSAGE BY A TRIBUTARY STATION THAT CARRIES A CANCEL TRANSMISSION.

- .1 A message partially received by a tributary station followed by a cancel transmission using the ERROR sign (2CR)(LF) E E E E E E E E AR (2CR)(8LF) (4N's) will be retained for number continuity only. It is the responsibility of the relay station originating the cancel transmission to protect delivery to those stations to which the cancel transmission was routed.
- .2 Tributary stations shall not introduce a cancel transmission using ERROR sign (2CR)(LF) E E E E E E E E AR (2CR)(8LF)(4N's) into the Automatic Switching System.

13137. REQUESTS FOR RE-RUNS

- .1 All stations within the tape relay section of the Naval Communication System, which handle messages in tape form, shall take all possible steps to avoid servicing messages which contain obvious errors that can be corrected locally. Such mechanical errors as false carriage returns, lack of carriage returns, false line feeds, lack of line feeds, upper case for lower case and vice versa, etc., can, in many cases, be corrected locally without the need of requesting a re-run.
- .2 In instances where the errors cannot be corrected locally, a procedure or SVC MSG should be sent to the originating station, rather than to the transmitting station (relay station) from which received, requesting a re-run of the message or a portion of the message as necessary.

13137.2 (Continued)

In many such cases, requests to the originator, in lieu of to an automatic relay station, will result in much faster speed of service. When it is obvious that errors are occurring between the receiving station and the transmitting station, immediate steps (corrective action) shall be taken to eliminate the cause.

- ★.3 When errors are not the result of equipment malfunctions or circuit conditions, the following procedures apply:
 - (a) When necessary to request re-runs on messages received from a continental USN activity by a tributary in the same area, such requests shall be directed as follows:
 - (1) To the originating or tape cutting station.
 - (2) To the communication center serving a TWX originator.
 - (b) When necessary to request re-runs on messages received by tributaries in the continental U.S. from overseas naval activities, such requests shall be directed to the originating station. If the originating station is unable to provide the re-run, that station should request the relay station serving him to make the re-run direct to the station originally requesting the re-run.
 - (c) Overseas tributary stations requiring re-runs shall direct the re-run request to the relay station serving him. If that relay station is unable to provide a good copy, that relay station should service the originating station, info to station initiating original re-run request, directing originator to retransmit direct to addressee. Upon completion of this action, relay station closes suspense file.
 - (d) Requests to Army and Air Force stations shall be in accordance with Article 414.a., ACP 127(B).
 - (e) Navy relay stations follow the procedure contained in Article 414.a., ACP 127(B).
- ★.4 When errors are the result of mechanical or circuit difficulty and re-run requests are required, the following applies:
 - (a) Re-run requests to Army and Air Force activities shall be station to station. If station receiving the request is unable to provide, the next preceding station should be instructed to provide retransmission direct to station initiating original re-run request. The station initiating the original request shall be information on such messages. Upon completion of this action, the relay station closes suspense file.
 - (b) Re-run requests to Navy station shall be in accordance with Article 414.b., ACP 127(B). If station-to-station procedure is necessary, the instructions contained in subparagraph (a) above apply.
- .5 Any tributary desiring a re-run of a general message shall direct the request to the station having predetermined responsibility for disseminating messages within an area or district. The station having predetermined responsibility will request a re-run from the originating station, if necessary.

13138. RE-RUNS

- .1 Re-runs will be in accordance with the procedures as outlined in ACP 127(B), and in all cases will be transmitted under a new channel number employing the following format:

13138.1 (Continued)

(2CR) (LF) (2CR) (LF)
 RR RBEPR (2CR) (LF)
 DE RBEPH 123
 ZDK PHA 003/10 etc.

- .2 When a new channel number is put on a re-run, the receiving station should log the message under the new number as well as the number(s) which was (were) re-run.

13139. ENSURING CONTINUITY OF SERVICE

- .1 The relay station shall make an hourly check of all incoming lines to insure continuity of service. If no traffic has been received within the past hour over a trunk or single-station channel, the relay station will originate a channel check to the station(s) involved.

EXAMPLE:

(2CR) (LF)
 RR RBEPH (2CR) (LF)
 DE RBEPR 061 (2CR) (LF)
 CHANNEL CHECK (2CR) (LF)
 09/0909Z (2CR) (8LF) (4N's)

Station(s) receiving a channel check will originate a procedure message to the originator of the check stating last number sent and received.

EXAMPLE:

(2CR) (LF)
 RR RBEPR (2CR) (LF)
 DE RBEPH 021 (2CR) (LF)
 ZIC 022/ZID 061/ (2CR) (LF)
 09/0909Z (2CR) (8LF) (4N's)

This procedure will not be required on multi-station lines due to the automatic self-checking feature employed on this type circuit.

- .2 Tributary station(s) will not be required to send number comparisons. If no traffic has been received by a tributary station for 30 minutes, that station will originate and transmit a channel check message routed to its own station.

EXAMPLE:

(2CR)(LF)
 RR RBEPG (2CR)(LF)
 DE RBEPG (station serial (2CR)(LF)
 number optional)
 CHANNEL CHECK (2CR)(LF)
 09/1000Z (2CR)(8LF)(4N's)

If this message is not returned on the received channel within 5 minutes after transmission, trouble is to be suspected and the telephone company test room serving that station should be notified immediately.

13140. CHANGING NUMBER SEQUENCES

- .1 Relay station to tributary stations.

- (a) The relay station will, at 2330Z daily, after recording the last number transmitted, commence resetting all tributary station outgoing channel numbers to 001.

13140.1 (Continued)

- (b) All tributary stations, except those on secured or unattended service, upon receipt of channel number 001 from the relay station or at 2400Z, whichever is earlier, will reset number comparator for the tributary station channel number to 001 and originate a procedure message to the relay station, stating the last number sent and received for that day. This procedure message shall be sent under channel number 001 for the new day.

EXAMPLE:

(2CR)(LF)	
RR RBEPR	(2CR)(LF)
DE RBEPR 001	(2CR)(LF)
ZIC 077/09 ZID 032/09	(2CR)(LF)
10/0001Z	(2CR)(8LF)(4N's)

.2 Relay station to relay station.

- (a) Each relay station will, at 2330Z daily, or as near as practicable, after recording the last number transmitted; commence resetting all trunk circuit outgoing channel numbers to 001.
- (b) Relay stations, upon receipt of channel number 001 from another relay station, will reset the incoming channel number for that particular channel to 001 and originate a procedure message to that relay station, stating the last number sent and received for that day. In case of multi-channel circuits one procedure message may be used to report all circuits.

13143.2(b) (Continued)

(Messages as BUPERS (RBEPH) reintroduces)

ZCZCPHA231PHA123PCB234 (2CR) (LF)
 RR RBEKC (2CR) (LF)
 DE RBEPG 534 (2CR) (LF)
 etc.....

Note: The first two letters of a channel designator for a tributary station is always the last two letters of the routing indicator of the tributary station and is used by the switching center as well as the tributary station as a channel designator. The third letter designated the channel, i.e., ALFA, BRAVO, etc.

(c) MULTI-STATION LINE

- (1) As a result of the two-letter cross office code being garbled or misread, the missent will be received by the station of this channel which is assigned the connect code (A,S,I,D, or R) corresponding to the connect code assigned the station of the correct addressee on his respective multi-station line.
- ★ (2) As a result of the channel designator being garbled, the missent will be received by the master station of a multi-station circuit.
- ★ (3) Stations receiving a missent message will reintroduce the message for the station for which it was intended, preceded by a pilot employing the operating signal ZOV and the routing indicator of the station reintroducing the message, assuring that the channel designator and number under which received is included immediately following the ZOV pilot.

EXAMPLE: (Message intended for RBEPG received by RBEPYG)

YPG123WBA231 (2CR) (LF)
 RR RBEPG (2CR) (LF)
 DE RBEPG 543 (2CR) (LF)
 etc.....

(Message as reintroduced by RBEPYG)

ZCZCAYC241 (2CR) (LF)
 RR RBEPG (2CR) (LF)
 ZOV RBEPYG 242 (2CR) (LF)
 YPG123WBA231 (2CR) (LF)
 RR RBEPG (2CR) (LF)
 DE RBEPG 543 (2CR) (LF)
 etc.....

Station RBEPG will upon receipt of message clear his receive log by marking off number 123 as if received direct from the relay station.

- ★.3 Missent stragglers (messages without channel numbers) are transmitted to stations as a result of equipment malfunction. A tributary station receiving a single-address straggler shall reintroduce the message, preceded by a pilot, routed to the station intended and the operating signal (ZOV) and the routing indicator of the station reintroducing the message. This procedure will be followed even though the message is intended for the station that received the straggler. A multiple-address straggler shall be introduced as a susdupe, using OPSIG "ZFD" to all routing indicators appearing in format line two. An automatic relay station receiving a straggler from another automatic relay station will reintroduce the message diverted to the miscellaneous intercept position and notify the transmitting station accordingly.

13144. SUSPECTED DUPLICATES

- .1 When a tributary station receives a duplicate transmission of a message originated by a Navy command and the message is not marked SUSPECTED DUPLICATE, it shall be the responsibility of the tributary station to inform the originator of the message tape of the duplicate delivery.

13144.1 (Continued)

EXAMPLE:

ZCZCPHA123 (2CR)(LF)
 RR RBWPC (2CR)(LF)
 DE RBEPH 234 (2CR)(LF)
 ZUI RBWPC 456/NAVCOMMSTA SAN FRANCISCO
 121212Z X DUPLICATE TRANSMISSIONS
 RECEIVED (2CR)(LF)
 12/1500Z (2CR)(8LF)(4N's)

- .2 Upon being informed of a duplicate delivery, the station originating the message tape shall retransmit the message as a SUSPECTED DUPLICATE using OPSIG "ZFD" to all addressees of the original transmission except those known, unquestionably, to have received the message.

13145. PROCEDURE FOR HANDLING PART-TIME CIRCUITS

- .1 A part-time circuit is a channel or channels arranged to operate for periods less than 24 hours daily.
- .2 The activation and deactivation of part-time circuits should be the responsibility of the Relay Station supervisor and closely coordinated with the Telephone Company to insure no interruption to service or loss of messages being sent over the circuits. Since this type of circuit must, according to regulations, be terminated by the Telephone Company Testroom within a specified time after the close of service hours, it is conceivable that messages could become lost if the deactivation is not properly handled. This immediately suggests that some prescribed method for handling should prevail, keeping in mind that at all times a close coordination between the Telephone Company and the Relay Station must exist.
- .3 The procedure for handling part-time circuits deals for the most part with the outgoing cabinets. The outgoing machines may serve the part-time circuit either, (1) individually or, (2) alternately and the procedure for handling the deactivation should be as follows:
- (a) Where the part-time circuit is served by only one (individual) outgoing machine.
- (1) Suspend receipt of messages from cross-office by operating the BUSY key prior to turn down time so there will be no accumulation of messages for transmission from the particular machine.
 - (2) After all messages waiting have been sent, operate the XMTR key to STOP.
 - (3) At the turn down time, operate the appropriate SVC key under the hinged panel to the OUT position.
- (b) Where the part-time circuit is served by more than one machine on an alternating basis:
- (1) On or before close down time, operate to the HOLD position, the XMTR keys of all machines that are transmitting.
 - (2) Operate the remaining machines XMTR keys to STOP.
 - (3) When all machines have ceased transmitting, operate the appropriate SVC key under the hinged panel to the OUT position.
 - (4) Restore all XMTR keys to NORMAL.

13145. (Continued)

- .4 The operation of the SVC key to the OUT position prevents the selection of the part-time circuit by any machines. Once the circuit is made busy, the machines may continue to transmit over the remaining regular circuits.
- .5 If for any reason a part-time circuit is to be extended beyond its contract period, a request for overtime use must be forwarded to the Telephone Company Testroom. When the overtime request has been acknowledged by the Telephone Company, the Relay Station may continue to make use of the part-time circuit. When the circuit is no longer required and after it has been made busy by the Relay Station, the Telephone Company Testroom must be notified.
- .6 If an incoming channel to the center is involved as a result of the deactivation of a part-time circuit, no action is necessary by the operating personnel at the Relay Station. If, however, the incoming machine servicing the particular circuit begins to run over, notify the Telephone Company Testroom at once.
- .7 To activate or turn up a part-time circuit, close coordination between the Telephone Company Testroom and the Relay Station is again essential. When advised by the Telephone Company Testroom that the part-time circuit is available for message transmission, the Relay Station supervisor may take the necessary steps to make the part time circuit accessible to the serving machines. Accordingly, the procedure for handling the turn up is simply the operation of the SVC key to the IN position and the restoration of any XMTR and BUSY keys that were operated at the previous deactivation.
- .8 Upon request, the Telephone Company maintenance man will advise as to the appropriate SVC key to be operated in handling part-time circuits.

13146. MASTER STATION

- .1 A station on a multi-station circuit will be designated as Master Station. Misdirected messages received by Master Stations shall be handled in accordance with the procedure outlined in paragraph 131314. Operating instructions for Master Stations are contained in 82B1 Tributary Instruction Manual under "Misdirected Message."

13147. THE OPERATING SIGNAL ZOT WITH ASSIGNED MEANING

- ★ .1 "Unable to relay message_____ in present form. We file. Transmit a correctly prepared tape under a new number to all adees (or to _____)". Is authorized for intra-Navy use by NAVCOMMU TRENTON and NAVCOMMSTA's Washington, Norfolk, San Diego, and San Francisco pending assignment of an appropriate OPSIG in ACP 131. The OPSIG ZOT will not be used when the messages involved are assigned a precedence of "00" or higher.

13148. NUMBER PICKUPS

- .1 A station receiving a message with two numbers will send a service to the transmitting station:

ZFU EHA 021

The transmitting station will take appropriate action. If a message is associated with the picked-up number, make a retransmission under a new channel number.

No further action is required by the receiving station.

13149. OPEN NUMBERS

- .1 A station reporting an open number will consider the matter closed after taking necessary logging action. The station receiving the report takes necessary action as follows:
- (a) If a message is associated with the reported open number, a retransmission will be made under a new channel number.
 - (b) If no message is associated with the reported open number, the transmitting station takes no action.

13150. MESSAGES

13151. PLAINDRESS EXAMPLE

- ★ .1 The following example shows a PLAINDRESS multiple-address message in which one of the addressees has received the message by other means, another will receive it via the tape relay network under predetermined delivery responsibility, and the remainder require transmission instructions for delivery or further relay. The message employs format line two routing, required in NTX.

EXAMPLE

(5 SPACES)	(2 CR) (LF)	
(Line 2)	MM RBATC RBEP C RBHPC RBWPC	(2CR) (LF)
(Line 3)	DE RBMPC 98	(2CR) (LF)
(Line 4)	NPM ZON3	(2CR) (LF)
	NPG T NALK	(2CR) (LF)
	NDT T NESP	(2CR) (LF)
(Line 5)	M 101400Z	(2CR) (LF)
(Line 6)	FM NFDR	(2CR) (LF)
(Line 7)	TO NALK	(2CR) (LF)
	NAPN	(2CR) (LF)
	NARL	(2CR) (LF)
	NELT -	(2CR) (LF)
	NESP	(2CR) (LF)
	NORL	(2CR) (LF)
	NUSX	(2CR) (LF)
(Line 8)	INFO MUSK	(2CR) (LF)
(Line 10)	GR75	(2CR) (LF)
(Line 11)	BT	(2CR) (LF)
(Line 12)	TEXT	(2CR) (LF)
(Line 13)	BT	(2CR) (LF)
(Line 15)	10/1355Z	(2CR) (8LF)
	(4N's)	(12 LTRS)

EXPLANATION: The contents of each line are as follows:

(5 SPACES) (2CR) (LF)

The five spaces are necessary to facilitate handling of the message tape in relay stations.

The carriage return (CR) and line feed (LF) function are necessary to reset the receiving teletypewriter at the ultimate destination where the message will be received in page copy form.

(Line 1)

A specific routing pilot is not employed.

13151.1 (Continued)

(Lin 2) MM RBATC RBEP C RBHPC RBWPC is th basic routing lin and consists of th prec dence prosign and routing indicators of the stations that ar to effect refill or delivery of the message.

MM is the repeated precedence prosign.

RBATC RBEP C RBHPC RBWPC are the routing indicators of the stations called to effect delivery or refile to th addressees.

(Line 3) DE RBMPC 98

DE is the prosign which means this transmission is from the station whose designation follows.

RBMPC 98 is the routing indicator and station serial numb r of the station originating the message tape.

(Line 4) NPM ZON3
NPG T NALK
NDT T NESP - are transmission instructions indicating:

NPM ZON3 - NPM(RBHPC) is to place the message of th NPM Primary Fleet Broadcast.

NPG T NALK - NPG(RBWPC) is to transmit to NALK.

NDT T NESP - NDT(RBATC) is to transmit to NESP.

NOTE: In this example, RBMPC has determined that NAPN, NARL, NELT and NORL are copying NPM Primary Fleet Broadcast. RBEP C, being the guard for MUSK, has predetermined responsibility and will effect delivery to MUSK without further instructions. The absence of any specific transmitting instructions for NUSX indicates that he has received or is to receive th message by other means from either NFDR or RBMPC.

13152. BOOK MESSAGE

- .1 A book message is one which is destined for two or more addressees and is of such nature that the originator considers that no address es need to be informed of any other addressees. Each addressee must b indicated as action or information.
- .2 Addressees of book messages are divided into groups according to the relay stations which serve them. For each group of addressees a separate message is prepared and transmitted. Each book is assigned a new station serial number but the same date-time group is used for all books.
- .3 A receiving relay station may further reduce the book message to a single-address message to its tributary stations if desired. Book messages requiring refile with commercial carriers (including relay via TWX) should always be handled as such, including reduction to singl - address messages if delivery to only one addressee is required. This applies whether the message is delivered by rapid means or by mail, which would include confirmation copies.
- .4 The operating signal ZEX means: THIS IS A BOOK MESSAGE AND MAY BE DELIVERED AS A SINGLE-ADDRESS MESSAGE TO ADDRESSEES FOR WHOM YOU ARE RESPONSIBLE. Addressees shall not readdress book messages outside their area of responsibility.

13152. (Continued)

.5 The following is an example of book message handling. The Bureau of Weapons message center has a message for transmission to 38 addressees in various naval districts. The BUWEPS message center obtains the originator's permission to transmit the message as a book message. Since two of the 38 addressees are served by the Pearl Primary Relay Station, the book message for those two addressees is prepared as follows:

(a) MM RBHPS RBHPC
 DE RBEPD 17
 M 271332Z ZEX
 FM BUWEPS
 TO COMFAIRHAW
 NAS FORD ISLAND
 GRNC
 BT
 TEXT TEXT TEXT ETC.....

(b) If the Pearl relay station desires to deliver to each of the addressees as a single-address message, it may effect delivery to each of the addressees, as to NAS FORD ISLAND, for instance, as follows:

MM RBHPC
 DE RBEPD 17
 M 271332Z ZEX
 FM BUWEPS
 TO NAS FORD ISLAND
 GRNC
 BT
 TEXT TEXT TEXT ETC.....

13153. PROCESSING OF TRANSMISSION SECTIONS

.1 Division of long messages into transmission sections is discussed in Subsection 9050.

★.2 The following examples show the manner in which a 1600-word message may be separated into two transmission sections:

(5 SPACES)	(2CR)	(LF)	(2CR)	(LF)
(Line 2)	MM RBMPC		(2CR)	(LF)
(Line 3)	DE RBEPD 98		(2CR)	(LF)
(Line 5)	M 091745Z		(2CR)	(LF)
(Line 6)	FM NFDN		(2CR)	(LF)
(Line 7)	TO NPN		(2CR)	(LF)
(Line 10)	GR750		(2CR)	(LF)
(Line 11)	BT		(2CR)	(LF)
(Line 12)	SECTION ONE OF TWO...TEN		(2CR)	(LF)
	LINES OF TEXT		(2CR)	(8LF)
(Line 12)	PAGE TWO RBEPD 98....TWENTY		(2CR)	(LF)
	LINES OF TEXT		(2CR)	(8LF)

NOTE: Succeeding pages of this transmission section would appear as shown above.

Final Page.

(Line 12)	PAGE FIVE RBEPD 98....FINAL	(2CR)	(LF)
	LINES OF TEXT OF	(2CR)	(LF)
	SECTION ONE	(2CR)	(LF)
(Line 13)	BT	(2CR)	(LF)
(Line 15)	09/1715Z	(2CR)	(8LF)
		(4Ns)	(12 LTRS)

The second and final transmission section would appear:

13165. (Continued)

- (e) In instances where the tributary station is forwarding a misrouted message and the tributary station serial number serves as the channel number, the MISROUTE pilot shall include a station serial number immediately following the tributary station's routing indicator.

EXAMPLE:

PP RUHPLE	(2CR) (LF)
ZOV RUWPLE 10A	(2CR) (LF)
WUA 096	
EUA 075	
PP RUWPLE	(2CR) (LF)
PP RUWPLE RUHPC RUAPC	(2CR) (LF)
DE RUEPC 78B etc.....	

.5 Missent Messages -

- ★ (a) When tributary stations, other than those served by the automatic relay system receive a missent message, those stations shall notify the relay station from which the message was received. The relay station shall cancel the transmission to the tributary station and retransmit the message tape over the proper channel.
- (b) When a relay station employing format line two routing receives a missent message, that station shall notify the relay station from which the message was received. The relay station which missent the message shall cancel the transmission and retransmit the message tape over the proper channel.

13166. HANDLING OF SUSPECTED DUPLICATE MESSAGES

- .1 Messages forwarded as SUSPECTED DUPLICATE messages are discussed in Article 9062.
- .2 When a tape relay station has cause to suspect that a message may have been previously transmitted but definite indication of prior transmission is not immediately available, the following procedure is applicable:

As received by RBWP -

EPA053	
EPA039	(2CR) (LF)
PP RBWKE RBWPLE	(2CR) (LF)
DE RBEPAR 16B	(2CR) (LF)
P 141630Z	(2CR) (LF)
FM NURL	(2CR) (LF)
TO RBWKE/HURT	(2CR) (LF)
INFO RBWPLE/HAPP etc.....	

As forwarded by RBWP -

PP RBWKE RBWPLE	(2CR) (LF)
ZFD RBWP	(2CR) (LF)
EPA053	
EPA039	
PP RBWKE RBWPLE	(2CR) (LF)
DE RBEPAR 16B etc.....	

As originally prepared by RBEPAR -

13166.2 (Continued)

(5 SPACES) (2CR) (LF)
 PP RBWKE RBWPLE (2CR) (LF)
 DE RBEPAR 16B (2CR) (LF)
 P 141630Z (2CR) (LF)
 FM NURL (2CR) (LF)
 TO RBWKE/HURT (2CR) (LF)
 INFO RBWPLE/HAPP etc..... (2CR) (LF)

As forwarded by RBEPAR to RBWKE -

(5 SPACES) (2CR) (LF)
 PP RBWKE (2CR) (LF)
 ZFD RBAPAR 48B (2CR) (LF)
 PP RBWKE RBWPLE (2CR) (LF)
 DE RBEPAR 16B etc.....

As forwarded by RBEPAR to RBWKE and RBWPLE -

(5 SPACES) (2CR) (LF)
 PP RBWKE RBWPLE (2CR) (LF)
 ZFD RBEPAR 72B (2CR) (LF)
 PP RBWKE RBWPLE (2CR) (LF)
 DE RBEPAR 16B etc.....

13167. TWO TAPES WITH THE SAME NUMBER

- .1 When a tape relay station is notified that two transmissions have been received with identical channel numbers, an examination of the sent tapes or monitor reel should be made. If two tapes are found with the same number, a correction message will be initiated to indicate the proper number under which the second transmission is to be forwarded.

EXAMPLE:

ERA192 (2CR) (LF)
 RR RBWP (2CR) (LF)
 DE RBEP (2CR) (LF)
 ZFQ EPA150 101400Z (2CR) (LF)
 10/1500Z (2CR) (8LF) (4Ns) (12 LTRS)

NOTE: The operating signal ZFQ means TWO MESSAGES RECEIVED AS CHANNEL OR STATION SERIAL NUMBER____. HOLDING MESSAGE____. ADVISE DISPOSITION_____.

Reply -

WPA156 (2CR) (LF)
 RR RBEP (2CR) (LF)
 DE RBWP (2CR) (LF)
 ZFS EPA150 101400Z (2CR) (LF)
 10/1510Z (2CR) (8LF) (4Ns) (12 LTRS)

NOTE: The operating signal ZFS means MAKE MESSAGE_____ SAME CHANNEL OR STATION SERIAL NUMBER AS THIS PROCEDURE MESSAGE.

- .2 When a tributary station is notified that two message tapes have been received with identical station serial numbers, an examination of the sent message file is made. If two messages have been transmitted with the same number, the tributary station will cancel the second transmission made under the duplicated number and retransmit the message under a new station serial number.

ANNEX ALFA

NAVY TWX DIRECTORY

A-1. SCHEDULING OF TWX CONNECTIONS:

- .1 If the volume of traffic justifies and the facility situation permits, a Teletypewriter Exchange Service (TWX) station should be directed by the relay station to handle its traffic with the relay station on a scheduled basis, placing calls at a predetermined time.
- .2 Normally the relay station will arrange the schedule so that the various activities place their TWX calls at different times, thus reducing to a minimum the amount of terminal equipment required and insuring a uniform traffic load.
- .3 The scheduled calls will normally be initiated by the TWX station. In case there is no traffic on file for transmission, no call should be placed. If the relay station has traffic on hand and no call is received within ten minutes after the scheduled time, the relay station will initiate the call.
- .4 Immediately after establishment of the connection, all traffic on hand at the TWX station should be transmitted to the relay station. To prevent the originator from disconnecting, the relay station should indicate whether it has any traffic to transmit by some phrase such as "MSG TO FOLLOW" before receipting. After receipting, the relay station should transmit the message it has on hand.
- .5 If tape transmission is used, all TWX messages filed for transmission during the interval between schedules should be punched and made ready for transmission at the scheduled time.
- .6 Where manual operation is used, the messages should be processed completely prior to transmission so that there will be no delay once the connection has been established.
- .7 Grouping of messages on scheduled connections results in a reduction of charges as well as more efficient handling of traffic because connections of less than three minutes are reduced to a minimum. The TWX rate is based on a minimum of three minutes per connection. Two messages of average length can be transmitted in one three-minute connection, and each additional minute is charged for at 25% of the initial 3-minute rate.
- .8 High precedence traffic is, of course, transmitted as soon as possible, irrespective of schedules.

A-2. ASSIGNMENT OF TWX INDICATORS:

- .1 Routing indicators assigned the activities listed in this Annex are listed in JANAP 117, and were assigned according to the following plan:
 - (a) When the assigned indicator ends with the letters CX it indicates that the activity is equipped only with TWX facilities. The letters preceding the letters CX in each of these routing indicators is the basic indicator of the primary, major, minor relay stations or tributary station that will effect transfer of traffic originated by and addressed to the TWX activity, when the Naval Teletypewriter Network (NTX) service is used for handling such traffic.
 - (b) The information contained in this Annex is listed in the following order:
 - (1) The city and name of the activity.
 - (2) The TWX number assigned the activity.

A-2.1 (Continued)

- (c) Navy TWX numbers are not included in the commercial TWX directory to avoid possible competition with commercial carriers. TWX is installed at certain naval activities primarily for the conduct of Navy business. Use of these facilities for other than that which intended could be detrimental to the best interests of the Navy.
- (d) TWX messages from commercial companies or private individuals transmitted to a naval activity will not be accepted for relay if the relay of such messages by Naval Communications will place the Navy in the position of competing with commercial carriers.

A-3. ROUTING OF TWX TRAFFIC:

- .1 Routing of traffic via TWX facilities will be accomplished as follows:
 - (a) Activities using TWX as primary means of communication will transmit originated messages requiring entry into the NTX system to the relay station serving the activity. In the event the addressee of a single addressed message is served by TWX from the same relay station as the originator, transmission shall be made direct to the addressee. In case of a multiple address transmission shall be made to the relay station serving the originator.
 - (b) Messages (including service messages) addressed to activities served by TWX must bear a complete address. The TWX routing indicator only routes the message tape to the TWX tape relay section of a relay station where the TWX tape relay operator must read the address portion of the tape to determine the destination.

A-4. WESTERN UNION AND TWX

- .1 Refile points shall use TWX to effect delivery of messages requiring commercial refile to those commercial companies which have a TWX installation when such addressees can be served thereby more economically than by Western Union. Retention of deferred traffic for transmission in strings is also appropriate. However, due care should be exercised not to impose excessive delay.
- .2 Those messages requiring refile with Western Union received after the end of the working day addressed to commercial companies and naval activities who do not maintain a 24-hour watch shall be transmitted as night letters whenever practicable.
- .3 All originators are requested to phrase their messages with the minimum number of words consistent with clarity and to assign appropriate precedence.

A-5. UNATTENDED TWX SERVICE

- .1 Teletypewriter machines may be equipped for unattended service which permits an incoming call to be completed without an operator in attendance. This service is not generally advocated for naval activities because of the possibility of fouling up of paper, tearing and jamming of ribbons, or mechanical trouble while the machine is unattended. It may be used, however, between an NTX relay station and an individual user after the user's closing hour.
- .2 Unattended service should not be used for TWX calls between naval activities, except when a receipt can be obtained for messages so transmitted immediately after the opening of the station the following morning. This is accomplished at no additional cost to the TWX user, as outlined below:

A-5.2 (Continued)

- (a) When transmitting to unattended TWX stations, two or three messages will normally be saved for transmission within one (1) hour after the opening of the TWX station, and the unattended station will receipt for all traffic received during the unattended period on this connection. This makes use of all time charged for, instead of wasting more than two (2) minutes as would be the case if a three-minute call is placed merely to obtain a receipt.
- (b) If, for any reason, the relay station has no need to establish a connection within one (1) hour after the opening of the TWX station, a special call should be made by the relay station to obtain receipts for these messages, unless previously receipted on a call originated by the unattended station.

- .3 Traffic received on an unattended basis should be carefully checked immediately upon the reopening of a station. The receipt should be made on the first connection established with the relay station by referring to the originator's routing indicator and identifying serial number of each message received. If the messages are channel-numbered by the relay station, reference may be made to the channel numbers. "UNAT" indicates that the messages were received on an unattended basis.

A-6. CORRECTIONS TO TWX LISTINGS:

- .1 The Chief of Naval Operations (DNC) should be notified immediately concerning additions, deletions or changes to the listing in this Annex. The Chief of Naval Operations will then promulgate the information.

★ A-7. ALPHABETICAL LISTINGS OF TWX FACILITIES:

.1 Albany, N.Y.

Navy Recruiting Station	AL 552
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Albuquerque, N. Mex.

Field Command, Armed Forces Special Weapons Project	AQ 89
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Athens, Ga.

U. S. Naval Supply Corps School	ATHENS GA 1171
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Baltimore, Md.

Bureau of Weapons Representative (Middle River)	ESSEX MD 89
Inspector of Naval Material (Accepts traffic for unlisted activities Baltimore and vicinity)	BA 562
Director of Navy Recruiting Second Navy Recruiting Area	BA 365

Bath, Maine

Supervisor of Shipbuilding and Inspector of Ordnance	BATH 293
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Boston, Mass.

Captain of the Port (COTP)	BS 313
Coast Guard Repair Base	BS 313
District Coast Guard Office	BS 313
Office of Naval Intelligence	BS 513

A-7.1 (Continued)

<u>Bremerton, Washington</u>	
Harbor Defense Unit	PORT TOWNSEND 408
<u>Butte, Montana</u>	
Navy Recruiting Substation	BT 8274
<u>Cedar Rapids, Iowa</u>	
Inspector of Naval Material	CR 27
<u>Charleston, S.C.</u>	
Commander Charleston Section	
Seventh Coast Guard District	CS 293
District Headquarters, Message Center	CS 288
District Intelligence Officer	CS 287
<u>Chicago, Illinois</u>	
District Intelligence Officer,	
Ninth Naval District	CG 950
Representative, Ninth Coast Guard	
District	CG 1494
<u>Cleveland, Ohio</u>	
Commander Ninth Coast Guard District	CV 333
<u>Corona, California</u>	
Naval Ordnance Lab	CNA 9268
<u>Denver, Colorado</u>	
Airway Manual	DN 245
Assistant Inspector of Naval	
Material	DN 45
Marine Corps Recruiting	
Station	DN 45
Naval Airways Pilot	DN 245
Naval Recruiting Station	DN 45
Naval Reserve Training Center	DN 45
Navy Branch Public Information Office	DN 45
<u>Denville, N.J.</u>	
Bureau of Weapons Representative	DOVER N.J. 556
<u>Des Moines, Iowa</u>	
Navy Recruiting Station	DM 95
Marine Corps Recruiting Station	DM 95
<u>Dover, N.J.</u>	
Naval Air Rocket Test Station,	
Lake Denmark	DOVER N.J. 556

A-7.1 (Continued)

Elmhurst, N. J.

Bureau of Weapons Representative NY 4-200

Fargo, North Dakota

Naval Recruiting Sub Station FG 84

Forest Park, Illinois

Naval Ordnance Plant FOREST PARK, ILL 652

Galveston, Texas

Coast Guard Radio Station GALV 83

Hingham, Mass.

Naval Ammunition Depot HINGHAM 42

Indian Head, Maryland

Naval Powder Factory INDIAN HEAD, MD 754

Kansas City, Mo.Bureau of Weapons Representative KC 240
Navy Recruiting Station KC 290Little Rock, Arkansas

Naval Recruiting Station LR 560

Long Beach, CaliforniaCommander, Eleventh Coast Guard District LB 5070
Field Intelligence Office Long Beach LB 8082Los Angeles, California

Field Intelligence Office Los Angeles LOSA 91

Louisville, Ky.Naval Ordnance Plant LS 574
Navy Recruiting Station LS 180
Marine Corps Recruiting Station LS 180Marietta, Wash.Naval Radio Station(s) FERNDALE WASH 09
Naval Security Group Activity FERNDALE WASH 79McAlester, Oklahoma

Naval Ammunition Depot 482

A-7.1 (Continued)

Mechanicsburg, Penna.

Ships Parts Control Center MECH 468

Miami, Florida

Commander, Seventh Coast Guard District MM 595

Minneapolis, Minn.

Navy Recruiting Station MP 114

Morton, Penna.

Bureau of Weapons Representative SWARTHMORE 558

New Orleans, La.Commander, Eighth Coast Guard District NO 367
District Headquarters, Message Center NO 460New York, N. Y.Commander, Third Coast Guard District NY 1-4929
Office of Naval Intelligence NY 1-2210Norfolk, VirginiaDistrict Coast Guard Office NF 52
District Headquarters, Message Center NF 82Northbrook, Illinois

Coast Guard Radio Station NORTHBROOK 1280

Odenton, Maryland

National Security Agency WA 264

Oklahoma City, Okla.

Navy Recruiting Station OC 451

Omaha, NebraskaInspector of Navy Recruiting, Sixth OM 68
Recruiting Area
Naval and Marine Corps Reserve Training OM 68
Center
Navy Recruiting Station OM 68
Commander Naval Reserve Training Command OM 190Palo Alto, Calif.

Bureau of Weapons Representative PALO ALTO 93

A-7.1 (Continued)

Philadelphia, Penna.

District Intelligence Office	PH 507
Navy Recruiting Station	PH 519

Pocatello, Idaho

Marine Barracks	PC 95
Naval Ordnance Plant	PC 95

Point Mugu, Calif.

Commander, Pacific Missile Range	OXD 8984
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Pomona, Calif.

Inspector of Ordnance, Consolidated Vultee Aircraft Corporation	POMONA 7326
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Port Arthur, Texas

Military Sea Transportation Service Office	PTA 38
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Portland, Maine

Coast Guard Operating Base	P0 472
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Quincy, Mass.

Supervisor of Shipbuilding	QUINCY 960
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Richmond, Virginia

U.S. Navy Area Provisions Supply Office	RH 845
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Rockland, Maine

Coast Guard Base	ROCKLAND ME 297
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St. Louis, Missouri

Commander, Second Coast Guard District	SL 567
Inspector of Navy Material	STL 1071

Salt Lake City, Utah

Marine Corps Recruiting Station	SU 353
Naval Inspector of Recruiting and Office of Naval Officer Procurement, Area Eight	SU 353
Naval Reserve Training Center	SU 353
Navy Recruiting Station and Office of Naval Officer Procurement	SU 353

San Bruno, California

District Public Works Officer, Twelfth Naval District	SSF 5980
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A-7.1 (Continued)

San Diego, California

Bureau of Weapons Representative	
CONVAIR Division A of General Dynamics Corporation	SD 6266
Coast Guard Air Station	LB 8070
District Headquarters, Message Center	SD 6273
District Intelligence Eleventh Naval District	SD 6255

San Francisco, Calif.

Commander, Twelfth Coast Guard District	SF 410
District Headquarters, Message Center	SF 184
Navy Control of Shipping Officer	SF 15
Resident Officer in Charge Naval Construction Contracts, Pacific Ocean Areas	SF 15

Santa Monica, Calif.

Liaison Officer for Bureau of Weapons Representative	S MON 7454
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Seattle, Washington

Major Relay Station, District Headquarters	SE 33
Office of Naval Intelligence	SE 292
Navy Recruiting Station	SE 469
Marine Corps Recruiting Station	SE 469
Marine Corps Officer Selection Office	SE 469

Shumaker, Arkansas

Marine Barracks, Naval Ammunition Depot	CAMDEN 465
Naval Ammunition Depot	CAMDEN 465

Silver Spring, Md.

BUWEPS REP of Applied Physics Laboratory, The Johns Hopkins University	SILVER SPRING MD 126
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South Charleston, W. Va.

Naval Ordnance Plant	SCH 292
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Spokane, Washington

Marine Recruiting Service	SP 301
Naval and Marine Corps Reserve Training Center	SP 301
Navy Recruiting Station	SP 301

Springfield, Mass.

Inspector of Naval Material	SM 461
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Toledo, Ohio

MSTS, Representative	TO 156
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Trenton, N. J.

Naval Communication Unit	EWING 966, 967
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A-7.1 (Continued)

Washington, D. C.

Coast Guard Headquarters
National Security Agency
Naval Communication Station
Naval Research Laboratory

WA 161
WA 264
CLINTON MD 516, 517
WA 593

Williamsburg, Va.

Military Subsistence Supply Agency

WMSBG 854

Woods Hole, Mass.

Coast Guard Operating Base

FALMOUTH, MASS 877

York, Pennsylvania

Naval Ordnance Plant

YORK 94

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