CHAPTER FOUR

COMMUNICATION PERSONNEL

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CHAPTER FOUR

COMMUNICATION PERSONNEL

SECTION A

4000. COMMUNICATION OFFICERS

4001. RESPONSIBILITY

- .1 The communication officer is responsible for effecting rapid, reliable, and secure visual, radio and landline communications within the scope of responsibility of the command to which attached. Regulatory duties of the communication officer are stated in U.S. NAVY REGULATIONS, Articles 0920 and 0921.
- .2 Interior communications (I.C.) on board ship, including ship's service telephones, are the responsibility of the electrical officer.

4002. GENERAL REQUIREMENTS

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- .1 In order to carry out their responsibilities efficiently, officers performing communication duties must understand the following subjects:
 - (a) Organization and administration of the Naval Establishment.
 - (b) Fleet organization, and fleet and type regulations.
 - (c) Shipboard organization and procedures (NWP 50, NWIP 50-1).
 - (d) Naval operations (Naval Warfare Publications series).
 - (e) Signaling and tactics (ACP 175, ATP 1, with USN Addenda).
 - (f) Navy and Marine Corps communication doctrine (NWP 16, NWIP 16-1, NWP 11).
 - (g) Communication procedures (DNC 5, JANAPs, ACPs).
 - (h) General conduct of mobile radio communications, including naval, merchant ship and commercial organizations.
 - (i) Handling of commercial and press traffic (DNC 26).
 - (j) General administration relative to preventive maintenance requirements for communication equipment.
 - (k) Radio wave propagation.
 - (1) Radio direction finding (DF), and radio aids to navigation.
 - (m) Security of classified material.
 - (n) Cryptosystems, including their use, protection and susceptibility to compromise.
 - (o) Censorship instructions, and regulations governing press representatives. However, this is not a duty of Marine Corps communication-electronics officers.

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4003. SPECIFIC REQUIREMENTS

- .1 In addition, officers performing communication duties shall fulfill the following specific requirements:
 - (a) <u>Communications</u>
 - (1) Have a detailed knowledge of the appropriate communications plans and initiate steps to insure the readiness of the command to carry them out. From the Communication Annex of the Operation Plan/Order, he must organize, write and distribute the command communication plan, checking the feasibility of the plan to insure ability to meet the requirements.
 - (2) Be responsible for routing, filing, relaying and physical security of all messages handled by the command.
 - (3) Insure that messages are delivered promptly to the proper persons for action or information, and provide a reliable tickler system whereby all action messages requiring reply are answered.
 - (4) Maintain the prescribed files and records of messages, and properly dispose of obsolete files in accordance with existing disposal instructions.
 - (5) Be able to prepare messages properly for transmission by any means available to the command.
 - (6) Be familiar with all cryptoaids issued to the command, and the principles of communication security.
 - (b) Training
 - (1) The communication officer shall vigorously prosecute the continuous and progressive training of all communication personnel under his charge. Importance of training for both officer and enlisted personnel cannot be overemphasized. It is one of the basic essentials of efficient organization. The fact that communication personnel have completed a course in a service school does not automatically guarantee a high level of efficiency.
 - (2) The communication officer or an assistant shall hold frequent classes for communication watch officers and members of the cryptoboard. Such classes shall include the study of communications publications, orders and directives. In addition, these meetings should provide an opportunity to clear up any difficulties or problems that have been causing delay and discrepancies in the handling of messages, and clarify what is expected in the performance of cryptoboard duties.
 - (3) The communication officer shall supervise regularly scheduled training for all communication ratings and for all voice radio operators. Training should include as appropriate: code practice, thorough indoctrination in proper procedure for radiotelegraph, radiotelephone and teletypewriter transmissions, call sign ciphers, authentication systems, frequency shifting, frequency measuring, visual signaling and care, operation and maintenance of equipment. During working periods as much variation of duty as is practical should be permitted so that operators will maintain proficiency in communication functions for which they are qualified.

4003.1(b) (Continued)

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(4) The communication officer should instruct electronic repair officers, electronic technicians and his own personnel in the necessity for observing authorized operational practices when testing any unit which radiates an electromagnetic signal.

(c) <u>Equipment</u>

- (1) Know the capabilities and limitations of installed communication equipment, including antennas.
- (2) Insure that those under his charge are thoroughly familiar with the safety precautions in the handling of electronic equipment.
- (3) Know the operating condition of the available equipment and comply with the required Type and Service Force Commanders' standards of upkeep, maintenance and cleanliness.
- (4) Be responsible for the cleanliness and preventive maintenance of all radio and visual signaling equipment, and for the compartments and deck spaces occupied by such equipment.
- (5) Insure that all equipment and supplies in his charge are cared for properly, and take such measures as may be necessary for their preservation and economical use.
- (6) Prepare and maintain all required records. He shall submit promptly such reports as may be required.
- (7) Maintain a complete set of equipment instruction books.
- (d) Inspections
 - (1) Make regular daily inspections to determine the operating condition of communication material and to insure compliance by all personnel under his charge with all existing regulations, orders, and instructions.
 - (2) Read and initial all log sheets for each 24-hour period.
 - (3) Check operators' maintenance check-off lists.
 - (4) For the purpose of inspection, and as directed by the commanding officer, have access at all times to such communication equipment, stores and supplies as the supply officer has not yet issued for use.

(e) <u>Inventories</u>

- (1) At least once a year take an inventory of the articles and equipment in use for exterior communications. This inventory should be conducted as nearly as practicable to coincide with the inventory taken by the supply officer.
- (2) Forward the annual inventory via the operations officer to the ship's supply officer. In forwarding the inventory, he shall certify he has submitted to the supply officer the necessary memorandum requests for survey to cover all deficiencies.
- (f) Supervisory
 - (1) Insure that the operation of the cryptocenter or cryptoboard is accurate, secure and efficient.

4003.1(f) (Continued)

- (2) Directly supervise the custodian of registered publications.
- (3) Be responsible for the security of communication publications, equipment and cryptoaids issued to the command. This requirement shall not be construed as relieving other persons of their responsibility for the security of classified matter assigned to them or in their custody.
- (4) Prepare and publish procedures and duties in case of casualties and emergencies, including instructions for the disposition and destruction of classified publications and cryptographic matter issued to the ship.
- (5) Be responsible for the preparation and maintenance of all records and reports required to be submitted or maintained for the publications and cryptoaids under his cognizance.

4004. OPERATIONAL REPORTS

- .1 Chapter 6, NWIP 16-1, describes in detail the Movement Report System.
- .2 A tabular summary of other operational reports is contained in NWIP 10-1.
- 4005. COMMUNICATION PLANS AND ANNEXES
 - .1 NWP 16, supplemented by NWIP 16-1, forms the basic communication plan for the Operating Forces. Paragraphs of communication plans are numbered to conform to the paragraph numbering of NWIP 16-1.
 - .2 Instructions for the preparation of communication plans are set forth in Part III of NWP 11.
 - .3 The Communication Annex to an operation order (plan) must be studied thoroughly by communication personnel. Individual appendices may go into detail concerning the following items:
 - (a) Contact reports, method sent; radiotelephone procedure; acknowledgments, to whom made, information to be contained; use of plain language; precedence; authentications.
 - (b) Recognition and Identification Responsibility; use of identification, friend or foe (IFF).
 - (c) Radio Discipline and Procedure Responsibility; use of command nets; authorized personnel; general information.
 - (d) Call Signs Proper employment.
 - (e) Frequency Plan Surface ship and landing force communication nets and circuits, and aircraft communications.
 - (f) Cryptography.
 - (g) Visual Communications.

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 Oporder 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/Oporder 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 The AN/FGC-5, and similar synchronous 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. <u>DISTRICT COMMUNICATION OFFICERS AND</u> <u>COMMANDING OFFICERS OF NAVAL</u> <u>COMMUNICATION STATIONS AND</u> <u>FACILITIES</u>

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 As an additional duty, the commanding officer of the Naval Communication Station serving a district commandant is customarily assigned as district communication officer on the staff of the district commandant; the commanding officer of a naval communication station serving an area commander's headquarters may be assigned as communication officer on the staff of the area commander.

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)

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- (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) Procure all leased and commercial facilities for activities which are not included under naval communications.
- .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 an annual inspection 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. LIAI3ON
 - .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 Fublication 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

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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.

4021.1 (Continued)

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 (i) For Fleet Marine Force staff communication officers, a similar list of duties will be found in the U.3. Marine Corps Staff Manual, 1953.

4022. SPECIFIC COMMUNICATION FUNCTIONS

- .1 Because staffs vary to some extent in organization, according to particular requirements, the communication division will differ from command to command. The pattern of activity will, however, remain the same, and it will be determined by the requirements of command which may include the following specific communication functions:
 - (a) Supervision of communication personnel.
 - (b) Training of communication personnel, including communication watch officers and cryptoboard officers.
 - (c) Coordination and supervision of all rapid communications.
 - (d) Liaison with other communication activities.
 - (e) Preparation of communication plans and orders.
 - (f) Transmission, receipt, routing, and filing of all messages.
 - (g) Registered publications.
 - (h) Communication security.
 - (i) Telephone service.
 - (j) Electronic countermeasures.
 - (k) Communication censorship.
 - (1) Electronic material.
- 4023. COMMUNICATION OFFICERS ON STAFFS OF SEA FRONTIER COMMANDERS
 - .1 Communication officers assigned to the staff of sea frontier commanders shall fulfill the duties and responsibilities for district communication officers and for staff communication officers where applicable.
 - .2 Specific tasks and functions which may be assigned are:
 - (a) Plan adequate communication facilities for the sea frontier commander.
 - (b) Advise the commander regarding all communication functions and activities within the sea frontier.
 - (c) Prepare and maintain up-to-date communication plans for U.S. Navy, Joint and Combined communication activities and functions for both peacetime and wartime operations in the sea frontier.
 - (d) Coordinate communications for naval participation in Search and Rescue.

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4023.2 (Continued)

- (e) Review communication plans and facilities of component Naval districts to insure the adequacy of such plans and facilities to support the basic sea frontier communication plans.
- (f) Effect coordination control and broad supervision of communication activities and functions within the sea frontier to insure the economical and efficient utilization of communication facilities and personnel.
- (g) Inspect communication activities within the sea frontier at least once annually and make appropriate reports and recommendations.
- (h) Maintain liaison with representatives of government agencies and commercial activities concerning communications.
- 4024. COMMUNICATION OFFICERS ON STAFFS OF NAVAL FORCE COMMANDERS
 - .1 Communication officers assigned to the staffs of naval force commanders shall fulfill the duties and responsibilities for district communication officers insofar as they are applicable.
- 4025. COMMUNICATION OFFICERS AT NAVAL AIR STATIONS
 - .1 In addition to the responsibilities set forth in Articles 4000-4003, communication officers assigned at Naval Air Stations shall fulfill the following duties.
 - (a) Maintain a communication department in accordance with the Naval Air Station organization.
 - (b) Provide for the operational readiness of assigned ground communication and electronic navigational aids facilities.
 - (c) Be familiar with the local area air traffic control communication system as maintained by military and civil authorities.
 - (d) Be familiar with the communication plans of the task or administrative organization under which assigned.
 - (e) Be familiar with the International Civil Air Organization (ICAO) communication procedures as contained in applicable ICAO documents. Current listing of these publications is contained in OPNAV INSTRUCTION 3770.1.
 - (f) Be familiar with the instructions issued by CNO and the management bureaus concerning the procurement of ground electronics equipment, and the procedures for effecting changes in the allowance thereof.
 - (g) Provide technical and maintenance services to ensure the proper functioning of assigned ground communication and navigational aid facilities.

4030. SHIP'S COMMUNICATION OFFICER

4031. RESPONSIBILITIES

.1 The ship's communication officer, under the operations officer, is responsible for the organization, supervision, and coordination of the ship's exterior communications, including the administration of the internal systems pertaining thereto.

4032. GENERAL DUTIES

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- .1 In addition to the duties set forth in Articles 0920 and 0921 of U.S. NAVY REGULATIONS, the ships communication officer shall be thoroughly familiar with the operation orders and communication plans under which his ship and force are operating. From the OPORDER he must organize, write and distribute the ship's communication plan. (See Article 4006).
- .2 In the handling of messages, he must:
 - (a) Be responsible for routing, filing and physical security of all messages handled by the ship.
 - (b) Ensure that messages are delivered promptly to the proper persons for action or information, and provide a reliable tickler system whereby all action messages requiring reply are answered.
 - (c) Maintain the prescribed files and records of messages, and properly dispose of obsolete files in accordance with existing disposal instructions.
 - (d) Verify and forward, via the commanding officer, all abstracts and statements of account of naval communication funds, submitted in accordance with DNC 26.
- 4033. DUTIES INVOLVING PERSONNEL
 - .1 The ship's communication officer shall:
 - (a) Be in charge of all personnel assigned to radio and visual communications.
 - (b) Jupervise and coordinate the activities of the assistant communication officers in charge of radio and of signals, and the custodian of RPJ-distributed publications.
 - (c) Furnish the effective recognition and identification signals to the personnel of the watch whose duties require that they be cognizant of such signals.
 - (d) Train and exercise all communication personnel in order to increase their proficiency.
 - (e) Frequently exercise the cryptoboard to improve its proficiency. He shall encourage the study of cryptographic procedures, particularly by all junior officers other than those of the Medical Corps, Dental Corps and Chaplain Corps.
- 4034. DUTIES INVOLVING EQUIPMENT
 - .1 Specific duties of the ship's communication officer with respect to materiel follow:
 - (a) <u>Maintenance and Repair</u>. Be responsible for the cleanliness and preventive maintenance of all radio, teletypewriter, cryptographic and visual signaling equipment and for the compartments and deck spaces occupied by such equipment.
 - (b) <u>Equipment and Supplies</u>. Ensure that all equipment and supplies in his charge are cared for properly, and take such measures as may be necessary for their preservation and economical use.

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- (c) <u>Records and Reports</u>. Prepare and maintain all required records. Submit promptly such reports as may be required.
- (d) Inspection and Inventory.
 - (1) For the purpose of inspection, and as directed by the commanding officer, have access at all times to such communication equipment, stores and supplies as the ship's supply officer has not yet issued for use.
 - (2) When a ship is being fitted out, conduct a careful inspection of all parts of the ship and equipment for which he is responsible. If any defects or deficiencies are discovered, a detailed report to the commanding officer shall be made immediately.
 - (3) At least once a year take an inventory of the articles and equipment in use for exterior communications. This inventory should be conducted as nearly as practicable to coincide with the inventory taken by the supply officer.
 - (4) Forward the annual inventory via the operations officer to the ship's supply officer. In forwarding the inventory, he shall certify he has submitted to the supply officer the necessary memorandum requests for survey to cover all deficiencies.
 - (5) When a ship is placed out of commission, the communication officer shall, prior to his detachment, properly dispose of and account for all classified matter for which he is responsible and satisfactorily account for all equipment, stores and supplies under his cognizance. He shall ensure that surveys covering shortages have been held and approved.

4035. SUPERVISORY DUTIES

- .1 The ship's communication officer shall:
 - (a) Ensure that the operation of the cryptocenter or cryptoboard is accurate, secure and efficient.
 - (b) Directly supervise the custodian of registered publications.
 - (c) Be responsible for the security of communication publications, equipment and cryptoaids issued to the command. This requirement shall not be construed as relieving other persons of their responsibility for the security of classified matter assigned to them or in their custody.
 - (d) Prepare and publish procedures and duties in case of casualties and emergencies, including instructions for the disposition and destruction of classified publications and cryptographic matter issued to the ship.
 - (e) Be responsible for the preparation and maintenance of all records and reports required to be submitted or maintained for the publications and cryptoaids under his cognizance.
- .2 In addition to these duties, the communication officer must be highly proficient in tactics and signals. The commanding officer assigns him

4035.2 (Continued)

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a battle station where he can best supervise and control external communications.

- 4036. DUTIES ON ENTERING AND LEAVING PORT
 - .1 The communication officer is responsible for exercising such specific functions as the command may prescribe when entering and leaving port. In port, he shall be guided by SOPA Instructions.
 - .2 A guide to assist the communication officer in entering port, upon arrival in port and departure from port follows:
 - (a) Entering Port.
 - (1) Prepare arrival report when this authority is delegated to the communication officer and if it is known there is a local requirement for such reports. (Reference: appropriate fleet or SOPA Instructions.)
 - (2) Set guard on degaussing station frequency as required prior to arrival at harbor entrance.
 - (3) Set watch on harbor frequencies (radiotelephone and/or radiotelegraph).
 - (4) Have communication personnel man sea detail stations and report when manned.
 - (5) During wartime, warn signal personnel to be prepared to establish communication with HECP if required.
 - (b) Arrival in Port.
 - (1) File movement (arrival) report in accordance with existing directives.
 - (2) Remove from the navigation bridge, communication and operations spaces all extracts of recognition signals, authentication systems, call signs and task organization data; stow or destroy, as appropriate.
 - (3) Account for and stow tactical and communication publications, orders and plans not required in port.
 - (4) Become familiar with SOPA Instructions.
 - (5) Maintain watch on harbor frequencies in accordance with SOPA Instructions.
 - (6) Set signal bridge watch or arrange for guard.
 - (7) Arrange with shore communication station or other ship to assume radio guard for his ship if necessary.
 - (8) Obtain basegrams from basegram authorities.
 - (9) Require custodian to visit the Registered Publication Issuing Office (RPIO) and bring the vessel's allowance up-to-date.

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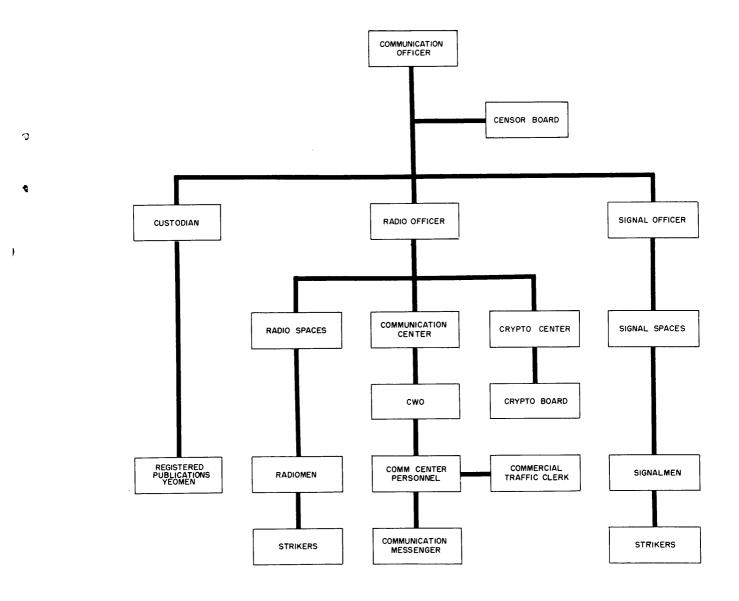
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4036.2 (b) (Continued)

- (10) Require custodian to enter changes and corrections to publications; check effective dates of new issues and reserveon-board publications.
- (11) Arrange with operations officer for necessary repairs to communication equipment in sufficient time to permit repairs prior to departure.
- (12) Schedule vigorous drill circuit and other supervised training. Take advantage of shore training facilities as much as practicable.
- (13) Arrange for installation of landline telephone. If unable to do so, ascertain location of nearest telephone ashore.
- (14) Arrange for inspection of cryptodevices if time permits and establish cryptoguard.
- (c) Prior to Departure.
 - (1) File movement (departure) report in accordance with existing directives.
 - (2) Require custodian to visit RPIO for final draw.
 - (3) Obtain latest basegram from basegram authorities. (See Article 7040).
 - (4) Arrange for removal of landline telephone.
 - (5) Insure that all radio equipment has been calibrated, particularly on frequencies for operations. Do not allow radiation of testing signals unless specifically authorized by the operational commander.
 - (6) Confirm underway communication guard arrangements with 30PA or the officer in tactical command (OTC). Set radio watches. (If in-port guardship arrangements on the fleet broadcast have been made, the ship should resume her own guard at least four hours prior to departure.) Test all assigned circuits and nets on designated frequencies.
 - (7) Set signal bridge watch.
 - (8) Inform all communication personnel of pertinent information regarding operation orders and plans.
 - (9) Distribute tactical and communication publications orders and plans to the navigation bridge, communication and operations spaces.
 - (10) Prepare list of tactical call signs required during the operation.
 - (11) Set guard on degaussing station frequency as required.
 - (12) Have communication personnel man sea detail stations and report manning.

TYPICAL SHIPBOARD COMMUNICATION ORGANIZATION



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4036.2 (c) (Continued)

(13) During wartime signal personnel be prepared to establish communication with HECP if required.

4040. RADIO AND SIGNAL OFFICERS

4041. RESPONSIBILITY

- .1 The assistant communication officers in charge of radio and signals, under the ship's communication officer, shall each:
 - (a) Organize, coordinate and supervise his personnel to ensure accurate, secure and rapid handling of communications and recording and reporting of discrepancies.
 - (b) Prepare all correspondence connected with matters under his cognizance.

4042. KNOWLEDGE AND PROFICIENCY

- .1 Each of these officers shall be familiar with:
 - (a) NWP 16, NWIP 16-1, and other volumes of the NWP/NWIP series insofar as communications are concerned.
 - (b) Fleet and task organization.
 - (c) Use of the U.S. NAVAL SIGNAL BOOK.
 - (d) JANAPs/ACPs, ATPs, DNCs and associated publications.
 - (e) BUREAU OF SHIPS MANUAL and equipment instruction books.
 - (f) SECURITY MANUAL.

4043. DUTIES INVOLVING PERSONNEL

- .1 Each of these officers, together with the division officers, shall:
 - (a) Prepare the watch, quarter and station bills for his division or section.
 - (b) Take charge of his personnel during tactical drills, general quarters, all hands evolutions, getting underway, coming to anchor and when approaching harbors or anchorages.
 - (c) Train and organize personnel for the efficient operation of assigned equipment.
- 4044. SUPPLIES, EQUIPMENT AND INVENTORY
 - .1 Each of these officers shall:
 - (a) Ensure the supply of all necessary materials for the proper function of operations under his cognizance.
 - (b) Be responsible to the communication officer for the care, normal maintenance and upkeep of all equipment under his cognizance. Ensure that adequate warning signs and safety precautions are posted and observed. (Reference; Chapter 67, BUREAU OF SHIPS MANUAL.)

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

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- .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.

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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 usually is continuous when underway, and a 24-hour duty when in port.
- .6 A CWO notebook usually is maintained in, and not removed from, the message center. Immmediately 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.

4051.8 (Continued)

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- (e) Landline connections.
- (f) Shore telephone link.
- (g) Use of the standby watch section to clear backlogged traffic.
- 4052. COLLATERAL COMMUNICATION DUTIES
 - .1 In addition to regular shipboard duties, officers may be assigned to the following collateral duties related to communications:
 - (a) Cryptosecurity officer.
 - (b) Member of cryptoboard.
 - (c) Custodian. (In the Marine Corps this duty is performed in the adjutant section.)
 - (d) Member of censoring board.
 - (e) Classified Material Control Officer.
 - (f) TOP SECRET Control Officer.
 - .2 Officers are assigned to conduct such audits and inspections as the commanding officer may direct.

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SECTION B

4100. OPERATING PERSONNEL

4101. SPECIFIC DUTIES

.1 Specific duties of enlisted personnel assigned to communication duties vary in accordance with the size, location and mission of the ship or station. Therefore it is necessary for those responsible to issue additional instructions for the guidance of such personnel.

4102. WATCH, QUARTER AND STATION BILL

- .1 Watches and stations of communication personnel normally will be based, so far as is practicable, on the master bill of the ship or station. It must be realized, however, that the watches of communication personnel cannot be made always to conform to the hours or watches of other personnel of the ship or station. Often the peak load of message traffic occurs when other activities of the command are at a comparative lull. Hence, the arrangement of the communication watch bill must be sufficiently flexible to provide adequate personnel on watch to meet the fluctuations which will occur at odd intervals. At the same time the bill must afford these personnel their fair share of rest.
- .2 Operators should be assigned watches in accordance with their ability.
- .3 During general quarters both maintenance and operating personnel should be assigned to each radio space. Every net or circuit should be manned by a qualified operator. Standby men in other radio spaces should duplicate as many logs as possible for the traffic coming into radio central. Communication personnel assigned to battle stations remote from communication spaces should be assigned to duties from which they can be withdrawn to act as communication replacements without impairing the fighting efficiency of the ship.
- .4 For the purposes of cleaning and upkeep, communication spaces should be sub-divided, the number of such areas depending upon personnel available, and personnel assigned specific areas for cleaning and upkeep. Under the direction of the leading petty officer, a petty officer should be placed in charge of cleaning each space.
- .5 Information concerning special station such as fire, fire and rescue, collision and abandon ship are contained in the ship's organization book.
- 4103. PERSONNEL GOING ALOFT
 - .1 When it is necessary for personnel to go aloft to work, permission must be obtained from the officer of the deck. The 00D is to be informed when work is completed.
 - .2 Personnel are not permitted to work on any antenna when that antenna or other antennas in the immediate vicinity are energized by radio or radar transmitters unless it is determined definitely in advance that no danger exists. On board ship "other antennas" includes antennas on board a ship moored alongside or across a pier, or at nearby shore radio stations.

- 4103. (Continued)
 - .3 Warning signs and suitable guards must be provided to help prevent personnel from coming into accidental contact with high voltages. Equipment that must not be energized while men are aloft should be tagged conspicuously. (Reference: Chapter 67, BUREAU OF SHIPS MANUAL.)
 - .4 In addition to the electrical hazards involved, precautions must be taken to prevent the rotation of radar antennas which might knock a man off his perch.
 - .5 Personnel working aloft must wear safety belts.

4110. RADIOMEN

4111. RATING STRUCTURE

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- .1 <u>Radiomen</u> (RM). The principal duties of the radioman are the operation of radiotelegraph, radiotelephone, teletypewriter and direction finding equipment; and supervision of lower ratings in these duties.
- .2 <u>Telemen</u> (TE). In broad outline the duties of the teleman, general service, include teletypewriter and radiotelephone operation, communication clerical work, and supervision of lower ratings in these duties. The teleman rating is being abolished. Communication telemen are gradually being converted into radiomen.
- .3 Qualifications for advancement in rating are contained in NAVPERS 18068.
- 4112. LEADING PETTY OFFICER (RADIO)
 - .1 The leading petty officer assigned to radio duties normally shall be in direct charge of all enlisted personnel assigned thereto. He shall:
 - (a) Prepare all watch lists for radiomen and telemen.
 - (b) Make daily checks of all traffic files and logs.
 - (c) Organize and conduct an adequate training program for personnel, including intra-ship drill circuits, as may be necessary.
- 4113. SUPERVISOR IN RADIO CENTRAL
 - .1 The supervisor is responsible for the proper handling of traffic. He has direct supervision of the personnel on watch and the equipment in use. Normally, he shall stand his watch where he can best observe the conduct of communications.
 - .2 The supervisor in radio central usually maintains a status board, mounted on plexiglass, listing pertinent information relative to the employment of nets and circuits.

EXAMPLE:

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CKT	NET	NCS	FREQ	EM	POS	XMTR	RCVR
B1	BCST	NSS	VAR	CW	2		RAK
A17	s/s	NAM	2840	CW	SUP	TBL	RBB
D106(c)	TGC	V3F2	495	CW	1	TCS	TCS
E1.5	C1	Watchdog	145.08	v	CIC-3	TDQ	RCK
D1(a)	PriTac	Watchdog	272.9	v	REM	TED	URR-13

- .3 The supervisor shall perform the following duties:
 - (a) Assist the communication watch officer. In the absence of a communication watch officer, he may be designated to act as the CWO insofar as the internal routing and delivery of messages are concerned.
 - (b) Take immediate action in the event of equipment failure, make necessary casualty reports to CONN, and see that personnel are detailed to effect repairs. After investigation, inspection, and adjustment of equipment to determine the cause of the failure, radio personnel should be detailed to service and replace minor parts. If repairs requiring high technical skill or internal alignment are required on electronics radio equipment, the electronics repair officer should be notified.
 - (c) Monitor frequencies in use and inspect logs to detect errors by his operators. He shall report any improper practices of other operators.
 - (d) Ensure that an inventory of classified matter is taken at the change of watch.
 - (e) Before being relieved, ascertain that his relief is ready in all respects to perform the duties assigned.
 - (f) Turn over to his relief all special orders, instructions and other information. He shall inform his relief of the following:
 - (1) Radio organization in effect.
 - (2) Status of traffic on the nets or circuits in use.
 - (3) Call signs and address groups for which he is responsible.
 - (4) Condition of receivers, transmitters and controls.
 - (g) Thoroughly familiarize himself with all publications and classified devices associated with his watch.
 - (h) Be responsible for the cleanliness and orderliness of spaces under his cognizance.
 - (i) Make prescribed frequency checks.
 - (j) Allow only authorized personnel in radio spaces.
 - (k) Consult the leading petty officer, communication watch officer, assistant communication officer in charge of radio or communication officer when a situation arises which he cannot fully handle.

- 4114. OPERATORS IN RADIO CENTRAL
 - .1 <u>Authority</u>. While on watch, operators shall be under the authority of the supervisor. All transmissions made by an operator carry the authority of the originating command.
 - .2 Instructions. An operator shall consult the supervisor when:
 - (a) Equipment fails to operate efficiently.
 - (b) He does not fully comprehend the meaning of any transmission heard.
 - (c) He receives an enemy contact report, urgent or other unusual transmission.
 - (d) He receives a transmission which he suspects is deceptive.
 - (e) He is uncertain whether a transmission recorded in his log should be written on a message blank.
 - .3 Caution to Operators. Operators must avoid the following practices:
 - (a) Violation of radio silence when in effect.
 - (b) Incorrect and unauthorized procedure.
 - (c) Unofficial radio conversation with other operators.
 - (d) Emission of signals from a transmitter through the antenna prior to ensuring that the transmitter is on exact frequency and before commencing initial transmission on the circuit.
 - (e) Misuse and confusion of call signs and address groups.
 - (f) Unnecessary and excessive procedure transmissions.
 - (g) Transmission at speeds beyond the capabilities of the receiving operator.
 - .4 Change of Watch.
 - (a) Before turning over the watch, an operator shall:
 - (1) Ensure that his relief is ready in all respects to perform his duties.
 - (2) Turn over to his relief any special orders.
 - (3) Inform his relief of the effective radio organization, of all messages awaiting transmission, receipt, execution or acknowledment, and of other pertinent operational matters.
 - (4) Inform his relief of the current status of equipment in operation and in standby, including any faulty equipment and status of repairs.
 - (b) Before his predecessor leaves the radio spaces, the relieving operator is to determine that the receiver is in efficient operating condition and properly adjusted to the prescribed frequency, and that the transmitter control circuit is satisfactory.

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4114.4 (Continued)

- (c) Upon being relieved, the operator shall complete the log, and report to the supervisor that he has been properly relieved.
- .5 A guide to the general qualifications of a qualified radio operator follows:
 - (a) Receives hand sending at prescribed speed and does not receipt (ROGER) for a message until he checks the group count, if used, and message indicators, and understands the transmitting instructions.
 - (b) Can send accurately at moderate speed both letters and numbers.
 - (c) Knows the executive method.
 - (d) Can make up, pad and encrypt any call sign.
 - (e) Logs everything he hears on the frequency he is guarding.
 - (f) Knows when and how to authenticate.
 - (g) Uses only prescribed procedure.
 - (h) Is familiar with the communication plan for his own force and for the operating area.
 - (i) Uses accurate operating signals.
 - (j) Can tune any transmitter on board his ship within three minutes with calibrated settings or with meter, and with no radiation from the antenna until the last stage and coupling are given final adjustment.
 - (k) Can patch any receiver or transmitter to remote positions for single or multiple control operation.
- 4115. RADIOMEN IN TRANSMITTER ROOMS
 - .1 Radiomen will be in charge of transmitter rooms and secondary or emergency radio spaces. Each must:
 - (a) Become familiar with the location of all radio equipment, spare parts and spaces assigned.
 - (b) Learn thoroughly all boards and panels through which his equipment power-feed lines pass.
 - (c) Be able to trace out and draw a sketch showing both normal and emergency power feeds to the individual equipments, with cable designations and other pertinent information.
 - (d) Be organized to maintain properly the required files, etc., relating to all tests and inspections.
 - (e) Learn to service the equipment by symptoms.
 - (f) Calibrate all transmitters to all frequencies prescribed by the type and operational commander, and if possible calibrate every five kilocycles preventing external radiation during calibrations.

4115.1 (Continued)

(g) Be proficient in "patching" transmitters and receivers to remote positions for single or multiple control operation.

4120. SIGNALMEN

- 4121. RATING STRUCTURE
 - .1 The primary duties of the signalman (SM) are signaling by flashing light, semaphore, flaghoist and other visual means; and supervision of lower ratings in these duties. A signalman also must be able to carry out the secondary duties of standing a quartermaster watch and radiotelephone operation.
 - .2 The communications duties of the quartermaster rating (QM) include signaling by flashing light, flaghoist, semaphore and other visual means.
 - .3 Qualifications for advancement in rating are contained in NAVPERS 18068.
- 4122. LEADING PETTY OFFICER (SIGNALS)
 - .1 The leading petty officer performing signal duties shall be in direct charge of all enlisted personnel assigned thereto. He shall:
 - (a) Ensure the adequate training of the signal force.
 - (b) Prepare watch lists, in port and underway.
 - (c) Be responsible for checking the visual station file, visual log file and such other records as may be prescribed.
 - (d) Be responsible for the maintenance and availability of visual equipment.
- 4123. SUPERVISOR ON SIGNAL BRIDGE
 - .1 The signal supervisor is responsible for coordinating and supervising the operations and activities of the watch to ensure maximum efficiency in the handling of visual traffic with a minimum of noise and confusion. Requirements of the signal supervisor follow:
 - (a) Knowledge.
 - (1) Possess a working knowledge of the U.S. NAVAL SIGNAL BOOK, INTERNATIONAL CODE OF SIGNALS (HO 87), and the call sign books.
 - (2) Be familiar with JANAPs, ACPs, ATPs, DNCs, and associated publications and instructions pertaining to visual communications.
 - (3) Know the visual responsibility of the ship or station.
 - (4) Be thoroughly familiar with visual challenge and reply procedures.
 - (5) Be familiar with procedures for communication with aircraft.
 - (6) Understand the application of single letter type indicators

for call sign purposes during Task Force operations. (References: ACP 118; OPNAVINST 2340.2)

- (b) <u>Proficiency</u>. Be proficient in all forms of visual communications, including the ability to prepare a message for transmission by any visual system. However, actual operation is secondary to his duties as supervisor.
- (c) Duties.
 - (1) Maintain an alert watch.
 - (2) Station the signal watch to ensure efficient visual communications with due regard to the requirement of each visual system.
 - (3) Keep the watch informed of the organization, disposition, formation and location of all units in visual company.
 - (4) Be responsible for the safeguarding of all communication publications on the signal bridge. He shall make entry in the designated log or book as to receipt of each publication and turn over publications to his relief. Upon securing the watch on the bridge, he shall personally deliver the publications to the custody of the officer in charge of the signal force.
 - (5) Conduct training and instruction for the personnel on watch, if practicable under operating conditions.
 - (6) Be responsible for maintaining all visual equipment in readiness for use.
 - (7) Be responsible for the orderliness of the signal bridge and the personnel on watch.
 - (8) Ensure that the watchstanders know the effective recognition and identification signals, and that they are ready to reply immediately to a challenge and to challenge when directed.
 - (9) Familiarize himself and his watch with the location and use of emergency signal equipment.
 - (10) Familiarize himself and his watch with their duties in the various emergency bills.
 - (11) Maintain the visual station file and visual log.
 - (12) Be responsible for making all required reports to the bridge or quarterdeck; these include ships or objects sighted, status of signals on own ship and ships in the vicinity, the execution of signals, etc.
 - (13) Ensure that receipts are obtained for messages that his watch accepts for delivery or relay.

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- 4124. SIGNALMEN ON SIGNAL BRIDGE
 - .1 Signalmen should be proficient in all means of visual communications. They should know how to use the U.S. NAVAL SIGNAL BOOK and have knowledge of the following:
 - (a) Correct visual procedure, including the uses of procedure signals, procedure signs, and call signs.
 - (b) Recognition procedure and the recognition signals in effect.
 - (c) Organization, disposition, formation and location of all units in company.
 - (d) Maintenance of logs and files.
 - (e) Special meanings of all flags and pennants.
 - (f) Location and method of operation of all emergency signaling gear.
 - .2 Signalmen should be able to compose and break down any visual or radio heading in naval form.
 - .3 Signalmen should be able to communicate by visual means with a merchant ship at sea. They should have a basic knowledge of visual communication with aircraft.
 - .4 Signalmen should pay particular attention to the following:
 - (a) Halyards should be kept taut in fair weather. In fog or inclement weather halyards should be slacked off to prevent unnecessary strain due to shrinkage. When it is too dark for flaghoist the halyards should be slacked off.
 - (b) No "Irish pennants", loose equipment or personal gear should be left about the bridge.
 - (c) Lost or damaged equipment should be reported at once and steps taken to replace it.
 - (d) Bunting should be dry and kept covered in bad weather, and should be aired weekly. Prior to airing bunting, permission must be obtained from the SOPA.
 - .5 Signalmen should always be mindful that an alert signal force is the mark of a smart ship. The following items make for smartness in flaghoist signaling:
 - (a) Accuracy in bending on the correct flag the first time.
 - (b) Smoothness in hoisting and making a quick turn with the haul-up.
 - (c) Speed in getting up the hoist.
 - (d) Being certain the signal is kept visible while hoisting. The down haul should be kept fairly taut.
 - (e) Making certain all flags are sent up clear.
 - (f) Hauling signals down sharply and smoothly without allowing them to stream to leeward or over the side.

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4124. (Continued)

- .6 Signalmen should be alert to respond to a flashing light or semaphore call without delay.
- .7 At night signalmen should use extreme care to avoid illuminating ship's bridges and aircraft. Such illumination will reduce the night visual acuity of pilots and conning officers. Whenever practicable, during carrier night flight operations, infra-red systems should be used rather than visible flashing light.
- .8 Accuracy is essential. Smartness is necessary and desirable, but not at the expense of accuracy.

4125. SPOTTERS

- .1 When operating in company, spotters are stationed on the signal bridge from dawn to dark to watch the OTC and other ships in company for signals. They must be alert at all times.
- .2 Spotters must be able to read flaghoist accurately. They must call out each flag in the signal in a loud, distinct voice so that personnel on the flag bags and those responsible for determining the meaning of the signal will hear the signal clearly.
- .3 In event that the originating ship maneuvers in such a manner that her signals cannot be distinguished, the spotter should immediately inform another member of the signal force to spot the ship from another position on the signal bridge.
- .4 Where there are obstructions--smoke, haze, fouled flags, or sun glare--the spotter should be given assistance. Regardless of the effort involved or the means necessary, the signal must be obtained with minimum delay.

4126. RECORDERS

- .1 An important duty of signalmen and strikers is to serve as recorders of signals and messages as received by another signalman.
- .2 All signals and messages should be recorded in legible writing. In recording encrypted traffic, the letters should be printed. The date, time of transmission or receipt, the reference numbers, date-time group, means of transmission, whether sent or received, the transmitting and receiving ships or stations, relaying ships or stations, should all be carefully recorded.
- .3 All messages should be initialed by the signal supervisor at the time of receipt or transmission. The originals of messages, after being initialed, should normally be sent to the message center immediately.

SECTION C

4200. MARINE CORPS COMMUNICATION PERSONNEL

- 4201. DUTIES OF COMMUNICATION-ELECTRONICS OFFICERS AND COMMUNICATION OFFICERS
 - .1 Officers of the Marine Corps assigned as communication-electronics officers or communication officers shall perform the following duties for the commander and staff:
 - (a) Estimate the requirements for communication-electronics personnel, units, equipment, supplies, and facilities.
 - (b) Make recommendations for the employment of communicationelectronics units.
 - (c) Make recommendations for the procurement, distribution, promotion, and replacement of communication-electronics personnel.
 - (d) Make recommendations for the communication-electronics training of the command and for the training of communication-electronics personnel and units.
 - (e) Make recommendations for the procurement, allocation, distribution, and utilization of communication-electronics equipment, supplies, and facilities.
 - (f) Make recommendations for the location and operation of communicationelectronics supply, maintenance, and salvage facilities.
 - (g) Assist in the collection, evaluation, and interpretation of technical communication-electronics intelligence.
 - (h) Furnish technical assistance in the examination of captured communication-electronics materiel.
 - (i) Prepare plans, orders and instructions necessary to implement the commander's policies and decisions as they affect communication-electronics matters and activities.
 - (j) Maintain records and prepare reports concerning communicationelectronics matters.
 - (k) Assist the general (executive) staff in preparation of the communication-electronics portions of studies, estimates, plans, orders, instructions, and reports.
 - (1) Exercise staff supervision of a technical nature to ensure compliance with the communication-electronics portions of the commander's orders and instructions.
 - (m) Coordinate all communication-electronics matters with all interested general (executive) and special staff sections, and with the staffs of other interested units.
 - (n) Coordinate the communications of the command with the Naval Communication System.
 - (o) Establish and maintain liaison with communication agencies of other services and allies concerned.

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- (p) Advise on the location, echelonment, and movement of the command post.
- (q) Supervise the distribution and use of cryptographic aids, and registered and non-registered communication publications, including the preparation of necessary supplements. (NOTE: In the Marine Corps the duties of Custodian of registered and nonregistered publications and of Postal Officer will be performed by personnel in the Adjutant Section.)
- (r) Supervise the operation and use of communication and electronics systems and equipment.
- (s) Supervise electronics countermeasures (in coordination with G-3) and communication security (in coordination with G-2).
- .2 Military Occupational Specialty (MOS) descriptions, qualification requirements, duties, and tasks for Marine Corps officer and enlisted communication-electronics personnel in Occupational Fields 25 (Operational Communications), 26 (Telephone Maintenance), 27 (Electronics Maintenance) and 66 (Aviation Electronics) are contained in the current edition of the U.S. Marine Corps MOS MANUAL, NAVMC 1008-PD.

4202. MARINE CORPS COMMUNICATION DETACHMENTS

- .1 Marine Corps communication detachments are assigned directly to amphibious force flagships (AGC) or APA squadron flagships with the primary mission of handling troop communications on board. Such detachments may be temporarily assigned to relief flagships, as required, for manning troop communication facilities. The commanding officer of the detachment will report to the troop communication officer when the advance echelon of the amphibious troops or landing force is established in the ship concerned.
- .2 In the absence of a troop headquarters aboard during an amphibious operation, Marine Corps communication detachments may be assigned such communication duties as will ensure proficiency in the performance of their primary duties. In this capacity, they may be assigned communication duties assisting an amphibious staff aboard.
- .3 During overhaul and similar periods, when no amphibious communication requirement exists, Marine Corps communication detachments are temporarily assigned to duty with, or duty as recommended by, commanding generals of the Fleet Marine Forces, for training ashore.