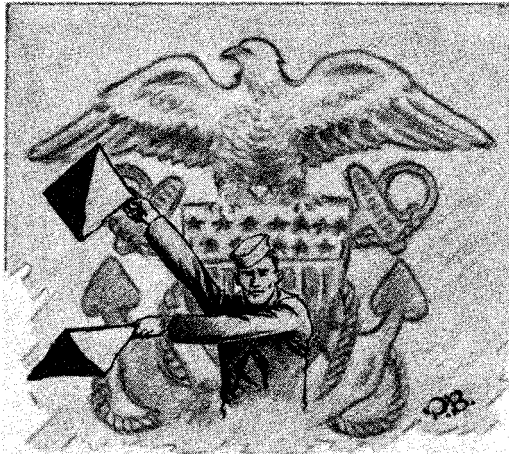


DNC 21

RESTRICTED  
NONREGISTERED

GENERAL INSTRUCTIONS  
FOR  
NAVAL COMMUNICATION LIAISON OFFICERS

DNC 21  
GINCLO



OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
DIVISION OF NAVAL COMMUNICATIONS  
MAY 1945

United States Government Printing Office, Washington : 1945

I

*With best wishes to  
my dear friend, Kay*  
"POB"  
4142 BERUBE  
9/6/45

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**DNC 21**



**ORIGINAL**

**II**

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

8 MAY 1945.

**LETTER OF PROMULGATION**

1. DNC 21, General Instructions for Naval Communication Liaison Officers, contains instructions and information for Naval Communication Liaison Officers, Armed Guard Officers, Commanding Officers Naval Armed Guards and Troops, and masters of United States merchant vessels as to the conduct of Naval Communications aboard merchant vessels.

2. DNC 21 is effective upon receipt.

3. General Instructions for Naval Communication Liaison Officers is a restricted nonregistered publication and is to be handled, transported, and stowed in accordance with the instructions contained in the effective edition of the Registered Publication Manual.

4. Printed corrections and changes to this publication will be distributed through the publication offices of port directors and routing officers.

5. This document contains information affecting the national defense of the United States within the meaning of the Espionage Act (50 U. S. C., 31 and 32, as amended). Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

6. Extracts from this publication may be made when necessary in making reports or furnishing information required in the handling of publications.

JOSEPH R. REDMAN,  
*Rear Admiral, USN,*  
*Director of Naval Communications.*

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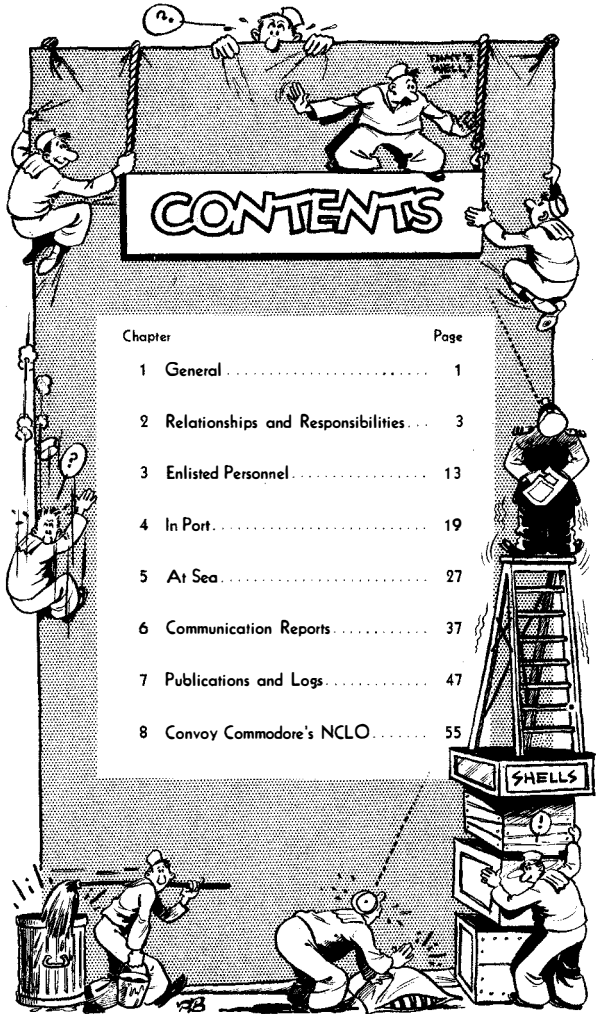
**DNC 21**



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## ABBREVIATIONS

For the sake of brevity, certain abbreviations have been used in this volume, as follows:

ALPAC.....	General message to all Pacific stations.
BAMS.....	Broadcasts for Allied merchant ships.
CIC.....	Combat information center.
Convoy Form D....	Commodore's report form.
HECP.....	Harbor entrance control post.
KCS.....	Kilocycles.
M Form.....	Data sheet for merchant ships.
NCLO.....	United States Naval Communication Liaison Officer.
NCLU.....	United States Naval Communication Liaison Unit.
NCSO.....	Naval control service officer (British).
RDM.....	Radarman.
RM.....	Radioman.
R/T.....	Radio telephone.
SM.....	Signalman.
SOE.....	Senior officer of escort.
TOD.....	Time of dispatch.
TOE.....	Time of execution.
TOR.....	Time of receipt.
VH/F.....	Very high frequency.
V/S.....	Visual signals.
W/T.....	Wireless telegraphy.
XAP communication team.	A specially trained communication unit, assigned temporarily to certain merchant ships for invasion and support-invasion movements.

## PUBLICATIONS

The following publications are mentioned in this volume:

- DNC 6..... Operator's Manual U. S. Navy.  
(To be drawn by the NCLC from the publication office of the port director.)
- GIRO-1944..... General Instructions to Routing and Reporting Officers 1944.  
(This publication is held by each port director or routing officer.)
- H. O. 87..... International Code of Signals. Vol. I (Visual).  
(This publication should be aboard each merchant ship. If not held, the master may draw a copy from the local hydrographic office.)
- NAVPERS 10113..... Radarman 2/c Navy Training Course.  
(These may be drawn for radarman or radarman strikers from the educational office of the Armed Guard center.)
- NAVPERS 16135..... Radar Operator's Manual (RAD-THREE).  
(To be drawn by the NCLC from the publication office of the port director when his ship is equipped with radar.)
- OPNAV 23L-2..... General Instructions for Commanding Officers of Naval Armed Guards on Merchant Ships.  
(May be drawn from Armed Guard center or port director.)
- RPS 9 Series..... Allowance Table of Communication Publications for Merchant Ships.  
(This publication is held by each port director or routing officer.)
- WIMS (1, 2, 3)..... Wartime Instructions for Merchant Ships (Vol. 1, 2, 3).  
(These volumes are to be issued to the masters of each allied merchant ship by the publication office of the port director. In addition, an extra copy of WIMS 1 is to be issued to the master for the specific use of the NCLC.)



## Chapter 1

### GENERAL

101. **Naval responsibility for convoys and independent ships.**—The Navy Department and the Admiralty are responsible for the organization, protection, and operation of merchant ship convoys, and for controlling voyages of independent merchant ships. This responsibility includes the supervision of communications.

102. **The United States Naval Communication Liaison Officer.**—The Navy Department has placed naval officers trained in convoy and independent ship

communication procedure aboard certain merchant ships. These officers are responsible to the master for supervising the conduct of visual and radio communications. Their official title is United States Naval Communication Liaison Officer (NCLO).

**103. Armed Guard commander as Naval Communication Liaison Officer.**—On ships carrying United States Navy Armed Guard units, if no communication officer is assigned aboard, the Armed Guard commander shall function as United States Naval Communication Liaison Officer, although the Armed Guard commander's primary interest is the defense of the ship. This manual, therefore, will also apply to Armed Guard commanders acting as officers in charge of communications.

**104. The Naval Communication Liaison Unit.**—The Naval Communication Liaison Unit consists of the NCLO (see arts. 102 and 103 above), and all United States naval enlisted personnel assigned to the ship for the purpose of performing visual and radio communication and radar functions.

**105. Representatives of the Navy.**—United States naval personnel assigned to United States and foreign merchant ships must at all times be conscious of their identity as representatives of the United States Navy and handle themselves accordingly.

**106. Unusual nature of duty.**—Detached duty aboard merchant vessels has few precedents in naval history and consequently requires that personnel so assigned discharge their duty with extraordinary initiative, tact, and general adaptability to the unusual circumstances of their assignment.



## Chapter 2

### RELATIONSHIP AND RESPONSIBILITIES

201. **Respect for merchant marine customs.**—The Navy and the Merchant Marine share many customs and traditions of seafaring life, but each service has some customs peculiar to itself. United States Naval personnel assigned to merchant ships are instructed to maintain a courteous respect for the customs of the merchant marine.

202. **The master's authority.**—In accordance with the law, the master of a merchant vessel commands the vessel and is charged with its safe navigation, and has full responsibility under the law except in regard to certain functions of the Armed Guard commander

as outlined in General Instructions for Commanding Officers of Naval Armed Guard on Merchant Ships (OpNav 23L-2). The master will be held accountable by Navy authorities for violations of wartime merchant ship communication instructions.

**203. Responsibility of various officers.**—The master has been given many new responsibilities since the outbreak of war, and certain specialized duties have also been assigned to other officers, subject to the final authority of the master.

*a.* Detailed descriptions of communication responsibilities are to be found in WIMS 1, WIMS 3, and General Instructions for Commanding Officers of Naval Armed Guard on Merchant Ships.

**204. The master and the Naval Communication Liaison Officer.**—The Naval Communication Liaison Officer is directly responsible to the master for the performance of his communication duties. He shall act as advisor to the master on communication procedures and convoy organization and will supervise communication functions. He shall discharge certain other duties assigned to him by the Navy, but none of these shall be construed as giving him the right to disregard the ultimate authority of the master.

*a.* The NCLO is required by the Navy to call the master's attention to any breach of wartime instructions for merchant ships or other official instructions concerning the security of the ship. If the master decides to disregard the official instruction, the NCLO's responsibility in the matter is ended, unless the problem is of sufficient importance to warrant mention of it in the NCLO's communication



report, in which case suitable corrective action will be taken by the port director.

b. The master shall show and make available to the NCLO all communication instructions which are given to the master.

c. It is obvious that maximum communication efficiency will be achieved only by close cooperation between the master and the Naval Communication Liaison Officer.

**205. The Armed Guard commander and the Naval Communication Liaison Officer.**—The Armed Guard commander (or Commanding Officer, Naval Armed Guards and Troops on Navy chartered transports) is in command of all naval communication personnel permanently assigned to the vessel and is responsible for their administrative organization and discipline. The Naval Communication Liaison Officer shall report to him for endorsement of orders upon assignment to the ship. As the Naval Communication Liaison Officer is directly responsible to the master for the performance of his communication duties, however, as explained in article 204, the Armed Guard commander (or Commanding Officer, Naval Armed Guards and Troops) shall leave the operational organization of communications to the Naval Communication Liaison Officer.

**206. Distinction between responsibilities of NCLO to the master and to the Armed Guard commander.**—Circumstances require that the Naval Communication Liaison Officer be responsible to the master for the performance of communication duties and at the same time subject to military administration of the Armed Guard commander. It is necessary therefore that this

division of responsibility as specified in articles 204 and 205 be recognized by all concerned.

207. **Duties of the NCLO.**—WIMS 3, article 5 (*b*) states that the Naval Communication Liaison Officer “shall be responsible to the master for the efficient conduct of communications except for the maintenance of radio equipment” and that “all communication personnel shall be under his *immediate* supervision as to watches, operations, and performance of their duties in all matters relative to wartime merchant ship communications.” This responsibility includes:

- a.* Setting communication and radar watches.
- b.* Efficient performance of personnel while on watch.
- c.* Proper log-keeping.
- d.* Preservation of radio silence.
- e.* Aiding the master with transmitting details.
- f.* Supervising the delivery of incoming messages to personnel concerned.
- g.* Attending pre-sailing routing or convoy conferences.
- h.* Preventing unauthorized persons from entering the radio room.
- i.* Making nonapproved private broadcast receivers inoperative while at sea.
- j.* Supervision of upkeep of visual signaling gear.
- k.* Arrangements for emergency disposal of all classified matter.
- l.* Assuring that identification signals are available on the bridge of ships sailing independently.
- m.* Assuring that the radio room receives publications and information necessary for efficient and proper operation.

*n.* Assuring that communication and radar personnel are familiar, as necessary, with:

1. Publications.
2. Current voyage instructions (communications).
3. Call signs.
4. Effective BAMS numbered and lettered messages.
5. Security measures.
6. Proper message form.
7. Distress procedure.
8. Changes to procedure or standard organization.
9. Changes to publications.

*o.* Seeing that radar personnel make necessary reports as due.

**208. Relations with the Merchant Marine officers** —The Naval Communication Liaison Officer should **always** display a spirit of courtesy and cooperation in his working relations with the Merchant Marine officers.

*a.* Instructions from the bridge to communication personnel shall normally be issued through the NCLC.

*b.* When the NCLC is not readily accessible, communication instructions from the bridge may be made directly to communication personnel.

*c.* In supervising radio watches, the NCLC must see that there is no discrimination against either merchant radio officers or Navy radiomen. It is well for the NCLC to consider the experience of merchant

radio officers in the operation of the radio room. Radio watches need not be rotated.

209. **The NCLO on a convoy flag ship.**—On all acting United States convoy flag ships having a United States Navy commodore or vice commodore on board, all communications shall be under the *immediate* supervision of the Naval Communication Liaison Officer attached to the staff of such United States Navy officer; however, the senior radio officer shall be responsible to the master for the maintenance of all radio equipment.

a. The NCLO attached to the ship shall be responsible to the commodore's NCLO.

b. When there is no NCLO attached to the commodore's staff, the NCLO attached to the ship shall act in that capacity. (See art. 802*b* for action to be taken when Armed Guard commander attached to the ship is acting as NCLO.)

210. **The NCLO when XAP communication teams are aboard.**—For certain invasion and support-invasion movements, specially trained communication teams, known as XAP teams, are assigned to some merchant ships. When such is the case the NCLO attached to the ship shall be subject to the authority of the officer-in-charge of the team in communication matters.

211. **The NCLO on an Army transport.**—On United States Army transports not having a United States Navy commodore or vice commodore on board, the United States Naval Communication Liaison Officer shall be in charge of and responsible to the master of the ship for all communications if United States Army radio technicians are not assigned on board. If United

States Army radio technicians are assigned on board, the Naval Communication Liaison Officer shall be responsible to the master for all visual communications and shall act as communication advisor to the United States Army transport commander as concerns radio communication. The transport commander shall be responsible to the master for the maintenance of equipment and the operation of the radio office.

*a.* The United States Army transport commander and the Naval Communication Liaison Officer should arrive at a complete understanding of their respective communication functions before the ship sails. In view of the specialized training of the NCLO and his fitness to supervise communications, the United States Army transport commander on many ships has delegated the supervision of the radio room to the NCLO.

**212. The NCLO on a Navy chartered transport.**—On troop transports chartered by the United States Navy and carrying a naval commanding officer of Armed Guards and Troops, the Naval Communication Liaison Officer should be responsible to the master for all radio and visual communications. For purposes of military control and administration, the NCLO is subject to the authority of the naval commanding officer, but the naval commanding officer must be cognizant of the responsibility the NCLO has to the master for the performance of his communication duties as outlined in WIMS 3 and article 204 above.

**213. Clarification of certain individual functions.**—The regulations that follow are promulgated

for the purpose of clarifying certain functions and responsibilities.

*a.* The NCLO is responsible to the Armed Guard commander or naval commanding officer of Armed Guards and Troops in all disciplinary matters affecting communication personnel.

*b.* The Armed Guard commander will set port security watches. The NCLO will set port signal and radio watches where required. Setting of port security watches must not interfere with setting of port signal and radio watches. Communication and radar personnel shall not be assigned gunnery duties while in port.

*c.* While at sea, communication personnel shall not be assigned other than communication duties unless a state of emergency exists. In devising emergency gun stations, the Armed Guard commander shall consult the NCLO. The NCLO will make provision for emergency communication stations on the bridge and in the radio room and designate the remainder of the communication personnel as available for gun stations. It is well for all communication personnel to be trained for gunnery duty in case of emergency.

*d.* The Armed Guard commander, after consultation with the NCLO, shall arrange leave, shore leave, and liberty for naval communication and radar personnel. Cooperation and consideration of duties are essential to an equitable arrangement.

*e.* The NCLO shall be in charge of the advancement in rating of signalmen, radiomen, and radar-men; the education of the gun crew is the responsibility of the Armed Guard commander and shall not be turned over to the NCLO.

*f.* The NCLO is not expected to perform duties other than those specified in this or other official publications. He may, however, perform censorship duties if delegated to him by the Armed Guard commander or naval commanding officer of Armed Guards and Troops.

*g.* The NCLO shall provide the Armed Guard commander or naval commanding officer of Armed Guards and Troops with copies of all incoming messages that concern the safety and defense of the ship.

*h.* The Armed Guard commander is responsible for the requisition of BuShips signaling gear; port directors furnish lists of such gear to Armed Guard commanders. The NCLO shall provide the Armed Guard commander with a list of needed items before the ship reaches port. The NCLO shall be responsible for procuring VH/F radio equipment.

214. **Radar.**—Certain merchant vessels have been selected to receive radar equipment for use in navigation. The master of the vessel in consultation with the NCLO will determine the circumstances under which operation of the equipment will aid in safe navigation of the ship. The supervision and security of the radar equipment is the direct responsibility of the NCLO, and radarmen are a part of the Naval Communication Liaison Unit.

Security arrangements must be made for the gear and unauthorized persons shall not be permitted access to radar equipment either at sea or in port. Detailed instructions and information will be promulgated to NCLO's and masters by the Chief of Naval Operations.

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### Chapter 3

#### ENLISTED PERSONNEL

301. **General regulations.**—NCLO's should maintain a uniformly friendly attitude toward their men, yet never impose undue familiarity upon them nor tolerate undue familiarity on their part. An officer should be firm, fair, and strict and maintain discipline rigidly and impartially. It should be remembered that minor breaches lead to excesses intolerable in a military organization. The NCLO's attitude will be reflected by his men; therefore he should lead them by good example and he will be justified in expecting the utmost of their abilities.

302. **Advancement in rating.**—The education and advancement in rating of enlisted personnel in the signalmen, radiomen, and radarmen classifications is

the responsibility of the Naval Communication Liaison Officer.

*a.* This duty is not to be taken lightly; it is only fair to the men that they be given opportunity for advancement in proportion to their competence, and it is only fair to the Navy that no man be allowed to advance beyond the limit of his competence.

*b.* The rules governing advancement in rating are found in articles 5201 through 5206 of General Instructions for Commanding Officers of Naval Armed Guards on Merchant Ships, and the instructions and forms distributed by the Armed Guard centers.

*c.* Men can be advanced in rating only by the Armed Guard center in which their records and accounts are carried.

*d.* If a man is detached from a Naval Communication Liaison Unit, or if the NCLC himself is detached, a report form indicating the number of progress tests completed and the marks earned on them should be filled out and given to the man so that he may proceed with his tests under his next command.

*e.* A copy of a recommendation for advancement in rating should always be given to the subject man.

*f.* DNC-6 (Operator's Manual) has been added to the allowance of NCLC's in order that enlisted naval communication personnel may study Navy procedure, a knowledge of which is necessary for advancement. The information contained in this publication is for training purposes only and is *not* to be used in communications between merchant ships and naval vessels or activities when in conflict with instructions in WIMS.

*g.* As radarmen are a new addition to Armed Guard center enlisted pools, it is particularly important that the NCLC check to see that the necessary radar training publications are put aboard. RAD-THREE (Radar Operator's Manual) has been added to the allowance of those NCLC's assigned to ships with radar equipment installed. This publication is an excellent elementary description of radar operation principles. NavPers 10113 (Radarman 2c Navy Training Course Manual) will be issued by the educational office of Armed Guard centers to radarmen; this publication is used for both radarman 2c and radarman 3c study. A manufacturer's instruction handbook will be issued with each equipment installed and will help still further in education of radarmen. Other publications may be added to these allowance lists later.

303. **Health and welfare.**—The health and welfare of all communication personnel must be a primary consideration.

304. **Suitable quarters.**—The Naval Communication Liaison Officer shall make certain that communication and radar personnel are quartered as near bridge and/or radio room as possible.

305. **Duties of Armed Guard commander.**—The Armed Guard commander is charged with many duties and responsibilities that affect the entire crew, including the enlisted communication personnel. The Naval Communication Liaison Officer should give the Armed Guard commander his fullest cooperation in connection with these duties, especially insofar as they apply to communication and radar personnel. Some of the

more important of these duties are described fully in the following articles of General Instructions for Commanding Officers of Naval Armed Guards on Merchant Ships:

*a.* Articles 1306 and 4106 (Armed Guard for military duties only. Gangway watches. Duties required by port authorities).

*b.* Article 2205 (Clothing, helmets, gas masks)

*c.* Article 2218 (Recreational gear).

*d.* Article 3107 (Inspections).

*e.* Article 3418 (Unnecessary exposure of men during attack).

*f.* Article 3419 (Helmets to be worn during air attack or antiaircraft barrage).

*g.* Article 3420 (Acquaint gun crew and merchant crew with emergency signals).

*h.* Article 4106 (Information for men about liberty, disease conditions, and restricted areas in foreign ports).

*i.* Article 4207 (Payment in United States ports).

*j.* Articles 5101 through 5114 (Pay, subsistence, reimbursement).

*k.* Articles 5501 through 5539 (Care of wounded and medical treatment).

*l.* Articles 5601 through 5622 (Abandoning ship, life saving, damage control).

*m.* Article 5910 (Cameras).

*n.* Article 5911 (Diaries).

*o.* Article 5912 (Black-outs).

*p.* Article 5915 (Unauthorized firearms).

**306. Removal from the ship.**—If any of the enlisted communication personnel are to be removed from the

ship for discipline, medical treatment, leave, or any other reason, the removal shall be handled by the Armed Guard commander with the cognizance of the NCLO.

307. **Senior signalman, senior radioman and senior radarman.**—When there are two or more signalmen on board, the NCLO should designate one of them (presumably the one who is senior in grade) to act as senior signalman. The other members of the signal crew should then be made to understand the nature of the senior signalman's duties and his authority as representative of the NCLO and the Armed Guard commander. The NCLO should consult the senior signalman in connection with watch bills and other matters affecting the daily routine of the signal crew and make him responsible for the performance of work details such as painting and flag repair. It may be well also to grant him extra privileges commensurate with the extra work and responsibility required by his position.

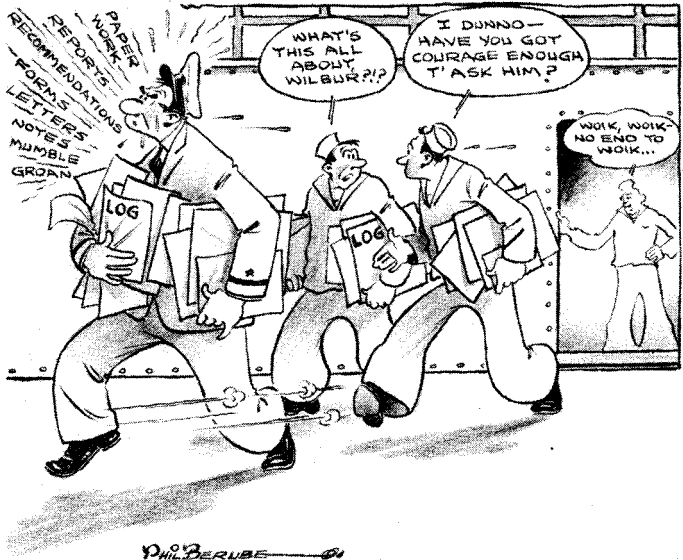
*a.* If the entire radio crew and/or radar crew is composed of United States Navy personnel, a similar arrangement should be established among the radiomen and radarman.

*b.* All hands are specifically instructed to respect the supervisory function of the boatswain's mate in matters that concern the entire enlisted complement. It is just as important that the Armed Guard commander and senior petty officer cooperate with and respect the duties of the senior signalman, radioman, and radarman.

*c.* It has been noted that some senior petty officers stationed on merchant ships are reluctant to take any initiative and responsibility in supervising the work

of the other enlisted men in the crew for fear of looking "too military" in the eyes of the Merchant Marine personnel on board. It is absolutely essential that this feeling be eradicated; otherwise the petty officers rated by Armed Guard centers will be of no use to the Navy when they are eventually transferred to fleet duty.

308. **Radarmen.**—As stated in article 214, some vessels will have radarmen and/or strikers assigned for operation of radar equipment. These men are specialists and their time will usually be utilized operating the equipment. For this reason, radarmen will not normally be used for other duties. They should be trained in signaling procedure so that during periods of heavy signaling and emergency they may assist on the bridge, though such additional duties shall not interfere with operation of the radar.



## Chapter 4

### IN PORT

401. **Purpose of this chapter.**—The exact procedure to be followed by a Naval Communication Liaison Officer while in port in the United States is found in the instructions and check-off lists issued by the various port directors and by the commanding officers of the Armed Guard centers at Brooklyn, New Orleans, and San Francisco. This chapter will not undertake to review these detailed instructions, which necessarily vary from port to port, but will refer instead to some of the general problems that apply to all NCLO's in

all United States ports. The last part of this chapter will contain instructions for foreign ports.

**402. Inventory and receipt for equipment.**—When one NCLO relieves another on a ship, the officer being relieved should turn over an inventory of all communication equipment held aboard (except that which comes within the cognizance of the chief radio officer), and the relieving officer should give his predecessor a receipt for any title B equipment that may be held in the name of the NCLO.

**403. Obtaining new equipment.**—Most of the general equipment will be requisitioned by the Armed Guard commander in his function as administrative officer. This includes such items as long glass, binoculars, cold-weather gear, life jackets, flashlights, stationery, vacuum bottles, recreational equipment, etc. It is the NCLO's responsibility to personally check all communication equipment shortly before arrival in port and to requisition new equipment, supplies, and repairs necessary to insure efficient working condition before the vessel sails.

*a.* New signal searchlight bulbs should be checked carefully to make sure that they are of the proper voltage, wattage, and type to fit the lights and correspond to the ship's power supply.

*b.* Batteries for multi-purpose kits and R/T should be examined for cracked cells and an ample amount of acid for the voyage. Special attention must be given to the stowage of wet-cell batteries in the Pacific to avoid damage by excessive heat.

*c.* All NCLO's should be familiar with the Bureau of Ships Type Allowance List for Armed Guard



Units, Navy Communication Liaison Groups, and Convoy Commodores Assigned to Merchant Vessels, dated 15 October 1943, and subsequent amendments. This list is available in port directors' offices.

404. **VH/F radio equipment.**—Very high frequency radio equipment is issued directly to the NCLO by the port director's office, usually through a special issuing office devoted to that purpose alone. VH/F gear is not to be included in the Armed Guard commander's regular requisition list.

*a.* Application for new sets, spare parts, and batteries should be made as soon as possible after the arrival of the ship in port in order to prevent last-minute confusion at the time of the convoy conference and to avoid being caught in temporary shortages.

405. **Obtaining BAMS numbered and lettered messages.**—The latest changes to radio organization, call signs, visual organization, publications, general instructions, etc., are transmitted as BAMS numbered or lettered messages for the information of all ships at sea. Because such information may be transmitted while the vessel is in port and normally off radio guard, port directors and routing officers are required to provide a complete list of current BAMS numbered and lettered messages to the master of each merchant ship routed from their ports. Since much of the information concerns communications, it shall be the responsibility of the NCLO to make certain that latest BAMS numbered and lettered messages are on board before the vessel sails and that personnel concerned have received copies of messages pertaining to their functions.

406. **Publications allowance.**—All NCLO's should be familiar with the effective edition of RPS 9 series (the Allowance Table of Communication Publications for Merchant Ships). This table lists the communication publications to be held by masters of merchant ships, convoy commodores, NCLO's, and NCLO's attached to ships guarding naval schedules.

a. The current allowance for NCLO's on ships *not* guarding naval schedules consists of DNC-6 and DNC-21 (and RADTHREE when ship is equipped with radar). The NCLO is responsible for obtaining these publications from the port director's publication office.

407. **Publications must be current.**—Changes and corrections to naval publications held by merchant ships will normally be made by port director and NCSO publication offices while the ship is in port; the NCLO must make sure that there are no omissions.

a. When corrections by BAMS broadcast or corrections on loose sheets are received, they shall be held until arrival at the next port, where insertion can be made by personnel trained in that work.

408. **Brush-up schools.**—Wartime merchant ship communication schools have been established in certain key ports in the United States for the instruction of United Nations' merchant ship personnel in communication procedure as set forth in WIMS 1 and WIMS 3 and in the maintenance and operation of intraconvoy radio sets. NCLO's, signalmen, and radio operators should attend these schools at least once every 6 months in order to keep abreast of necessary changes in wartime procedure.

a. At present, wartime merchant ship communication schools are located in the ports shown below (addresses will be furnished by the local port directors) :

1. Boston, Mass.
2. New York, N. Y.
3. Philadelphia, Pa.
4. Baltimore, Md.
5. Norfolk, Va.
6. New Orleans, La.
7. San Pedro, Calif.
8. San Francisco, Calif.
9. Seattle, Wash.

409. **Educational publications for enlisted men.**—The NCLO must make sure before sailing that his study manuals, progress test books, and other educational material for enlisted men correspond with the actual ratings of the enlisted men aboard. For instance, a SM3c who is striking for advancement to SM2c will be helpless if the NCLO happens to have been given only SM1c and SM3c books and has failed to correct the omission.

410. **Quarters and space for gear.**—The NCLO should make arrangements with the master and Armed Guard commander for suitable quarters for communication personnel, adequate stowage space on the bridge and a convenient location for the VH/F radio. Experience has shown that the VH/F radio should be operated near or at the conning position of the ship. Most masters experienced in using the voice circuit will be eager to assist in making an efficient semipermanent installation. If it should prove impossible to

arrive at a satisfactory arrangement, the matter should be brought to the attention of the port director without delay.

411. **Upkeep of signaling equipment.**—Although the master has the ultimate responsibility for the upkeep of signaling equipment (see WIMS 1, ch. 9), the NCLO should regard himself as immediately responsible for the maintenance and protection of navy signaling equipment both in port and at sea.

412. **Emergency disposal of classified publications.**—Before the ship leaves port, the NCLO should make arrangements with the master and chief radio officer for the stowage and emergency disposal of classified publications.

413. **Rigging antennae and halyards.**—The NCLO should make sure that all antennae and signal halyards are fully rigged *before* the ship puts out to sea. On several occasions, ships have missed important sailing instructions because of undue delay in rigging antennae.

414. **Prompt distribution of communication plan to communication personnel.**—The master is responsible for the distribution of publications and communication instructions to the persons aboard who will need to use them (WIMS 3, art. 2). The NCLO should assist the master in this matter and see that all hands understand the necessary instructions before the ship sails. The VH/F radio code should be handed to the signalmen promptly in order that they be able to digest it before they need to use it.

415. **Alert signals in foreign ports.**—It is of utmost importance that the NCLO inform himself of the local alert signals as soon as his ship enters a foreign port,

especially one in a forward area. This information is usually supplied by the local boarding officer, but if the ship is not boarded promptly, inquiry should be made by flashing light. The information should be passed to the mates, radio operators, and signalmen without delays.

**416. Harbor communications.**—The NCLO must also inform himself of the local harbor communication plan, if any, immediately upon entering port, and should set watches accordingly. In many of the Pacific forward areas, both harbor visual and radio watches are necessary.

**417. The NCLO shall attend convoy conferences and independent ship routing conferences.**—Some ports have failed to include NCLO's in their orders for attendance at convoy conferences or independent voyage routing conferences because they were unaware of the presence of such officers. British NCSO's were instructed to invite attendance of United States naval communication officers by Admiralty dispatch 151227B of July 1944. All United States port directors and routing officers are required by GIRO-1944, articles 2751 and 3303 to have NCLO's attend both convoy communication conferences and masters' convoy conferences. For ships sailing independently, GIRO-1944, article 2802 requires presailing interviews with the master and the NCLO.

**418. Distinction between convoy R/T frequencies.**—In filling out British questionnaires about a ship's radiotelephone facilities, the master, NCLO, or chief radio officer who is providing the information must be careful to indicate whether the ship can both transmit and receive, and whether the frequency involved is a

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medium frequency, such as 2410 kilocycles, or a very high frequency, such as 72.5 or 72.1 megacycles. Frequent misunderstanding has resulted from the British tendency to think of R/T in terms of 2410 kilocycles only and the American tendency to refer exclusively to the VH/F used in United States convoys.

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## Chapter 5 AT SEA

**501. Purpose of this chapter.**—The material contained in this chapter is to be regarded as *supplementary* to WIMS, communication plans and other official instructions issued by Allied naval port authorities. It is issued for the purpose of clarifying and emphasizing some of the special problems that arise in connection with the general instructions in the publications and orders mentioned above.

**502. Secret identification signals must be ready.**—When a ship is routed independently or straggles from a convoy, the most important duty of the NCLO is to make sure that the secret identification signals are known to, and understood by, the deck officer and signalman on watch. These signals are issued to the master and are used to reply to the challenge "OE" from a warship or plane.



a. Secret identification signals are *never* to be made by radio.

b. Whether made by flashing light or flag hoist, secret identification signals must *always* be preceded by the ship's International Call Sign.

c. Merchant ships are forbidden to challenge warships, planes, or other merchant ships.

d. Identification for escorted convoys will be made by the escort. Unescorted convoys will be identified by one of the vessels predesignated by the sailing authority.

503. **Availability of publications.**—The preface to WIMS 1 states that “When at sea, the master is to keep this publication in a safe place on the bridge, under the charge of the officer of the watch, so that signals may be attended to without delay.” A second copy of WIMS 1 is issued to all United States merchant vessels to which Naval Communication Liaison Units are attached so that this publication will always be available to the NCLO or signalman on watch; masters are given specific instructions to use the second copy in this way. The International Code of Signals, volume 1—Visual (H. O. 87), should also be kept in a place where the signalmen can have immediate access to it. On page IX, original of WIMS 3, it is stated, “When the ship is at sea, this book is to be kept in the radio office.” Changes and corrections to publications should always be called to the attention of communication personnel by the NCLO.

504. **Messages to bridge in writing.**—Messages received by radio or visual signals must be passed to the bridge promptly and shall be written out in order to prevent misunderstandings.



505. **Relaying V/S messages.**—The following is quoted from WIMS 1:

Any ship in a convoy which sees a ship trying to communicate by flags with some other ship in the convoy should, if she considers that by doing so she will expedite the communication, repeat the signal exactly as hoisted by the originator, hoisting the distinguishing signal of the originating ship at the dip on a different pair of halyards to indicate by whom the signal was originated.

The same principle applies to the passing of flashing light messages. Signalmen should always be kept on the alert to assist their neighbors in instances of this sort.

506. **Responsibility for speed and accuracy of visual signals in convoy.**—The Naval Communication Liaison Officer is responsible for the accuracy and speed of the visual signals handled by the signalmen under his command and for the accuracy of signals repeated by any other ship or ships for which his ship is responsible in accordance with the plans set forth in WIMS 1, chapters 3 and 9, and in the convoy communication plan.

a. Speed is essential in handling V/S messages in convoy, but accuracy is even more important. Some signalmen show a tendency to sacrifice accuracy in the interests of speed—a tendency which must be restrained by the NCLO.

b. The NCLO shall require his signalmen to submit to him all general flashing light messages or messages from the commodore to individual ships in the convoy *before* passing them on to the next ship in the chain of responsibility. If the message appears to have been garbled in transmission, the NCLO

should check back toward the source and clear up the error before transmitting to the next ship. If the message is urgent, however, the NCLO should pass it along as received and inform the next ship that he is checking for error and will send a corrected version as soon as possible.

*c.* General flag hoists must be repeated flag for flag, and no ship in a convoy shall use the international Code or Answering pennant in lieu of repeating the commodore's hoist.

*d.* In repeating flag hoists, each ship must check the hoist as repeated by the ship for which it is responsible. Should the hoist be repeated incorrectly, the signal "QR" should be sent by flags or flashing light meaning, "You are repeating the flag signal incorrectly. Correct it." (WIMS 1, art. 36.)

*e.* It is the responsibility of the NCLO to see that flag hoists are handled quickly and smartly. The standard of proficiency for signalmen in Naval Communication Liaison Units must be the same as that of the fleet.

**507. Visual signaling by independent ships.**—The NCLO is responsible for the accuracy and speed of visual signals handled by the signalmen under his command on independently routed ships. This also applies on ships prior to forming with a convoy and after leaving a convoy.

*a.* Before leaving port the NCLO shall familiarize himself with local regulations regarding clearance signals.

*b.* Upon entering port, signals may be expected from a guard vessel, harbor entrance control post

(HECP) and net vessel. Prompt reply shall be given. In some ports, ships are led in by small craft. After establishing identification with these craft, the ship is normally relieved of further responsibility so far as harbor signals are concerned.

*c.* It is the responsibility of the NCLO to see that no unofficial visual transmissions are made at sea or in port.

**508. Pyrotechnics, colored lights, semaphore, etc.**—It is the duty of the NCLO to make sure that his signalmen are familiar with the operation of all the signaling devices on the ship, especially those which are used only in case of emergency.

*a.* Each signalman must know where the Very pistol and rockets are stowed and how to discharge them.

*b.* Mates and signalmen shall be familiar with the operation of the colored lights (Christmas Tree).

*c.* Periodic semaphore drill should be held.

**509. Brilliancy of signal lights.**—Signalmen must be indoctrinated in the necessity for using minimum brilliancy of signal lights when signaling at night. New 12-inch signal searchlights are equipped with hoods and filters to reduce their brilliancy and increase their directionality, and these must always be used at dawn and dusk as well as throughout the night unless it is possible to use a smaller hand lamp.

**510. Unauthorized use of flashing light.**—The unauthorized use of flashing light is forbidden; it is the NCLO's duty to see that this regulation is understood and obeyed by all hands.

**511. Upkeep of signaling equipment.**—The master's

responsibility for the upkeep of signaling equipment is almost invariably delegated to the NCLO, and he must exercise it with great care.

*a.* Canvas covers should be provided for signal lights and kept on them as much as practicable. When traveling independently signal lights shall be turned on daily to evaporate moisture condensed within the unit.

*b.* Pyrotechnics must be kept in a dry place.

*c.* Batteries must be properly charged, and spare acid is to be carried on board.

*d.* The senior signalman should be given the responsibility of seeing that signaling gear is painted and flags repaired periodically.

*e.* The delicate mechanism of the VH/F radio is very sensitive to spray and salt air and must be protected insofar as possible. This radio should have a semipermanent installation near or at the conning position of the ship, as explained in article 410 above.

*f.* Colored lights (Christmas Tree) shall be tested daily by ships in convoy.

**512. Signal watches.**—The NCL● is responsible for preparing watch bills for the Navy signalmen on his ship. In doing so, he will do well to consult the senior signalman and accept any suggestions that are in accord with official policy and the conditions under which the ship is sailing.

*a.* A ship to which three signalmen have been assigned shall normally stand a 24-hour signal watch. If it is considered by the NCLO that it will be more efficient to have two signalmen on the bridge during

part or all of the day, however, he may, with agreement of the master, maintain only a stand-by signal watch during the hours of darkness. This stand-by watch must be quartered near the bridge and must be available for immediate call during the night. It is suggested that the stand-by watch be rotated each third night among the three signalmen; the signalman on stand-by watch must understand that he cannot leave his quarters during the night. If there are only two signalmen on board, continuous watch shall be stood throughout the daylight hours and a signalman should be quartered near the bridge and on call during the night.

*b.* In assigning battle stations, essential communication needs must be given primary consideration so far as signalmen are concerned. A minimum of one signalman shall be stationed on the bridge during battle stations.

*c.* It is the responsibility of the master with the advice of the NCLO to designate suitable personnel for the VH/F radio watch from among the ship's personnel, passengers, or signalmen. If there are less than three signalmen assigned to the ship, signalmen shall not be used for the VH/F radio watch at night.

*d.* On independently routed vessels the signalman on watch may be used as a lookout if this duty does not interfere with his communication duties.

*e.* Signalmen shall not be used as "talkers" on the gun phone system.

**513. Radio watches.**—The NCLO is responsible for supervision of the preparation of radio watch bills. He

shall consult the master in this connection and be guided by his suggestions or recommendations. As explained in article 208 above, the NCLO must see that there is no discrimination against either merchant radio officers or Navy radiomen in such watch bills. Radio watches need not be rotated.

*a.* In certain BAMS areas, radio watchkeeping periods for ships with less than three radio operators may fall during meal times. In such cases, the NCLO should arrange with the master for meals to be served to the operator on watch in the radio room.

514. **Communications with gunnery officer.**—Certain areas are developing a system whereby, when enemy attack is imminent, information from an escort vessel's CIC is relayed to ships in the convoy so that crews aboard merchant vessels may have the advantage of their guns being trained (in part) by radar. This information will only be most valuable if further relayed with greatest rapidity from the NCLO to the gunnery officer. The NCLO should, as quickly as possible after the beginning of each voyage, work out an efficient communication arrangement, in conjunction with the Armed Guard commander, for such relays within his own ship. It is suggested that one of the Armed Guard battle phone stations always be placed in close proximity to the VH/F radio; this battle phone station will then serve as a focal point for all other stations on the battle phone circuit, and information received through VH/F may be immediately relayed to all parts of the ship served by the battle phone circuit.

515. **Name boards.**—The NCLO must be familiar with the WIMS instructions for the use of name boards.

516. **Inspection of logs.**—The NCLO shall inspect the signal and radio logs daily in accordance with instructions in WIMS 1 and 3.

517. **Position reports and other information for radio watch officer.**—WIMS 3 requires the master to see that the radio operator on watch is informed of the ship's position and weather conditions when the ship is sailing independently. When in convoy, the operator must be advised immediately in case of low visibility, enemy action, changing station number in convoy, or straggling. He must also be notified when the ship is about to move into a new BAMS area. Most masters delegate this responsibility to the NCLO and, whether responsible or not, the NCLO should make sure that this information is passed to the radio operator.

518. **Entering a new BAMS area.**—When entering a new BAMS area, the radio operators should copy BAMS routines from stations in both the old area and the new one during at least two routines on each side of the estimated demarcation line in case the shore stations make a miscalculation as to the exact location of the ship.

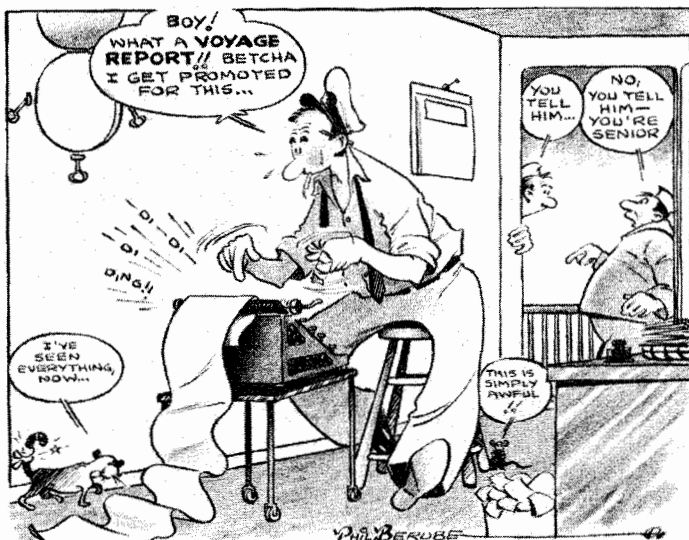
519. **Keep unauthorized persons out of radio room.**—The master, the NCLO and the radio operators must cooperate in keeping unauthorized persons out of the radio room, as ordered in WIMS 3, chapter 3.

520. **Unauthorized electrical apparatus.**—The NCLO and the chief radio officer shall be jointly responsible for calling the master's attention to any oscillating electrical apparatus or indication thereof, as described in WIMS 3, articles 21 and 22, and for assisting him to eliminate it.

**521. Confidential nature of communication duty.**—The NCLO must impress the signalmen and radio operators with the confidential nature of their duties. They are necessarily in a privileged position for acquiring information about the ship's activities, and such information must not be repeated until its release is authorized by the master.

**522. NCLO on 24-hour duty.**—The NCLO must make it clear to the radio operators, signalmen, and radarmen that he is on 24-hour duty and should be aroused at any hour of the night for important communications, unusual weather conditions, suspicious phenomena, or any other reasonable cause. In connection with "suspicious phenomena," they must be made to understand that, despite the many false alarms, there will eventually be one that will turn out to be the "real thing" and it is essential that the NCLO be on deck when that comes.





## Chapter 6

## COMMUNICATION REPORTS

601. **General.**—Upon completion of a voyage, the Naval Communication Liaison Officer shall make a brief report concerning communication matters during the voyage. This report shall be classified confidential, and shall be known as the "Communication Report." *Whenever an Armed Guard commander is acting in the capacity of an NCLO, he shall invariably submit a communication report.*

602. **Procedure for submitting reports.**—An original and two copies of the communication report shall be submitted to the Chief of Naval Operations via the port director. No reports shall be submitted outside of the continental limits of the United States, and it

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is intended that a single report shall cover all legs of a protracted voyage. If vessels operating coastwise along the continental United States complete more than one voyage a month, they may submit monthly communication reports at the end of the voyage nearest the first of the month, if practicable. However, items of special interest should be officially reported as soon as possible to the port director at the first port of call.

**603. Form.**—The following form is required for use in making out the communication report:

Naval Communication Liaison Unit

-----  
(Ship)

**CONFIDENTIAL**

-----  
(Date)

From: Officer in Charge

To: Chief of Naval Operations

\*Via: Port Director, -----

Subj: Communication Report

Ref: (a) GINCLO, Chapter 6

1. The following information is submitted in accordance with reference (a).

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

-----  
(Signature)

-----  
(Name, rank, classification,  
and File No.)

-----  
(Title)

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\*On ships to which a Commanding Officer, Naval Armed Guards and Troops, is assigned, this line shall be changed as follows:

Via: (1) C. O., Naval Armed Guards and Troops  
(2) Port Director, -----

*a.* Printed or mimeographed forms shall not be employed in making communication reports.

*b.* The reporting officer shall sign the report and type or print his name, rank, classification, file number, and title below his signature. His title will indicate whether he is a Naval Communication Liaison Officer, or, if such an officer is not assigned to the ship, an Armed Guard commander.

**604. Paragraph 2 of communication report.**—Paragraph 2 of the communication report shall include the name of the vessel, correct gross tonnage, type of vessel, and names of master, owner, and operator.

*a.* In giving the type of vessel, be specific. If possible, use the correct United States Maritime Commission or United States Shipping Board designation, as C4, EC2 “Liberty,” T2, or “Hog Island” type rather than such vague descriptions as “steamer” or “cargo vessel.”

**605. Paragraph 3 of communication report.**—Paragraph 3 shall include the ports of departure and arrival and dates thereof, as well as information as to whether the ship was routed independently or in convoy. In the latter case, the designation of the convoy shall be included.

a. The following form is recommended:

<i>Arrived</i>	<i>Port</i>	<i>Departed</i>	<i>Status</i>
	New York.	1/10/45	In convoy—.
2/21/45	Southampton.	1/24/45	In convoy—.
1/24/45	Le Havre.	2/8/45	Independent.
2/8/45	Weymouth.	2/9/45	In undesignated convoy.
2/10/45	Milford Haven.	2/12/45	In convoy—.
2/23/45	New York.		

606. **Paragraph 4 of communication report.**—Paragraph 4 shall cover the adequacy of the communication complement, and shall include a list of names and, in the case of Navy or Army personnel, rates and serial numbers.

a. This paragraph is designed to secure information about the collective adequacy of communication crews rather than the individual proficiency of signalmen, radio operators, and radarmen. Indicate here whether the communication crew is, in your opinion, adequate, inadequate, or more than adequate to the service in which your ship is presently engaged.

b. This is the appropriate paragraph for mentioning any breaches of wartime security regulations or other acts harmful to the safety and efficient operation of the ship by non-Navy communication personnel and the action taken by the master of the ship or other appropriate authority in such cases.

c. Mention of extraordinary merit on the part of communication personnel is acceptable and if approved by the Chief of Naval Operations, will be forwarded to the Chief of Naval Personnel for inclusion in the subject man's record.

607. **Paragraph 5 of communication report.**—Paragraph 5 shall state all difficulties experienced with regard to visual signaling.

*a.* Include difficulties caused by the following conditions and any other that you may experience: improper handling of flashing light messages by other ships in convoy, laxness on the part of shore signal stations, improper use of challenge procedure, use of naval flashing light procedure, deviation from standard signaling procedure in convoy.

*b.* Show deficiencies in visual equipment in paragraph 9. (See art. 611.)

608. **Paragraph 6 of communication report.**—Paragraph 6 shall state all difficulties experienced with W/T and R/T transmission and reception.

*a.* Report inability to hear transmitting station satisfactorily, poor keying, interference, jamming, stations transmitting simultaneously on the same frequencies.

*b.* Report difficulty with BAMS, such as delays and interruptions in transmission of routines, improper order of messages broadcast, improper order of traffic list, interference from coastal stations broadcasting BAMS messages while routines are in progress, instances of improper coding of BAMS messages received, use of codes and ciphers not held by the ship, undue use of 500 kilocycles for broadcasting complete BAMS messages which could be shifted to the station working frequency.

*c.* Report cases of radiation from oscillating receivers and other electrical apparatus and the remedial action taken in such cases.

*d.* Report any unusual breach of radio silence by your ship.

*e.* Report flagrant abuse of the international silent period.

*f.* Report all difficulties experienced in intraconvoy radio communication, including insufficient test periods and errors committed in the use of voice codes and general R/T procedure as outlined in WIMS 3, chapter 12.

*g.* Show deficiencies in radio equipment in paragraph 9. (See art. 611.)

**609. Paragraph 7 of communication report.**—Paragraph 7 shall cover the adequacy of instructions received prior to sailing.

**610. Paragraph 8 of communication report.**—Paragraph 8 shall include suggestions for improvements in wartime merchant ship communications.

*a.* All suggestions must be set forth with due regard to practical detail.

*b.* Suggestions concerning the general status and functions of United States Naval Communication Liaison Officers and the allocation of communication responsibilities, as provided in WIMS 1, chapter 20 and WIMS 3, chapter 1, may be included in this paragraph.

**611. Paragraph 9 of communication report.**—Paragraph 9 shall cover the adequacy of communication matériel and indicate action taken in connection with deficiencies.

*a.* Report inadequacies of communication equipment allowance, such as insufficient number of signal lights, radio receivers, batteries, flags, etc.

*b.* Visual equipment: Do not include requests for relocation of signal equipment or requisitions for supplies, replacements, and repairs. These are to be reported to the port director for the attention of the Armed Guard inspection service or Armed Guard matériel sections.

*c.* Radio equipment (except VH/F): Do not include requests for the adjustment, repair, and replacement of radio equipment. These are normally included in the requisition list submitted by the master to the ship's agent.

*d.* VH/F radio equipment: Requests for adjustment, repair or replacement of the VH/F radio equipment shall be submitted to port director's or routing officer's VH/F radio pool and such items will not normally be included in the report.

*e.* If action is delayed on items listed in subparagraphs *b*, *c*, and *d* above, the difficulty shall be reported in person to the merchant ship communication officer at the port director's office in time for action to be taken before sailing time. If the ship sails without corrective measures having been taken, the matter shall be reported in the next communication report submitted.

**612. Paragraph 10 of communication report.**—Paragraph 10 shall include comments on miscellaneous communication items for which no previous provision is made in the communication report. Items which might possibly be included are the use of unorthodox methods in the operation of a convoy, improper handling, stowage and disposal of confidential matter, interference with communication functions by ship's

personnel, unsatisfactory quartering of communication personnel, etc.

613. **Paragraph 11 of communication report.**—This paragraph is to be completed for ships equipped with radar. Instructions as to the information needed in such cases will be promulgated separately by the Chief of Naval Operations to NCLO's on ships so equipped.

614. **Specific detail.**—The need for specific detail in communication reports is obvious.

*a.* For instance, corrective action cannot be taken if it is reported that during the voyage one BAMS message was unintelligible. The reporting officer must identify the message (by address and date-time group), the BAMS area, the transmitting station, the frequency, the ship's position at time of schedule, time of the incident, and the nature of the difficulty.

*b.* Communications made during enemy action or other emergency shall be described in detail. Extracts from logs may be desirable in such cases.

615. **Disposition of communication reports.**—Communication reports are submitted to the port directors, who take appropriate action and then endorse and forward the reports to the Chief of Naval Operations for collation, study, and further action as may appear necessary.

*a.* The majority of the problems and complaints contained in communication reports, such as requests for equipment or information, are handled on the spot by the office of the local port director. In endorsing and forwarding the reports to the Chief of Naval Operations, the port director indicates what



action has been taken in connection with the various reports.

*b.* All communication reports are again studied by the Merchant Ship Communications Section of the Division of Naval Communications along with the port director's endorsements and pertinent boarding reports. In the past, vital communication intelligence has been sifted from the collected communication reports, and remedial action, such as changes to WIMS and the BAMS system, has been taken on the basis of the information contained in these reports.

*c.* The reports are then filed under the name of the ship, with a cross-reference to the name of the reporting officer, and are available as a record of both ship and officer.

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## Chapter 7

## PUBLICATIONS AND LOGS

701. **Merchant ship publication allowance.**—The effective edition of RPS 9 series, the Allowance Table of Communication Publications for Merchant Ships, contains instructions for issue and allowances of communication publications to Allied merchant ships, port directors, routing officers, convoy commodores, Naval Communication Liaison Officers, and ocean-going Army vessels. As indicated in article 406 above, the only publications issued to an NCLO in his own name are DNC 6, DNC 21, and RADTHREE, which are used in connection with the training of enlisted personnel.

a. Many NCLOs have requested in their communication reports that CCBP-2 be added to the merchant ship publications allowance because of the frequent use of Navy operating signals in both radio and V/S communications by United States shore stations in the Pacific. This allowance has not been made because all the operating signals that a merchant ship need use are to be found in appendix II of General Radio Regulations (Cairo revision), which is published by the Department of State and required to be held in the radio rooms of all ocean-going merchant ships. United States Navy radio and visual signaling operators in the Pacific area have been instructed in ALPAC's 113 and 323 (1944) to refrain from using Navy procedure when communicating with merchant ships.

**702. Master's responsibility for publications.—** Classified naval publications issued to a merchant ship are charged to the master of the ship. In the event of loss or compromise of such a publication for other than unavoidable reasons, the master will be subject to arraignment before a United States Coast Guard merchant marine hearing unit and possible disciplinary action.

**703. Responsibility of naval personnel in temporary possession of publications.—**The mere fact that the master has the ultimate responsibility for the classified naval publications allowed to the ship does not relieve the naval officers and enlisted men of their immediate responsibility for such publications as may be temporarily entrusted to them in connection with the performance of necessary duties. Article 76 (5) (a)

of United States Navy Regulations, 1920, states that "Each person who may receive custody of any classified matter shall be responsible for its safeguarding in accordance with its assigned classification."

**704. Responsibility for correcting publications.**—The master is also responsible for seeing that the ship's publications are kept up-to-date, but it is incumbent upon the Naval Communication Liaison Officer to assist in this function and to assume the immediate responsibility if the master so desires. The procedure for making corrections to publications is described in article 407.

**705. BAMS messages.**—A file of BAMS lettered and numbered messages must be kept, but it is not intended that publications be corrected on receipt of these messages. Corrections shall be made only upon receipt of printed changes. BAMS lettered and numbered messages should be held until information contained in them is included in the subsequent change to WIMS or until they are declared ineffective. A BAMS numbered message is sent out each 3 months giving the letters and numbers of those BAMS general messages which are still in effect.

**706. Official logs.**—The NCLO has cognizance of three official logs: Radio, visual signaling, and radar. Regulations concerning the contents, inspection, and disposition of these logs are found in WIMS 1 and 3 and elsewhere in this volume, except that special instructions as to the radar log are promulgated separately by the Chief of Naval Operations.

**707. Unofficial communication log.**—The NCLO is not required to keep a general communication log, but he will find it very helpful to keep an unofficial record of incidents and conditions suitable for inclusion in

his communication reports. It is impossible for him to make a conscientious communication report if he relies on his memory alone; again it is emphasized that communication reports must include specific detail if they are to be of any use to the authorities ashore.

*a.* If such a record is kept, it must be handled, stowed, and destroyed in a manner consistent with the security classification of the material contained in it.

**708. Visual signaling log.**—Brief instructions for the method of keeping a visual signaling log are given in WIMS 1, article 424. The supplementary instructions contained in the following subparagraphs apply to all United States managed merchant vessels with one or more United States Navy signalmen aboard.

*a.* The V/S log must include all messages sent from or received by your ship (as individual addressee, one of a group addressee, or as a relay station) by flag hoist, flashing light, semaphore, colored lights, sound, pyrotechnics, voice hail, or VH/F voice radio.

*b.* Each page of the log book should be headed as follows:

TOR					SIGNAL	OR
TOD	TOE	FROM	TO	METHOD	MESSAGE	SM

*c.* Column 1, TOR or TOD, indicates the time of receipt or time of dispatch depending on whether the message or signal is received or sent.

*d.* Column 2 indicates the time of execution of the signal and is only to be used for entries of flag hoist or colored light signals. If the execution of the or-

der does not coincide with the execution of the signal (as in the case of a flag-hoist signal ordering a change of course at some later hour), the execution of the order is indicated by a separate entry in the log at that time. Such an entry shall include the further executive signal (if any) and a reference to the TOR of the original signal, e. g.: "two short blasts executing TOR 1725."

*e.* Columns 3 and 4 indicate the transmitting and receiving ships.

*f.* Column 5 indicates the method of signaling by which the message was sent or received.

*g.* Column 6 contains the complete signal or message, including the message heading, originator's date-time group or any other incidental instructions that may accompany the text. A message should always be recorded in the log exactly as received, especially with regard to abbreviations, calls, prosigns, passing instructions, etc. Never record the WIMS 1 "Decode" meaning along with the "Code" signal.

*h.* Column 7 is to be initialed by the signalman or other person who sends or receives the message or signal.

*i.* When a message is passed or relayed to another ship, a separate entry is to be made in the log, but the TOR of the message may be used in column 6 instead of repeating the entire text, e. g., "Relayed TOR 1317."

*j.* In order to standardize the abbreviations used in columns 3, 4, and 5 and to make them intelligible to the shore authorities, the following abbreviations shall be used in all log entries (including VH/F voice radio messages) :

FH—Flaghoist  
FL—Flashing light  
SEM—Semaphore  
CL—Colored lights  
S—Sound  
VHF—VH/F voice radio  
B—Commodore  
ALL—All ships  
J—Senior officer of escort  
AA—Unknown ship  
Z—Shore station

*k.* No erasures shall be made in the V/S log. Entries found to be in error shall be corrected by drawing a single line through them so that the original entry in every case will remain legible. The correct entry shall, if practicable, be inserted immediately following the entry struck out; otherwise it should be entered elsewhere in the log for that watch so that the whole will be neat and legible. (See U. S. Navy Regulations, 1920, art. 1317.)

*l.* The V/S log is classified Confidential.

*m.* The V/S log book should be approximately 8 by 11 inches and should contain at least 100 pages. It is not necessary to use a separate book for each trip; rather, the book should be used until filled, even if the end of the book does not coincide with the end of a voyage.

*n.* The outside cover of the book should bear the name of the ship. The inside cover should indicate the names of the ship, the master, and the Naval Com-



munication Liaison Officer, as well as the period of time covered by the book.

**NOTE.**—The regulations contained in subparagraphs *m* and *n* are designed to facilitate filing and reference.

*o.* WIMS 1, article 424, requires that the master sign the log daily.

*p.* The visual log shall be disposed of in accordance with WIMS 1, article 424.

*q.* It is the responsibility of the Naval Communication Liaison Officer to see that the V/S log is kept in accordance with the regulations prescribed in this paragraph. Each signalman should be held strictly accountable for the correct logging of the signals sent or received on his watch. It is often difficult to log a signal or message the minute that it comes in (especially messages received by VH/F), but the signalman must find time before he goes off watch to copy all messages into the log from the clipboard or loose sheets of paper that he may have been using.

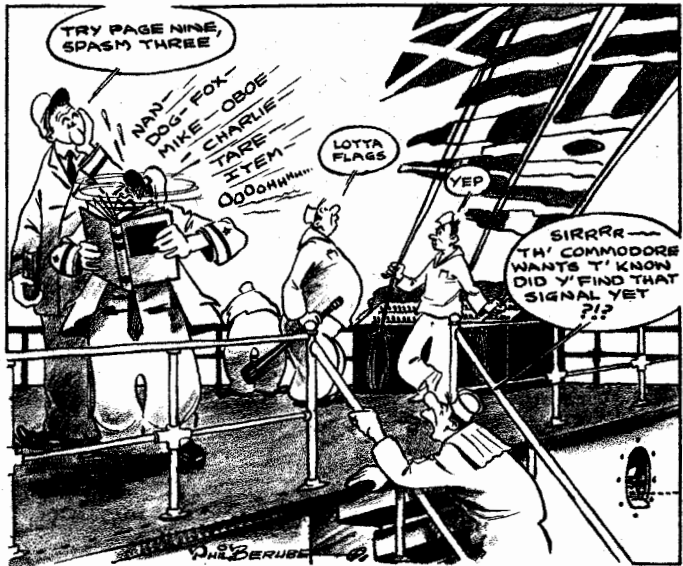
**709. Message forms.**—When a signal or message is received, it must be passed to the mate on watch immediately, and the mate will presumably pass it on to the master. It is the absolute responsibility of the Naval Communication Liaison Unit, however, to make sure that the master receives all messages; if he fails to receive one, the NCLO will be held responsible. It is therefore advisable that the NCLO prepare a typed or mimeographed message form and have it understood that all incoming messages will be filed at a certain place—preferably in the chart room—where the master can check from time to time. Such a procedure eliminates the undesirable practice of having

the signalman leave the bridge to hunt up the master every time he receives a message and also eliminates the possibility of misunderstanding that is always present when messages are not confirmed in writing. If, however, the message is urgent, the master must be advised immediately by word of mouth.

a. A suggested message form is shown below :

(Classification)	(Name of ship)	<b>DISPATCH</b>
<b>FROM</b>	<b>DATE</b>	<b>OPERATOR</b>
<b>TO</b>	<b>TIME</b>	<b>METHOD</b>
		<b>ROUTING</b>
		<b>CAPT.</b>
		<b>MATE</b>
		<b>R. O.</b>
		<b>A. G. C.</b>
		<b>T. C.</b>

(R. O. = Radio operator; A. G. C. = Armed Guard commander; T. C. = Transport commander)



## Chapter 8

## CONVOY COMMODORE'S NCLO

801. **Introduction.**—This chapter concerns the duties of a United States naval convoy commodore's NCLO insofar as they differ from the duties of a Naval Communication Liaison Officer on a usual ship assignment.

802. **Commodore's crew.**—The commodore's crew usually consists of one Naval Communication Liaison Officer, four signalmen, and one radioman (or two radiomen for a coastal convoy). The NCLO and enlisted men should always refer to, and address, the commodore as "Commodore" rather than by his actual naval rank in order to distinguish him from the master of the ship and other officers aboard.

*a.* When there is no NCLO attached to the commodore's staff, the NCLO attached to the ship shall act in that capacity. If the Armed Guard commander attached to the ship is acting as NCLO, the commodore shall transfer an NCLO from some other ship in the convoy to act as the commodore's NCLO, inasmuch as the Armed Guard commander may be unable to perform NCLO duties for the commodore in addition to his primary responsibility of defense of the ship.

803. **Orders.**—The orders for the commodore's NCLO will also include the enlisted personnel in the commodore's crew and will instruct all concerned to report to a vessel for duty with the commodore. Upon reporting aboard, these orders must be endorsed by the commodore. Both date and time of reporting must be recorded in the endorsement since enlisted personnel are included in the orders. In addition, the convoy designation shall be shown on the endorsement.

804. **Prior to sailing.**—Many of the commodore's NCLO's most important duties must be performed while he is still in his port of departure; some of these have been set forth in official instructions, while others have been sanctioned by experience and common sense. Both categories will be mentioned in this article for the benefit of officers newly assigned to duty with commodores.

*a.* Upon first meeting his commodore, and again before each succeeding trip, the NCLO should confer with the commodore in order to ascertain the latter's wishes and instructions concerning such mat-

ters as charts, signaling equipment, personal gear, choice of flag ship, and personnel problems.

*b.* The NCLO should keep in touch with the convoy and routing section of the port director's office during the process of making up the convoy and keep the commodore advised of progress in this connection, because he may have personal preferences for certain ships and masters.

*c.* If the commodore has no preference, it may become necessary for the NCLO to inspect some of the ships scheduled to sail in the convoy with a view to selecting a flag ship. In making such inspections, he should check the signal and radio equipment, navigation equipment (including whether the ship has a gyrocompass), and the adequacy and location of quarters for the commodore and his crew. Some of this information is available on the ship's "M form" in the convoy and routing section, but experience has shown that there is no substitute for a personal inspection.

*d.* The NCLO should also consult the port director's communication officer concerning all phases of communications in the convoy. Voice code and procedure, light and sound repeaters, and special communication problems should be thoroughly discussed before the routing officer establishes final cruising formation of the convoy. This must be done no later than 24 hours prior to the convoy conference.

*e.* The NCLO must be familiar with all publications issued to the commodore.

*f.* Publications must be checked for corrections at the port director's (or NCSO's) publication office at every port of call. They are drawn in the name of

the commodore, but the NCLO may sign for them if he presents an appropriate chit signed by the commodore.

*g.* A sextant may be drawn by the NCLO in the commodore's name.

*h.* The NCLO must not fail to make sure that the commodore's charts are corrected by the port director's hydrographic office between trips.

*i.* Foul weather gear for the commodore is usually drawn at the nearest navy yard, while that for the NCLO and enlisted personnel comes from the Armed Guard center. Operational and defensive equipment is provided by the port director's office, and should be drawn well in advance of sailing and stowed ashore in a locker provided by the port director. Whenever gear is held over from one trip to another, it should be carefully checked by the NCLO and necessary repairs and replacements made.

*j.* A commodore will often require his NCLO to plot rendezvous and landfalls and handle other simple navigational problems. Every commodore's NCLO, and indeed every NCLO, should therefore take the naval correspondence course B-40 and follow up with the advanced course A-40. He should also avail himself of the generous assistance that will often be offered him by masters and mates, being careful to use good judgment and consideration so as to avoid in any way interrupting them while engaged in performing their navigational duties.

**805. Check equipment.**—The commodore's NCLO should inspect all equipment and clothing when it is first loaded on board the flagship in order to make sure

that nothing is missing. The NCLO should arrange to have the commodore's personal gear brought aboard and stowed in his quarters.

806. **Liaison with other officers.**—Before sailing, the commodore's NCLO should confer with the Armed Guard commander and the Naval Communication Liaison Officer (if the ship has an NCLO) and explain to them the commodore's wishes concerning uniform, watches, quarters, test fire and drills, upkeep of equipment, division of responsibility, etc.

*a.* In this connection, tact and understanding on the part of the NCLO will be most helpful in establishing working relations with the Armed Guard unit, ship's communication liaison unit, ship's officers, and such Army officers as may be aboard.

807. **Watch bills.**—Signal and radio watch bills must be drawn up and published before sailing. The flagship should have a continuous signal watch, and there should be at least one signalman from the commodore's crew on watch at all times.

808. **Division of communication responsibilities.**—The commodore's NCLO shall be responsible for communications on the flagship subject, of course, to the orders of the commodore. If there is a ship's NCLO aboard, the commodore's NCLO shall arrange a clearly defined division of work with him before sailing. The ship's NCLO shall be responsible for the internal distribution of messages and such other duties as are assigned him, but any deviation from the commodore's orders or wishes will be charged to the commodore's NCLO regardless of who is on the bridge at the time. The commodore's NCLO should therefore personally

supervise all important signals, such as alarms, rendezvous positions, time changes, and VH/F radio calibration.

a. The senior signalman of the commodore's crew shall be considered the senior signalman present for the duration of the trip. He should consult with the senior signalman of the ship's NCLU concerning the details of watch-standing, log-keeping, and methods of signaling.

809. **Visual signaling.**—The following is an excerpt from an informal memorandum prepared by a group of experienced commodore's NCLO's for the office of the Port Director, New York, and is quoted for the guidance of all commodores' NCLOs:

Operations must be conducted with consideration for others. First, the manner in which you conduct the signaling will be one basis for the commodore's reputation among the masters. Second, the more consideration you give to the convoy and the more expertly you handle your business with the convoy, the better consideration and finer signaling you will get from them. Lastly, don't presume on your position. Make sure the commodore grants you certain privileges and that he always knows exactly what you are doing. The same for the senior officer of the escort. Never forget that the SOE is the final boss.

Do not send more than one signal at a time. The other ships have only one signalman on the bridge at a time, and he has only one pair of arms. Particularly, don't send flashing light and flag hoist through the convoy at the same time, unless it is urgent.

Establish a routine. Send the same signals at the same time each day (noon position, rendezvous, night maneuvers). That is vital to get good results from the convoy. Keep signaling to a minimum. If you send "SN" and "US" day in and day out, on the slightest provocation, it will mean nothing after a time. Use it sparingly but with justification. If



a ship is having trouble, ask it what is the matter. "UV" means nothing to a master who is having periodic engine trouble. Do no signaling at chow time unless it is urgent.

Calibrate R/T at the same time daily. You will complete it quicker that way. Try to establish an agreement with the SOE prior to sailing concerning the time and method of calibrating R/T. Also, for courtesy's sake, secure the SOE's permission each day to calibrate R/T so that he will know the circuit will be busy. Always announce the time of the sunset watch (time R/T is to be manned for the night) and always secure the watch in the morning, or after an emergency. Never let watches secure on their own accord. Never keep them on beyond necessity. By announcing the time of sunset watch, you eliminate guess work and pestering of masters and mates on other ships for sunset time and bring all stations on simultaneously. Keep posting the convoy on fog and emergency conditions that are anticipated and remind them of the necessary watches. You can then count on their being on the circuit when you have to pass a message under those conditions.

"Keep vigilant." Since your staff is mostly on the origination end of messages, do not relax your attention to the convoy. When a ship calls a commodore, it is usually under extraordinary circumstance. Don't make him wait because you don't see him. Always watch the SOE. The gunners on the ship may assist in this but the main responsibility rests on the signal crew. See that lagging, smoking, and irregularities, especially of signalling, are reported immediately to the SOE and commodore.

**810. Transferring equipment.**—Duty with a commodore involves frequent transferring from ship to ship (sometimes at sea) and from port to port (sometimes by plane). Consequently, the commodore's crew must travel as lightly as possible, and all gear must be checked constantly and lashed and stowed with greatest care.

*a.* Immediately before leaving a ship, the commodore's NCLC should inspect the quarters of the commodore's crew to make sure that they are left completely shipshape.

811. **Further endorsement of orders.**—Upon arrival in a port, the commodore's NCLC must take his (and the crew's) orders to the port director (or United States naval port officer in a British-controlled port) for endorsement as to date and time of arrival and departure, and availability of public quarters and subsistence. If ordered to another port, the same procedure must be repeated. The commodore's crew will be granted a per diem allowance while ashore overseas if the nonavailability of public quarters and subsistence is plainly endorsed on the orders.

812. **Amendment of orders.**—When transferring from one ship to another, the commodore's NCLC must see that his (and the crew's) basic orders are amended by the commodore to show the date and time of the transfer.

813. **Communication reports.**—At the end of each round trip the commodore's NCLC shall file a communication report similar in form to the communication report described in chapter 6 with a few exceptions. The commodore's NCLC's report shall show the name of the commodore rather than the name of the ship in the heading and shall be endorsed by the commodore.

*a.* Paragraph 2 of the commodore's NCLC's communication report must give the required data for each ship used as a flagship during the complete

voyage and the dates of boarding and leaving each ship.

*b.* Since the commodore is responsible for the entire convoy, it is the duty of his NCLO to include in his communication report detailed descriptions of infractions of established communication procedure committed by any ship in the convoy as well as general difficulties experienced by the convoy as a whole. The commodore's NCLO will do well to keep a special notebook for jotting down incidents for inclusion in his communication report rather than to rely on his memory for the times and details of such occurrences.

*c.* The commodore's NCLO should make a point of being the first NCLO (or Armed Guard commander acting as NCLO) to hand in his communication report to the port director. If he does so, the port director's communication officer will often be able to explain incidents or conditions that will be brought up by the other NCLO's from the same convoy. He will also be armed with the necessary information for prompt correction of errors committed by individual ships of the convoy during the trip.

*d.* The commodore's NCLO will also find it helpful to review the communication reports filed by the other NCLO's in the convoy for the purpose of studying their criticism of his work. The port director's communication officer will cooperate in making this material available to the commodore's NCLO.

**814. Commodore's reports and papers.**—The commodore's NCLO will often be called upon to assist the commodore in handling his convoy papers.

a. The commodore's NCLO should familiarize himself with convoy Form "D," which is submitted by the commodore at the end of each trip. The information required in Form "D," such as dates and times when vessels joined or broke off from the convoy, must be noted during the trip so that it will be readily available when the time comes to fill out the form.

b. Many commodores' NCLO's have found it helpful to make a board with holders on it for little cards, each card representing a ship and all of them arranged on the board in Form A1 cruising formation. The cards contain information about the ships and are moved when the ships change position in the convoy. The board should be kept in a weatherproof place on the bridge.

c. If the commodore places his sailing orders in the custody of his NCLO, the latter should keep them in a suitable place on or near the bridge where they will be available to the commodore at a moment's notice.



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