

RESTRICTED

(FOR OFFICIAL USE ONLY)

**ADMIRALTY FLEET ORDER  
("S" SERIES)**

---

**S.2.—Message Handling Instructions**

---

RESTRICTED

**RESTRICTED**

Attention is drawn to the Penalties attaching to any infraction of the  
Official Secrets Acts.

**ADMIRALTY FLEET ORDER  
("S" SERIES)**

**MESSAGE HANDLING INSTRUCTIONS**

ADMIRALTY, S.W.I.  
1st September, 1961

The following Order having been approved by My Lords Commissioners of the Admiralty is hereby promulgated.

Copies of this Order are supplied to Commonwealth Navies but only for official use by these Navies and such of their contractors, under seal of secrecy, as may be engaged on a defence project. Disclosure to any other authority or release to the Press or in any other way is forbidden. The information should be safeguarded under rules designed to give the same standard of security as maintained by Her Majesty's Government in the United Kingdom.

By Command of their Lordships,



*To Commanders - in - Chief, Flag  
Officers, Senior Naval Officers,  
Captains and Commanding Officers  
of H.M. Ships and Vessels.*

NOTE :—A note on the Fleet Order System and the scale of distribution of issues is given in "Admiralty Fleet Orders—Instructions and Quarterly Index."

**RESTRICTED**



## CHAPTER 1

## GENERAL

## CONTENTS

## SECTION 1—INTRODUCTION

*Paragraph*

- 1101 Importance of Efficient Message Handling.
- 1102 Message Handling Investigations.
- 1103 Causes of Main Delays.
- 1104 Work Study and Message Handling.
- 1105 Need for Standardisation.

## SECTION 2—GENERAL

- 1201 Process Included in "Message Handling".
- 1202 Precedence.
- 1203 Deferred Messages.
- 1204 Failure to Clear Messages.
- 1205 Handling Classified Messages.

## SECTION 3—ROUTEING

- 1301 Processes Entailed.
- 1302 Responsibility for Routeing.
- 1303 Consideration Before Routeing.
- 1304 Choice of Means of Transmission.
- 1305 Choice of Crypto Channel.
- 1306 Transmission Instructions.
- 1307 Relaying.
- 1308 Relaying of Through Messages.
- 1309 Automatic Relay Responsibilities.
- 1310 Relaying Instructions on Tape Relay Systems.
- 1311 Refiling Messages.
- 1312 Re-addressing and Re-transmitting Messages
- 1313 Rear Link Address Procedure.

## SECTION 4—PREPARING MESSAGES FOR DESPATCH

- 1401 Processes Required.
- 1402 Message Heading.

## SECTION 5—TYPING AND DUPLICATION

- 1501 Layout.
- 1502 Conventions to be Followed.
- 1503 Typing Corruptions and Garbles.
- 1504 Checking of Typing.
- 1505 Colours of Message Forms.
- 1506 Stamping of Message Forms.
- 1507 Thermofax Duplicator.
- 1508 Multi-ply Duplication.
- 1509 Duplication Direct from Teleprinter Ormig Master.
- 1510 Originators Ormig Masters.

SECTION 6—DISTRIBUTION AND DELIVERY

Paragraph

- 1601 General.
- 1602 Standard Distribution.
- 1603 Block Distribution.
- 1604 Operational Distribution.
- 1605 Teleprinter Distribution.
- 1606 Blanket Distribution.
- 1607 Rush Distribution.
- 1608 Comcen Messengers.

SECTION 7—FILING

- 1701 Choice of Filing Methods.
- 1702 Types of Message Files.
- 1703 Number of Message Files Required.
- 1704 Stowage of Files.
- 1705 Disposal of Files.
- 1706 Operators' Logs.
- 1707 Danger of Classified Messages in Transmission Offices.
- 1708 Acquaint Chits.

## CHAPTER 1—GENERAL

## SECTION 1

## INTRODUCTION

**1101. Importance of Efficient Message Handling**

With the increasing tempo of modern warfare, the complexities of Allied commands, and the introduction of more automatic and semi-automatic equipment, the importance of efficient message handling is becoming more vital. As yet the processes involved have not, in general, kept pace with other advances in the communication field.

**1102. Message Handling Investigation**

Accordingly, the Captain, H.M.S. MERCURY, has been directed to undertake the task of surveying the whole field of communications as a continuous study, with a view to improving and standardising message handling arrangements.

**1103. Causes of the Main Delays**

a. The main delays at present experienced are caused by the number of separate keyboard operations required (typewriter, teletypewriter or machine crypto) and, more applicable to shore H.Q.s, by the number of times a message is recorded before despatch to enable a check to be kept on its progress.

b. These principal aspects of the problem are receiving urgent attention, but the implementation of sweeping improvements is a slow process because of:—

(1) The difficulty in changing circuit procedures. The adoption of new equipment or techniques usually requires changes in these procedures; and even if such changes do prove acceptable to other N.A.T.O. countries, the negotiations to achieve them are often long and protracted.

(2) The widely varying organisation and layouts which have to be considered before a navy-wide change in message handling procedure can be introduced and made mandatory.

c. Nevertheless, ideas achieved as a result of message handling studies are being incorporated in the layouts of new and modernised ships and headquarters and a certain amount of new equipment is being introduced into the Fleet.

**1104. Work Study and Message Handling**

a. The lack of a standard message handling system referred to in sub-paragraph 1103 b (2) makes difficult a work study of the problem as a whole. Nevertheless, there is tremendous scope for the work study mentality in each message handling organisation, and Signal Officers should encourage any such activity either by a qualified team or by their staffs.

b. As a result of such studies, questions may well be asked as to why certain procedures are laid down as mandatory. For instance "Are receipts really required for Unclassified Hand Messages?" This rule is being reviewed at the moment. Similar questions are always relevant.

**1105. Need for Standardisation**

Signal Officers should avoid divergence from the guiding principles laid down in this Order when introducing new ideas into their organisation.

## SECTION 2

## GENERAL

**1201. Processes Included in Message Handling**

The main processes in the exchange of information by Naval messages are as follows:—

- (1) Origination (*see* current A.F.O. S.9).
- (2) Routeing.
- (3) Preparing messages for despatch.
- (4) Despatch/receipt.
- (5) Typing and distribution. Must be done both at the originator's and addressee's ship or establishment.
- (6) Encryption/decryption.
- (7) Re-routeing. This is required for **THROUGH** messages; in general these are treated first as **IN** and then as **OUT** messages.
- (8) Filing.

**1202. Precedence**

a. It is most important that messages should be handled throughout in order of precedence. However, intelligent appreciation of the relative importance of messages of lower precedence is necessary. Low precedence messages which have been delayed may often have to be handled as if they bear higher precedences.

b. When a message of high precedence is being handled, the officer or rating in charge of the communication watch should, if possible, personally check its progress.

**1203. Deferred Messages**

Deferred messages should be dealt with in the following manner:—

- a. Handling may be delayed until a quiet period.
- b. Each communication office should review daily all deferred messages awaiting action. Any such messages which were originated on or before the previous day should thereafter be treated as routine. The originators degree of precedence must not, however, be altered.
- c. Stations where intermittent watch is being kept are not to have their schedules altered to allow deferred messages to be cleared. These are to be cleared as soon as possible, being treated for this purpose as routine messages, but again without alteration of the originator's precedence.

**1204. Failure to Clear Messages**

a. When, due to congestion of circuits or for any other reason, a message (either **THROUGH** or **OUT**) has not been cleared within a reasonable or specified time the originator or Releasing Officer is to be informed.

b. Departmental orders should, where possible, include a list or lists of the maximum times within which messages of the different precedences should be cleared. It may be convenient to compile lists covering varying conditions, *e.g.* during a particular exercise, or during non-exercise conditions. Such lists would be for departmental guidance only. The Signal Officer must always have in mind the time actually being taken to clear messages of the various precedences and be ready to inform the originators accordingly.

c. If a message is being relayed through a series of links any linking station unable to clear the message should inform the station from which the message was received.

**1205. Handling Classified Messages**

a. The distribution of messages classified CONFIDENTIAL and above and all those bearing the paraphrase warning, must be on a "need to know" basis.

b. CONFIDENTIAL, RESTRICTED and UNCLASSIFIED messages may be handled in all respects by ratings, but those bearing the paraphrase warning are to be filed and stored in accordance with the instructions for SECRET messages (see paragraph 1704).

c. Secret messages are normally to be encrypted/decrypted, typed, filed and distributed by leading rates and above. Should shortage of staff or volume of Secret traffic make this impracticable, the Commanding Officer may authorize other specially selected ratings to handle these messages at some or all stages; in wartime, ratings selected should be of the coder branch if borne. Distribution copies are to be enclosed in sealed envelopes on which are to be written the D.T.G., and short titles of the intended recipient. Furthermore the Signal Officer is to consider each Secret message carefully, and cause to be placed on the Top Secret file those whose contents are such that the P.L. version should not, in his opinion, be retained in the M.S.O.

d. Top Secret messages are normally to be encrypted/decrypted, typed, logged and distributed by officers only. In some cases certain communication ratings authorized by Admiralty will be cleared for Top Secret and may be employed on these duties. Files containing Top Secret messages are to be retained in the custody of an officer.

e. EXCLUSIVE messages of whatever classification are to be handled by specially detailed officers or ratings as laid down in the cryptographic instructions.

f. PERSONAL messages are to be handled according to the classification. Such messages are to receive the attention of the individual named. The distribution need not necessarily be restricted to the particular individual. He may authorise further distribution of a specific message or give orders that personal signals for himself are to be distributed to certain officers automatically.

g. The unedited version of a message should not be released from the cryptographic centre except in situations of urgency, in which case the message may be passed by hand to officers concerned for reading prior to editing and internal distribution. The unedited copy must be returned immediately to the cryptocentre and not delayed by copies being made by the officers concerned.

**SECTION 3****ROUTING****1301. Processes Entailed**

Routing involves the issuing of the necessary instructions to enable a message to reach all addressees and entails one or more of the following processes:—

- (1) Ordering the means of transmission.
- (2) Ordering the crypto system and channel to be used.
- (3) Inserting transmission instructions.

**1302. Responsibility for Routeing**

a. Although the (Duty) Signal Officer is ultimately responsible for the routeing of messages, this responsibility should usually be delegated to a subordinate so that the former is free to attend on the Command and to supervise his department.

b. General routeing, e.g. W/T, V.S., crypto, may be carried out by a router in the traffic centre/M.S.O. and the detailed routeing, e.g. crypto channel, RATT circuit, by a router in the C.Y.O. or appropriate transmission office.

**1303. Consideration Before Routing**

Before deciding on the route to use, the following points must be considered:—

- (1) How quickly must the message get to the addressee?
- (2) Can it be sent via a route which does not entail manual encryption?
- (3) The present state of traffic on each route.
- (4) The electronic emission policy.

**1304. Choice of Means of Transmission**

a. Ratings who route messages must know all the transmission circuits available, and the approximate speed and security of each.

b. Brief description of the various means of transmission and their relative degrees of security are given in A.C.P.s 121, 122 and 176.

**1305. Choice of Crypto Channel**

The factors affecting the choice of crypto channel for the encryption of a classified message are:—

- (1) The degree of security required for the subject matter of the messages.
- (2) The crypto channels held by all the addressees by whom the message has to be decrypted. When it is known that an addressee will have to re-transmit the message to other authorities, the use of a crypto channel held by the latter should be considered.
- (3) Whether the message is liable to be published.
- (4) The crypto channel which meets the requirements of (1) and (2) and which has the smallest distribution should be chosen.

**1306. Transmission Instructions**

Those may include the following:—

- (1) Instructions to repeat back.
- (2) Instructions not to answer.
- (3) Relaying instructions.
- (4) Special indications of contents, *e.g.* special operating group.

**1307. Relaying**

a. If a message cannot be transmitted to an addressee direct it must be routed through a relay station. Relaying instructions are usually necessary and should show clearly for which addressee the message requires re-transmission. In special cases, a detailed route must be specified showing any further relays to be used or, for example, naming a particular service. Normally, however, the instruction "Relay to" is sufficient.

b. To achieve greater security in codress messages relaying instructions *may* be included as part of the text. This presupposes that the delay in re-transmission, which results from the relay station having first to decrypt the message, can be accepted. It may, in any case, be necessary to do this if the addressee has no address group.

c. When relay is effected through the network/s of other services or nations care should be taken that the procedures used are in conformity with current A.C.P.s and the various agreements internationally drawn up for interchange of traffic.

**1308. Relaying of THROUGH Messages**

a. The office in which a THROUGH message is received should normally re-transmit it without further orders. If, however, this cannot be permitted due to local conditions, departmental orders should cover which types of message should be re-transmitted automatically and on what circuits, *e.g.* enemy contact reports on ship broadcast.

b. It may sometimes be necessary to give special instructions such as "Re-encrypt this message (using a new date time group) and pass it to all addressees or addressees indicated". The instructions quoted above should be used when it is desired to ensure that certain addressees cannot in any way be disclosed by the routing of the message (*i.e.*, to avoid a radio communication linkage). This is also used by anyone originating a classified message and not holding a crypto system in common with an addressee.

**1309. Automatic Relay Responsibilities**

a. An authority who has automatic relay responsibilities must relay P.L. messages in accordance with those responsibilities whether specific passing instructions are given or not.

b. In the case of messages received encrypted the instructions for the authority automatically responsible will vary, depending on his associated cryptographic guard responsibilities. Instructions as to the handling of encrypted traffic should therefore be laid down separately.

c. Details of principal automatic responsibilities in each Command are published in B.R. 1978 Part IV. Any additional automatic responsibilities, *e.g.* for ships based on a port for long periods, are laid down in local orders.

**1310. Relaying Instructions on Tape Relay Systems**

On tape relay networks complete relaying instructions are given by using routeing indicators together with the principle of segregation of the routeing line.

**1311. Refiling Messages**

Messages which require relaying to other addressees on a system using another procedure (*i.e.* W/T message received for relaying by tape relay), will require refileing. Details of the processes involved are contained in the relevant procedure A.C.P.s.

**1312. Re-addressing and Re-transmitting Messages**

a. Circumstances may arise in which it becomes necessary to re-address a message to additional authorities not originally included in the address. The following methods are available:—

- (1) Use of the operating signal "ZFH". (This message is being passed to you for . . . 1. Action. 2. Info. 3. Comment).
- (2) Originating a new message with the address and text of the original message in its text, preceded by a suitable cover phrase.
- (3) Re-transmitting the message to the additional authorities, and sending a separate message addressed to the originator and both original and new addressees, informing them of the re-addressal.

b. The choice of method is normally left to the Signal Officer or his representative and the authority ordering the re-addressal must, in cases when he requires the originator and addressees to be informed, make this clear. Method a. (3) will then be used.

**1313. Rear Link Address Procedure**

a. There are occasions when a Commander-in-Chief, Flag Officer, or other naval authority requires to be absent from his main administrative office and still receive certain signals and correspondence of immediate concern. The following procedure has been evolved to meet this requirement and is known as "Rear Link Address Procedure".

b. When brought into force it provides for the following:—

- (1) The main administrative office (and staff remaining) is addressed by the normal designation of the Flag Officer followed by the words REAR LINK, *e.g.* "F.O.A.C. (Rear Link)".
- (2) The Flag Officer himself (and staff accompanying him) is addressed by his normal designation followed by the word "FLAG", *e.g.* "F.O.A.C. (FLAG)".
- (3) Unless otherwise stated in the general message bringing the procedure into force only messages and correspondence, either concerning current operations or exercise of immediate interest to the Flag Officer or his staff, or those requiring the immediate personal attention of the Flag Officer, should be addressed to the "Flag" as described in paragraph b. (2) above.

(4) All other messages or correspondence should be addressed to the main administrative office as described in sub-paragraph b. (1) above.

(5) In the event, however, of the message or correspondence being required by both the "Flag" and the "Rear Link", both must be included in the address.

c. The responsibility for determining which address is appropriate rests with originators.

d. Messages and correspondence are to be routed as follows:—

(1) Those addressed to the REAR LINK—to the main administrative office as normal.

(2) Those addressed to the FLAG—to the ship or other temporary location as indicated in the general message (*see* paragraph f. below regarding cryptographic systems available).

(3) Those addressed to the normal designation of the Flag Officer without amplification (*i.e.*, in error)—to the main administrative office as normal (*see* paragraph e. below).

(4) The appropriate location should be included in addresses for correspondence as shown in the following examples:—

F.O.A.C. (FLAG)	F.O.A.C. (Rear Link)
H.M.S. EAGLE	H.M.S. ARK ROYAL
c/o G.P.O., London.	c/o G.P.O., London.

e. Messages addressed in error as described in paragraph d. (3) above and routed to the main administrative office must be reviewed by the operational staff or secretariat and, if considered to come under paragraph b. (3) above, retransmitted with the necessary indication in the Transmission Instructions (*e.g.*, operating signal "ZFH").

f. Unless otherwise indicated the "FLAG" will hold all publications and cryptomaterial proper to the Flag Officer's normal establishment (naviset).

## SECTION 4

### PREPARING MESSAGES FOR DESPATCH

#### 1401. Processes Required

a. The communication department is responsible for preparing messages for despatch. This may entail:—

(1) Inserting the call and/or station serial number.

(2) Expressing the precedence.

(3) Inserting the transmission instructions.

(4) Expressing the address.

(5) Inserting the group count.

(6) Expressing the text in a brevity code.

(7) Encrypting the message.

b. The detailed formats are laid down in the relevant procedure A.C.P.s.

#### 1402. Message Heading

Message headings are dealt with as follows:—

(1) The headings of messages are normally to be inserted by the appropriate office of transmission.

(2) When the message has only to be sent over one route the heading may be conveniently written in the space on the message form "For use in the Communications Department".

(3) The headings of messages which have to be sent over several different routes may more conveniently be written on a separate despatch form for each route.

## SECTION 5

## TYPING AND DUPLICATION

**1501. Layout**

Typed copies of messages are to follow the standard layout shown in Plate 1.

**1502. Conventions to be Followed**

a. The following conventions should be followed when typing messages:—

The system of transmission, cryptosystem, typist's initials, T.O.R./T.O.D., and date, together with the distribution and details of hand messages, should be placed at the TOP of the page thereby enabling the Cryptocentre to make an acquaint chit by tearing off the bottom of the page. This avoids preparing a separate acquaint chit and is an important economy in large ships and headquarters. A further advantage in placing such details at the top of the sheet is that when messages are filed in bulldog clips, only technical details are obscured, leaving the address and text clear.

b. The layout should follow, as far as is practicable in the space available, the order of the various portions of the message in basic message format. This accustoms non-communication personnel to this type of layout, and aids quick recognition when rush copies are distributed "as received".

c. Distribution guide numbers, when used, are always to be shown separately, e.g. X1, 2, 3, 4, and not X1-4.

d. When a non-communication typewriter is used, names of ships, places and proper nouns are to be typed in BLOCK CAPITALS.

e. The time of despatch shown on OUT messages is to be the time at which the message became cleared to all addressees. Alternatively, the time of despatch to each addressee may be shown separately.

f. When a large volume of traffic is being handled it will be undesirable to delay the typing of each OUT message until it has been cleared. In this case, the notation I.T. (In Transit) is to be typed instead of a time.

g. The security classification is always to be typed even though the message may be unclassified.

h. The marking BECAT, which may appear on original P/L copies of classified messages, is not to be typed. Duplicated copies are however, to be stamped with the appropriate security warning.

j. In organizations where distribution guide numbers are used copies of OUT messages should bear the releasing officers number next to the title of the originating authority. In smaller organizations this should be indicated by "Released by" followed by the short title of the officer concerned.

k. When the text of a message to be distributed contains a reference to a previous message a brief indication of its contents is normally to be included on the typed copies, (e.g., 071104Z—number attending post-exercise conference). However, in the case of messages where the previous message had a higher security classification than the message to be distributed, the reference is to quote no more than the security classification (e.g., 231017Z—SECRET).

**1503. Typing Corruptions and Garbles**

Careful editing can eliminate many obvious corruptions of decrypted messages. It is important however, that wild guesses are not made and that doubtful portions of text are reported. Such reporting should take one of the following forms on the typed message :—

- (1) A completely unintelligible garble is to be typed as "(2 groups corrupt)", with a note at the bottom to the effect that a repetition is being obtained. Necessary action should be taken to obtain a repetition.
- (2) A good guess is to be reported as e.g., "(? operationally) (? acceptable)", with a note at the bottom, "Words indicated by queries doubtful". Further action is not required unless ordered.
- (3) A garbled name or word that might be one of two or more should not be guessed at, but reported as, e.g., "proceed to TWIKDSUHAN (?)", with a note at the bottom, "Portion underlined as received". Further action not required unless ordered.

PLATE 1

Example of message as typed in the M.S.O. of H.M.S. EAGLE:—

RESTRICTED

NO UNCLASSIFIED  
REPLY OR REFERENCE

HNR        ADONIS        J.S.            TOR 1535        15 AUG 60  
DIST        X 1.2.3.6.7. A 1.2. C 1.2. F 1.2.3.7. G 1.2. L1. S1. T 1.2.  
ACTION      LT. CDR OPS

PRIORITY 150813Z  
FM        FOAC  
TO        FOFH  
          EAGLE  
INFO      CINC PORTSMOUTH  
          F. FIVE  
          TORQUAY

(Note.—If addresses are long they may be typed across the page.)

RESTRICTED.

EXERCISE CROSSTREES EXPECTED TO END BY 210600Z AUG. IN VIEW IMPORTANCE OF TORQUAY BEING AVAILABLE FOR SERIAL 2 OPERATION SHOPWINDOW ON FOLLOWING DAY, FOFH REQUESTED TO DETACH HER AS SOON AS PRACTICABLE AFTER COMPLETION CROSSTREES TO PROCEED PORTSMOUTH AND CARRY OUT PROGRAMME IN MY 011623Z.

2. SHIP IS NOT TO DELAY SAILING ON ACCOUNT OF NON-ARRIVAL OF ANY MEMBERS OF PARTY BRAVO.

150813Z

REF. 011623Z—SHOPWINDOW—FRIGATES PROGRAMME

RESTRICTED

Note.—Parts enclosed in boxes indicate rubber stamps.

**1504. Checking of Typing**

The typing of every message should be checked against the original version, preferably by two persons other than the typist. One should read aloud from the original version while the other checks the typed copy. When the typist is one of the checkers he should check his typed copy since he has already read the original and any misreading would be repeated were he to read it again for checking purposes.

**1505. Colours of Message Forms**

a. Depending on the classification of the message, copies should normally be distributed on forms of the following colour:—

- (1) Top Secret and Exclusive Secret—Green.
- (2) Secret—Pink.
- (3) Confidential—Pink.
- (4) Restricted—Pink.
- (5) Unclassified—White.

b. In large organizations blue forms may be used for personal messages and yellow forms for exclusive messages.

**1506. Stamping of Message Forms**

a. Each copy of a classified message is to be stamped:—

- (1) with a special security stamp as directed in the cryptographic operating instructions, and
- (2) at top and bottom with the appropriate security classification. This is in addition to the typed indication of classification required by paragraph 1502 g.

b. It is hoped to produce, as standard stationery items, prestamped forms for use in ships and establishments with electric duplicators.

**1507. Thermofax Duplicator**

a. Certain ships and shore Comcens are equipped with Thermofax duplicators. These are provided to expedite rush and operational distribution.

b. The paper is expensive and, at best, one copy can be produced in 4 seconds. Accordingly, it is sometimes better with short messages requiring a wide distribution to follow the normal typing/Ormig process, but the Thermofax is invaluable for reproducing long messages requiring rapid but comparatively small distribution.

c. The Thermofax can also be of great value in reproducing the encrypted version of a message for multiple-routeing.

d. The Thermofax will only copy BLACK writing and print, and care must be taken that editing, security warnings, etc., over an original copy are not omitted because they are in another colour, e.g. blue biro.

e. The Thermofax is a delicate machine and, though its use is simple, it is very easy to jam and burn out the belt.

**1508. Multi-Ply Duplication**

a. Rolls of multi-ply teleprinter paper are supplied to certain ships and shore headquarters for use with particular forms of distribution, e.g. operational distribution.

b. These range from two up to six ply and the interleaved carbon and the N.C.R. (no carbon required) types are under comparison trials.

c. Multi-ply rolls with a greater number of plies are produced commercially but these are expensive and their continuous use on a particular circuit would be unnecessarily extravagant.

d. Multi-ply rolls consisting of different coloured papers have been under trial. The possible use for these was for operations distribution, but the distribution advantage of one colour—one office was questionable and in any case was outweighed by the cost of the rolls. However, the N.C.R. rolls referred to in paragraph b. can be made with a distinguishing colour down one edge and this will be taken into account in the trials.

#### 1509. Duplication Direct from Teleprinter Ormig Master

a. Rolls of Ormig Master are supplied to certain ships and establishments for use on teleprinters.

b. By careful editing, copies produced therefrom can be made very presentable and the obvious advantage of producing distribution copies without another keyboard process needs no emphasis.

c. Signal officers should constantly strive to do what they can to improve the readability of these copies. In addition to good editing careful attention to tuning will reduce garbles.

d. The ultimate aim should be that, as improvements in circuit engineering progress, the Command should come to accept the teletype version of a message, or a direct reproduction of it, instead of a typed reproduction.

#### 1510. Originators' Ormig Masters

Pads of special Ormig Masters, overprinted with a Naval message format, are under trial. These make it possible, using certain rules, for selected originators, e.g. Captain's Secretary, to make Ormig Masters of their OUT messages.

## SECTION 6

### DISTRIBUTION AND DELIVERY

#### 1601. General

a. The rapid internal delivery to the officers concerned of information contained in both IN and OUT messages is one of the main duties which every message handling organization has to perform.

b. In small ships, although the problem is comparatively minor, the traditional routine whereby the Captain and the O.O.W. see all messages must be extended, under operational or exercise conditions, to the Operations Room Officer.

c. In larger organizations, the method must be carefully planned and constantly reviewed.

d. The various types of distribution are described in the following paragraphs, and in large organizations a combination of at least two of these will be required.

#### 1602. Standard Distribution

a. This method involves the use in the Comcen of an Internal Distribution Table, a document/book produced by the Signal Officer, in which is laid down the distribution to be given to each type of message.

b. In small organizations each officer/office may be allocated a number, but in larger ones he should be allocated a departmental letter, supplemented by a number, within that department. Departmental letters are as follows :—

A	Air	M	Medical
C	Communications	R	Royal Marines
E	Engineering	S	Supply and Secretariat
F	Admirals Staff (FLAG)	T	T.A.S.
G	Gunnery	X	Executive
L	Electrical		

Other letters may be used for local allocations.

c. The table should take the form of an alphabetical list of subject headings with the appropriate distribution letters/numbers.

d. The efficiency of standard distribution depends on:—

- (1) Constant reviewing of the guide to keep it up to date and,
- (2) Intelligent interpretation by the rating in charge of distribution.

### 1603. Block Distribution

a. Under this system the Comcen is normally responsible for deciding which departments require copies of a message, and for furnishing those departments with a standard number of copies. The various departmental offices are then responsible for distributing the copies to officers concerned within their departments.

b. It is emphasized, however, that a supplementary distribution of messages requiring early action must be made to certain duty officers. *e.g.*, Duty Staff Officer, Duty Lieutenant-Commander—during both working and non-working hours and the senior watchkeeper in the Comcen must ensure that a duty officer has received these messages and accepted responsibility for further action.

c. This system should be used as far as possible in large ships and large shore organizations, for the following reasons:—

- (1) Departmental offices are much more in touch with the division of responsibilities within their departments, and also with the hour-to-hour movements of their officers.
- (2) Personal delivery, which wastes most of the Comcen messenger's time, is cut to a minimum.
- (3) The difficult task of the distributor is made easier, since the total of distribution numbers with which he has to deal is smaller, leading to increased efficiency and more rapid output.

### 1604. Operational Distribution

a. This distribution is confined to a small number of permanently manned "offices", *e.g.*, Compass Platform, Ops Room.

b. These selected offices are normally given a copy of all messages, or at least of messages received on certain circuits. The duplication of messages for this distribution is normally achieved at the circuit head, *e.g.*, some, if not all, receive teleprinters being charged with multi-ply rolls.

c. A rigid organization of this nature can profitably be "work studied" so that very rapid delivery times can be achieved.

### 1605. Teleprinter Distribution

Providing a sufficiently high proportion of IN traffic arrives by A.T., Operational Distribution is best effected by internal teleprinter broadcast, *i.e.*, TELEDIS. This state has yet to be reached in ships, but some M.H.Q.s are being fitted.

### 1606. Blanket Distribution

a. Under this system certain nominated officers are allocated copies of all messages regardless of their contents.

b. This method is wasteful, both in paper and recipients' reading time, but has the merit of ensuring that these officers do not miss seeing an important message.

c. It is used:—

- (1) When experienced ratings are not available to decide distribution.
- (2) When organizations are being set up or are changing rapidly.
- (3) With certain specialized forms of distribution, *e.g.*, Operational Distribution, TELEDIS.

**1607. Rush Distribution**

a. "Rush" distribution is a distribution in advance of the normal one, for messages of laid-down precedences or whose contents clearly require very early action.

b. The Action Officer is always included (*see* current A.F.O. S.9). In addition, a small number of other officers may be included as decided by the communication department.

c. Rush distribution may be achieved by circulating one copy of the message, with the officers concerned listed thereon.

d. However, in large organisations it may be possible and profitable to make Thermofax copies of the message as received and give them to the officers selected for rush distribution.

e. With the exception of tactical messages, messages given a rush distribution are usually followed up by standard distribution copies.

**1608. Comcen Messengers**

a. In a large headquarters or a large ship, messengers will take some time to find their way about and should not be changed more frequently than necessary. A suitable period of duty is at least three months.

b. All messengers delivering messages should carry a loaded message pad and pencil in order that officers may make replies.

c. Large envelopes each marked with the recipient's name and distribution number should be used for carrying batches of messages.

d. Secret and all Exclusive messages are always to be delivered in sealed envelopes and handed personally to the officer concerned.

e. Restricted and Confidential messages should be folded and stuck down with staple or tape.

f. Top Secret messages are to be delivered by hand of officer (but *see* paragraph 1205 c.).

g. Messengers are to be instructed that when they are unable to deliver a message personally to an officer, they are to inform the Comcen accordingly.

**SECTION 7****FILING****1701. Choice of Filing Methods**

The object of every filing system is to facilitate quick and easy reference. Accordingly, the method of reference should determine the method of filing. The following choices are available:—

- (1) *By D.T.G.*—This should be the basis of any system which places on record the entire traffic handled during a particular period.
- (2) *In Sequence of Station/Broadcast Serial Numbers.*—Copies of messages transmitted or received on fixed circuits or broadcasts may conveniently be filed near the appropriate circuit head.
- (3) *In Sequence of T.O.R./T.O.D.*—If a separate file is required for a circuit where no serial numbers are used, messages should be placed in sequence of T.O.R./T.O.D. immediately after action, the file being arranged in D.T.G. order as time permits. On such circuits as tactical primary, however, it is often preferred to record manoeuvring messages on a Manoeuvring Sheet, in which case subsequent re-sorting in D.T.G. order is unnecessary.
- (4) *In Sequence of Originators' Numbers.*—This is the standard method of filing general messages.
- (5) *In Sequence of Office Numbers.*—This method is occasionally used in shore headquarters.

**1702. Message Files**

The following message files are to be maintained, depending on the size of the ship or establishment.

- (1) *Daily Fair*.—Fair copies of all distributed messages, except private telegrams and general messages, of a particular day's date and of classification Secret and below. Acquaint chits for Exclusive and Top Secret messages should be included and the whole contents arranged in D.T.G. order. Seven daily files S.329 should be used. After retention in such a container for one week, the days' traffic should be extracted, and transferred to a back message file S.329a.
- (2) A method of filing messages in suspension folders in Roneo type drawers has been evaluated and its introduction into H.M. Service is under consideration.
- (3) *General Messages*.—Fair copies of all general messages of a particular series, classified Secret and below, and with acquaint chits for Top Secret, etc. Series to be kept are laid down in A.F.O. S.1.
- (4) *Plain Language Originals*.—Of all messages classified Secret and below together with route chit where used.
- (5) *Ormig Masters*.—Of all messages classification Secret and below.
- (6) *Encrypted Versions*.—Of all off-line traffic handled, together with route chits where used. (Note.—Encrypted and P.L. versions may now be filed together in ships or headquarters with a separate C.Y.O. This may be effectively achieved in the case of OUT machine crypto messages, by sticking the check breakdown tape on the back of the P.L. original.)
- (7) *Top Secret Typed Copies and P.L. Originals*.
- (8) *Exclusive Typed Copies and Originals*.—These may be split into two files namely "Top Secret/Secret" and "Confidential/Restricted".
- (9) *Paid Private Telegrams*.
- (10) *Broadcast or Fixed Circuit Files*.—Copies of each message transmitted/received on broadcasts or fixed circuits. Commercial and Naval traffic should be filed separately in shore stations. These files may consist of the bottom copy retained on the Teleprinter roll.
- (11) *Intercept Files*.—Copies of messages intercepted but not reported. Such copies may be destroyed after scrutiny by the Signal Officer.
- (12) *Ship-Shore File*.—Copies of all messages transmitted/received on ship-shore circuits. Commercial and Naval traffic should be filed separately in shore stations.

*Note*.—Shore relay stations are not required to file relay traffic.

**1703. Number of Messages Files Required**

The volume of traffic dictates the number of message files to be kept in a ship or shore Comcen: e.g. only an unusually large volume of Top Secret traffic would require a daily file of such messages. Normally such messages would be retained in a weekly, monthly or even a non-changing file.

**1704. Stowage of Files**

Message files are to be kept in accordance with the following table:—

File	Where there is a S.C.Y.O.	Where there is no separate S.C.Y.O.	Where there is no separate C.Y.O.
Daily (Secret and below).	M.S.O. (i) (v)	M.S.O. (i) (v)	M.S.O. (i) (v)
General messages (Secret and below)	M.S.O. (i) (v)	M.S.O. (i) (v)	M.S.O. (i) (v)
Messages with paraphrase warning (Secret and below).	S.C.Y.O. (i)	C.Y.O. (i)	M.S.O. (i)
Top Secret	S.C.Y.O. (ii)	C.Y.O. (ii)	C.O.'s safe or as in Note (ii).
Exclusives	S.C.Y.O. (iii)	C.Y.O. (iii)	C.O.'s safe or as in Note (iii).
Private paid telegrams.	Wireless Office (iv)	Wireless Office (iv)	Wireless Office (iv)

*Notes.*—(i) Locked in steel safe, bookcase or filing cabinet when not in use. Key to be held by a leading rate or above.

(ii) Locked in steel safe. Key to be held by an officer.

(iii) Locked in steel safe. Key to be held by the officer detailed to handle Exclusive messages.

(iv) Stowed under lock and key when not in use.

(v) Unclassified messages may continue to be filed separately until adequate secure stowage is provided for the composite files.

**1705. Disposal of Files**

a. The contents of message files are normally to be retained for the following periods:—

(1) Daily fair files—6 months.

Top Secret—6 months.

Exclusive—6 months.

(2) Plain language originals—14 days.

Ormig Masters—14 days.

Encrypted versions—14 days.

Circuit working files (except commercial traffic)—14 days.

(3) Commercial traffic—6 months.

Paid private telegrams—6 months.

(4) In flagships and all shore stations and headquarters files in (1) and (3) above are to be retained for 1 year.

b. *General Message Files.*—Should be pruned regularly, cancelled messages being removed. General messages are cancelled or classed as "Sufficiently Promulgated" as follows:—

(1) A.G.M.s may be cancelled by signal or incorporated in various orders.

(2) Lists of Admiralty general messages (A, AZ, AB, etc.) in force are published in A.F.O. "S" Series.

(3) A review of "R" and "R lettered" series is published periodically in A.F.Os.

(4) Navigation messages are cancelled or reprinted by their originating authority.

(5) Station general messages may be cancelled by signal or incorporated in station orders. A station general message should be issued at intervals indicating the general messages in force.

c. After the normal period of retention, messages should be removed from files and destroyed.

d. Exceptions to this are messages of historical or lasting interest and other messages which the Commanding Officer may direct to be retained.

**1706. Operators' Logs**

Unless there is a special reason to retain them longer (e.g. for a post exercise discussion), these may be destroyed after one month except for ship-shore bay logs which should be retained for three months.

**1707. Danger of Classified Messages in Transmission Office**

No P.L. copy of a classified OUT message is ever to be filed in a transmission office unless the message was (or is permitted to be) transmitted in P.L. from there.

**1708. Acquaint Chits**

a. When an Exclusive or Top Secret message is encrypted or decrypted, an acquaint chit is to be prepared and passed to the M.S.O. for insertion in the daily file.

b. This acquaint chit is to be a skeleton of the message consisting of everything except the text although in the case of Top Secret messages the address should be omitted from the acquaint chit. The procedure in paragraph 1502 a. is therefore not applicable to Top Secret messages.

## CHAPTER 2

## MESSAGE ORGANISATION AFLOAT

## CONTENTS

## SECTION 1—GENERAL

*Paragraph*

- 2101 Communication Offices.
- 2102 Other Offices having Signal Communications.
- 2103 Cryptographic Teams.

## SECTION 2—ORGANISATION OF OFFICES

*Paragraph*

- 2201 General.
- 2202 Organisation of Main Signal Office.
- 2203 Duties of Rating in Charge of Main Signal Office.
- 2204 Trays or Clips.
- 2205 Stamps.
- 2206 Organisation of Cryptocentre.
- 2207 Organisation of Bridge Wireless Office.

## SECTION 3—PROCEDURES TO BE FOLLOWED

*Paragraph*

- 2301 Recording and Checking Messages.
- 2302 OUT Messages in the M.S.O. and C.Y.O.
- 2303 Particular Instructions for Routeing at Sea.
- 2304 Messages Transmitted without having passed through the M.S.O.
- 2305 Despatch by Hand.
- 2306 Despatch by V.S.
- 2307 Despatch by Line Teletypewriter.
- 2308 Despatch by Cable.
- 2309 Despatch by Radio Communication.
- 2310 Receipt by V.S., Telephone or Voice.
- 2311 Receipt by Radio Communication.
- 2312 Operational Distribution.
- 2313 Mutilated and Garbled Messages.

## SECTION 1

## GENERAL

## 2101. Communication Offices

In every ship some of the following signal communication offices will be found:—

- (1) **MAIN SIGNAL OFFICE** which is used for the distribution and preparation for despatch of messages classified Secret and below. In large ships where the main signal office is at a distance from the bridge, a bridge signal office is used for handling VS traffic and distributing messages to the command and staff on the bridge.
- (2) **BRIDGE WIRELESS OFFICE** which is normally situated adjacent to the operations room. In this office, watch is kept on all operational radio communication nets, action cryptography is undertaken, and the headings of all messages handled therein are dealt with. In a large ship there may be a **LOWER RECEIVING ROOM** which will be used for copying administrative and meteorological nets.
- (3) In later ships the main signal office and bridge wireless office are combined. This combined office, which carries out the function in both sub-paragraphs (1) and (2) above is called the **MAIN COMMUNICATION OFFICE**. This type of office will always be found in I.C.S. fitted ships.
- (4) One or more **WIRELESS TRANSMITTER ROOMS** in all larger ships. Transmitter rooms are widely spaced to reduce the effects of action damage. Watchkeepers should be stationed in transmitter rooms if complement allows. In the action state, repair parties should be based on the transmitter rooms.
- (5) In I.C.S. fitted ships all HF radio equipment is combined in one office called the **CENTRAL CONTROL ROOM**.
- (6) **V/UHF TRANSMITTER ROOM**.
- (7) **WIRELESS OFFICE** which in small ships may embrace all the receiving, transmitting and DF offices.
- (8) **CRYPTOCENTRE** which is used for all cryptographic purposes, except action cryptography which is carried out in the bridge wireless office. Where space is available a separate office known as the **SPECIAL CRYPTOGRAPHIC OFFICE** should be provided.
- (9) **TELEPHONE EXCHANGE**.
- (10) **ELECTRONIC WARFARE OFFICE**. This office contains the controlling positions for all active and passive electronic warfare equipment and is, wherever possible, sited adjacent to, and on the same deck as, the operations room.
- (11) **ELECTRONIC WARFARE EQUIPMENT ROOM**. This room contains unmanned electronic warfare equipment which must be sited within certain specific distances of its associated aerial systems.
- (12) **ELECTRONIC WARFARE TRANSMITTER ROOM**. This room also contains unmanned electronic warfare equipment of considerable weight but which can be sited remote from the remainder of the electronic warfare equipment (*i.e.* between decks) although still within specified distance limitations. It is generally used for jamming equipment, power supplies etc.,

**2102. Other Offices having Signal Communications**

In addition to the offices mentioned in paragraph 2101, certain other offices are fitted with radio communications, either direct or remote control :—

- (1) OPERATIONS ROOM with remote control facilities on certain nets.
- (2) AIRCRAFT DIRECTION ROOM, which has facilities for controlling aircraft on radio nets.
- (3) CERTAIN GUN CONTROL POSITIONS, which may have facilities for the reception of bombardment and spotting nets.

**2103. Cryptographic Teams**

Although cryptography is the responsibility of the communications branch, cases will arise where a Signal Communication Officer is not immediately available to deal with Top Secret messages, and in times of emergency where the volume of Secret, Confidential and Restricted traffic is too heavy to be handled entirely by communication ratings authorised in peace complement. Therefore ships should arrange for cryptographic teams, additional to the communication branch, to be trained to meet this requirement. It is most desirable that members of cryptographic teams should be able to touch-type.

**SECTION 2****ORGANISATION OF OFFICES****2201. General**

a. Except where stated to the contrary, the organisation described in the following paragraphs is intended for a large ship ; but many of the principles will form a guide to the organisation to be adopted in small ships.

b. It has been assumed that reception and action cryptography is carried out in the bridge wireless office, and that an adjacent main signal office (or bridge signal office) is used for message handling. The organisation can be readily adapted to meet other cases.

**2202. Organisation of the Main Signal Office**

The instructions in the appropriate parts of Chapter 1 should be followed as far as possible, taking into account the space allotted, and the number of ratings available to perform all the duties. Except in large organisations in wartime, it will not be possible to allot one rating to each individual task. Duties should be shared so that messages proceed smoothly round the office with the least movement of ratings. There should always be one rating who is in charge of the main signal office, and under whom watchkeepers will work. The following is a typical routine in which the work of a main signal office of a large ship could be shared in each watch between one L.T.O., two T.O.s, and a messenger (seaman rating). Depending on complement and volume of traffic, some of the following watchkeepers might be replaced by daymen :—

- (1) Leading communication rating.
  - (A) General organisation and smooth running of the M.S.O. in his watch.
  - (B) Routeing OUT messages and re-routeing IN and THROUGH messages where necessary.
  - (C) Inserting distribution on all messages.
  - (D) Final check of all messages.
- (2) Second Hand.
  - (A) Assisting Leading Communication Rating with references.
  - (B) Filing.
  - (C) Telephonist in harbour, and answering queries.
- (3) Typist.
  - (A) Typing carbon copies for rush distribution or operating Thermofax.
  - (B) Typing Ormig Masters for normal distribution.
- (4) Messenger.
  - Duplicating messages and placing copies in pigeon holes when not delivering messages.

**2203. Duties of Rating in Charge of the Main Signal Office**

In addition to general supervisory duties, the rating in charge of the main signal office is responsible for checking daily the typed and original files, the traffic records, and the hand message record books.

**2204. Trays or Clips**

Trays or clips marked as follows may be found useful in a main signal office whose organisation is based on paragraph 2202.

<i>Marking</i>	<i>Position</i>	<i>Contents</i>
(1) OUT	Rating in Charge	Out messages awaiting route.
(2) CLEARED	Rating in Charge	Messages after transmission.
(3) IN TRANSIT	Rating in Charge	PL copies of messages which are being transmitted.
(4) IN AND THROUGH	Second Hand	IN/THROUGH messages awaiting distribution or retransmission.
(5) TYPE	Typist	Messages awaiting typing.
(6) DUPLICATE	Duplicator	Messages awaiting duplicating.
(7) CHECK	Rating in Charge	Messages after action.
(8) FILE	Second Hand	Messages after checking.
(9) QUERIES	Rating in Charge	Outstanding queries.

**2205. Stamps**

The following rubber stamps are recommended for the main signal office:—

<i>Marking</i>	<i>Position</i>	<i>For Stamping</i>
(1) TYPED	Typist	Originals after typing.
(2) SPECIAL SECURITY STAMPS.	(A) Rating in Charge (B) Duplicator	Originals and typed copies.
(3) DEGREES OF PRECEDENCE.	Rating in Charge	Originals.
(4) SECURITY CLASSIFICATIONS.	(A) Rating in Charge (B) Duplicator	Originals and Route Chits. Typed copies.
(5) FILE	Rating in Charge	Messages after all action is completed.
(6) ACTION	Duplicator	Action Copy.
(7) RUSH	Rating in Charge	Action Copy.

**2206. Organisation of the Cryptocentre**

The organisation of the cryptocentre should be based on the main signal office organisation, but must necessarily be of smaller scope since, in many cases, all tasks will have to be carried out by one officer or rating.

**2207. Organisation of the Bridge Wireless Office**

The following principles govern the internal arrangements of the B.W.O.:—

- (1) The rating in charge must be close to the hatch giving access to the operations room. Moreover he must be able to see the whole office and his operators. He should have near him the tactical cryptographer.
- (2) The crew should not have to move about where this can be avoided, and the rating in charge should have nearest to him the operator manning the most important nets.
- (3) Interruption to operators should be avoided as far as possible.
- (4) Messages must flow in an orderly sequence and must not cross their original paths. The rating in charge must be able easily to check their progress.
- (5) The tactical cryptographer must have enough room for easy manipulation of both machine and maritime tactical codes and cyphers. Copies of all messages decrypted and encrypted in the B.W.O. should be sent to the appropriate office or centre for filing and distribution purposes. During operations or exercises, a rigid operational distribution should be implemented if this is possible.

## SECTION 3

## PROCEDURE TO BE FOLLOWED

**2301. Recording and Checking Messages**

a. A check of messages between offices may be kept by:—

- (1) Sending two copies to the next office, and receiving one back, signed as a receipt; or
- (2) The office number system using traffic record sheets.

b. The Crypto Officer should keep a record of all messages encrypted and decrypted, showing their D.T.G.s, time of receipt in the office, precedence, and numbers of groups.

**2302. OUT Messages in the Main Signal Office and Cryptocentre**

a. OUT messages should be handled in the main signal office and the cryptocentre as follows:—

- (1) Three copies of an OUT message graded Secret or below should normally be received in the main signal office.
- (2) The rating in charge should confirm that the message is authorised by checking the initials and the short title of the Releasing Officer.
- (3) He should then allot a D.T.G. and route the message, being guided by the instructions in Chapter 1, Section 30. A route chit may be used if it is a multiple address message, or a classified message to be sent by radio communications.

b. If the message is unclassified, the three copies should then be handled as follows:—

- (1) The top and second copies (and route chit if used) are sent to the transmission point, deciding, if necessary, by which system it is to be transmitted first. After transmission to all addressees, the top copy is filed at the transmission point, and the second copy (and route chit) is returned to the main signal office with the despatch particulars and T.O.D. inserted. It is then married to the third copy (*see below*).
- (2) The third copy may be used for immediate typing and distribution purposes (in which case IT (in transit) will be typed alongside the T.O.D.), and after action the copy is placed in the tray or clip marked **IN TRANSIT**. If there is no urgency in distributing the message, the copy will be placed directly in the **IN TRANSIT** tray or clip. In both cases, the third copy is not placed in the **CLEARED** tray until receipt of the second copy from the transmission point, when the two are married together to be filed or typed as appropriate.

c. If the message is Restricted, Confidential, or Secret, and cannot be cleared in PL by secure means, the rating in charge of the main signal office should pass it with a D.T.G. to the cryptocentre for encryption. The encrypted version (with route chit) is then sent for transmission, the PL version being placed in a tray or clip marked **IN TRANSIT**. The route chit will be returned, with the T.O.D. appended, and should be placed in the tray or clip marked **CLEARED**. The PL version should then be married to the route chit.

d. Top Secret and all Exclusive messages are routed and prepared for despatch in the S.C.Y.O. A D.T.G. should be obtained from the M.S.O.

**2303. Particular Instructions for Routeing at Sea**

a. Messages within a force are to be routed in accordance with force communication orders, taking the following into consideration:—

- (1) The choice of method will normally be between V.S. and radio, depending on the electronic emission policy and the consideration of speed.

- (2) Messages for authorities not in radio communication touch are to be routed to any shore wireless station for onward transmission.

b. In war, or peace exercises, the electronic emission policy in force at the time will make it clear to what extent radio communication may be used. A decision to break electronic silence must be made by the Commanding Officer personally. This decision must depend on whether the importance of despatching the message outweighs the threat to security which will be incurred.

c. When electronic silence is in force, there may be opportunities to pass a message to a ship or aircraft parting company for onward transmission when it returns to base, or is in an area where silence can be broken more safely. Subsequent re-transmission of the message on a service guarded or copied by the originating ship is sufficient indication whether the message has been passed correctly or not. If no such transmission will be made, the originating ship should instruct at least one addressee to acknowledge; but if instructions are lacking, shore authorities are nevertheless to acknowledge or receipt the message. Messages passed to aircraft for re-transmission must be short and in plain language or in a code held by the aircraft.

d. When, owing to the lack of up-to-date information, a message for an H.M. ship is passed to the wrong shore authority, the latter is responsible for taking action to clear the message.

#### 2304. Messages Transmitted without having passed through the Main Signal Office

It will often occur, particularly at sea, that a message must be sent direct to the bridge wireless office or flag deck for transmission to avoid the delay of first passing through the main signal office. Suitable liaison between the office of transmission and the main signal office must be effected to avoid duplication of D.T.G.s. When passed to the main signal office after transmission the message must clearly show what passing action has already been taken.

#### 2305. Despatch by Hand

The router should insert "Hand to . . ." on the message form. When the message is duplicated, additional copies are to be placed in an envelope for despatch in accordance with the instructions in Chapter 4.

#### 2306. Despatch by VS

The method used for passing messages by VS to each addressee (*e.g.*, light semaphore) is to be recorded by the operator in addition to the T.O.D. Messages made by the executive method are to be recorded on a manœuvring sheet which is to contain columns for:—

- (1) Time of making the signal.
- (2) Text.
- (3) Time executed.

#### 2307. Despatch by Line Teleprinter

a. The rating in charge of the main signal office or cryptocentre is responsible that the rules for Category B messages are observed.

b. After despatch by TP the message is to be returned together with one monitoring copy. A second copy is to be retained in the TP room, unless the message was classified and sent in PL, in which case only a skeleton is to be kept, containing the same information as an acquaint chat.

#### 2308. Despatch by Cable

A message for transmission by cable is to be re-written in duplicate on the form provided by the company, and in the manner described in A.F.O. S.9. It should then be sent ashore to the cable office.

**2309. Despatch by Radio**

a. The following rules should be observed when despatching messages by radio communications:—

- (1) Two copies of each message for transmission (whether in PL or encrypted) should be sent to the wireless office, with route chit if used, from the cryptocentre or main signal office as appropriate.
- (2) The heading should be inserted on the top copy (or despatch form if used), and the message passed to the appropriate bay for transmission. The second copy is placed in the IN TRANSIT tray at the R.S.O.W.'s position.
- (3) The operator is to insert the net, the time of despatch and his initials on the message form or the despatch form. The message is then to be passed to the next bay, if necessary, for further transmission, being finally returned to the CHECK tray at the R.S.O.W.'s position.

b. The R.S.O.W. should check that the message has been transmitted on all nets, and should fill in the times of despatch on the second copy (and route chit) obtained from the IN TRANSIT tray. The second copy (and route chit) is then returned to the main signal office or cryptocentre. The top copy and despatch form should be filed in the bridge wireless office.

**2310. Receipt by VS, Telephone or Voice**

More than one copy should normally be taken; one should be used for normal distribution, the others for rush distribution and/or re-transmission to other addressees.

**2311. Receipt by Radio Communications**

a. Messages received by radio communications should be handled as follows:—

- (1) Three copies of each message, whether addressed to the ship or not, should be made if possible.
- (2) All copies are to be passed to the rating (usually the R.S.O.W.) who deals with the decryption of address groups or call signs.
- (3) One copy of the message is to be used for re-transmission to other addressees if necessary, and is then to be filed.

b. If the message is not addressed to the ship or to the unit of which she is part, the rating in charge must decide whether to report it, or place it on the intercept file for scrutiny by the Signal Officer or Senior Communication Rating. He should be guided in this by the instructions in A.C.P. 176.

c. If the message has to be reported, and is in PL, or Brevity Code, the second copy should normally be used for rush distribution by intercom., voicepipe, or messenger. In some flagships, it may be necessary to type out further copies to be rushed, for example, to the Admiralty's staff office, compass platform and operations room. The third copy should be sent to the main signal office for normal distribution. If rush distribution is being carried out from the M.S.O. both copies must be sent there. In any case a receipt must be given to the B.W.O. from the M.S.O.

d. If the message is encrypted in a high-grade system and has to be reported, the R.S.O.W. is to pass it to the cryptocentre for decryption.

**2312. Operational Distribution**

A Thermofax duplicator (at present allowed only to carriers) and multi-ply Teletype rolls with more than three plies, should be used when available when it is required to implement an operational distribution (see paragraph 1604).

**2313. Mutilated and Garbled Messages**

a. The types of messages to be decrypted are laid down in A.C.P. 176. These are to be reported even though incomplete or mutilated.

b. Codress messages which are known to be intended for the ship must be reported even if they cannot be decrypted.

## CHAPTER 3

## MESSAGE ORGANISATION ASHORE

## SECTION 1—GENERAL

*Paragraph*

- 3101 Layout of Communication Centres (Comcens).
- 3102 Offices Forming a Shore Comcen.
- 3103 Records Office.
- 3104 Duty Signal Communication Officer (D.S.C.O.).
- 3105 Pneumatic Tubes.
- 3106 Teleprinter Distribution (TELEDIS).
- 3107 Precedence Tags.
- 3108 Coloured A.T. Tapes.

## SECTION 2—TRANSMISSION/RECEPTION OFFICES

*Paragraph*

- 3201 Rating in Charge.
- 3202 Siting of Bays.

## SECTION 3—TRAFFIC CENTRE

*Paragraph*

- 3301 Function.
- 3302 Duties of the Staff.
- 3303 Numbers in the Staff.
- 3304 Route Board.
- 3305 Re-routeing.
- 3306 Trays and Clips.
- 3307 Stamps.

## SECTION 4—THE MAIN SIGNAL OFFICE

*Paragraph*

- 3401 Task of the M.S.O.
- 3402 Rating in Charge.
- 3403 Layout of M.S.O.
- 3404 Main Signal Office Staff.
- 3405 Files to be kept in the M.S.O.

## SECTION 5—HAND AND GENERAL MESSAGE OFFICE (H.M.O.)

*Paragraph*

- 3501 Functions of the H.M.O.
- 3502 General Message Organisation.
- 3503 General Message Files.

SECTION 6—THE CRYPTOCENTRE

Paragraph

- 3601 Task of the Cryptocentre.
- 3602 Principle Crypto Officer.
- 3603 Crypto Staff.

SECTION 7—RECORDING AND CHECKING

Paragraph

- 3701 General.
- 3702 Need for Traffic Analysis.
- 3703 Choice of Recording Methods.
- 3704 Office Numbers.
- 3705 Traffic Record Sheets.
- 3706 Alternative Uses of Office Numbers.
- 3707 Check Sheets.
- 3708 Routine with " Officer Only " Traffic.
- 3709 Queries and Filing Office.

## SECTION 1

## GENERAL

**3101. Layout of Communication Centres (Comcens)**

a. The layout of a Comcen should be based on the following principles:—

- (1) The Comcen should be adjacent to the operations room, as its main duty is to serve the latter.
- (2) In joint headquarters, the Naval Comcen should be adjacent to, and work in close conjunction with, the R.A.F., and Army signal organisations. Certain functions of message handling may actually be integrated.

b. The various offices of the Comcen should, as far as possible, be sited around a "Traffic Centre". Here OUT messages are routed, prepared for despatch and recorded, and IN and THROUGH message headings are transcribed, recorded and re-routed as necessary.

**3102. Offices Forming a Shore Comcen**

In addition to the traffic centre previously mentioned, a large shore Comcen may comprise the following offices (though in smaller Comcens, their functions may be irrelevant, or combined with those of another office):—

- (1) *Ship Room*.—Contains terminals of all circuits to and from ships, both RATT and morse.
- (2) *Tape Relay Room*.—Contains a series of consoles, housing auto transmitters on one side, and printing reperforators on the other. These may have both line and RATT connections.
- (3) *Teletype Room*.—Contains a series of A.T. bays of varying types, which may have line or RATT connections. The bays may be connected direct to similar bays in other headquarters or into a tape relay or a teletype switching system, e.g. D.T.N. Certain bays may be fitted with on-line cryptographic equipment. These are normally contained in a special annex.
- (4) *Perforator Room*.—May be provided separately for the production of A.T. tapes for both teletype and ship rooms.
- (5) *Main Signal Office*.—Distributes all messages except those classified Top Secret and Exclusive.
- (6) *Crypto Office*.—Is designed to process all off-line crypto other than "Officer Only" traffic.
- (7) *Special Crypto Office*.—Deals with all "Officer Only" traffic. An on-line teletype bay may be fitted in addition to off-line equipment.
- (8) *Hand and General Message Office*.—Is an annex of the main signal office and distributes hand and general messages to ships and local shore authorities.
- (9) *Files and Queries Office*.—Is an annex to the traffic centre and is designed to carry out detailed checking of all messages and to deal with traffic handling queries and snags.

**3103. Records Office**

a. The majority of maritime headquarters now have a Records Office which is an annex to the operations room, containing a very comprehensive filing system of all operational information.

It is not part of the communication department but is the M.S.O.'s biggest distribution customer, taking anything up to 15 copies of each message.

b. The greatest possible liaison should be maintained with this office. Its efficiency depends very largely on its service from the communications department, and it can in turn be most helpful to the latter in many ways, mainly regarding ship's movements.

**3104. Duty Signal Communication Officer (D.S.C.O.)**

The D.S.C.O. is in charge of the communications centre during his watch. To perform this duty satisfactorily he must be available not only to any or all of the offices under his control, but also to advise the command. He must never be a link in the message handling chain.

**3105. Pneumatic Tubes**

a. The efficiency of an inter-office pneumatic system should not be allowed to suffer by:—

- (1) Operators failing to insert the carrier in the prescribed manner.
- (2) The organisation failing to provide for a constant and adequate supply of carriers at all terminals.

b. A ring main system of pneumatic tubes is being considered for certain new/modernised headquarters.

**3106. Teleprinter Distribution (TELEDIS)**

This system is being fitted in certain existing headquarters, with a pair of auto transmitters serving about six pairs of teletypewriters, the latter each being sited in a key office.

**3107. Precedence Tags**

a. Precedence tags are paper or cardboard tags pinned to messages to emphasise their precedence. They should initially be attached to OUT messages in the traffic centre, and to IN and THROUGH messages in the office of reception.

b. These tags, which can be produced locally, should be of two colours, one for flash and emergency and one for operational immediate and priority. The actual precedence should be printed on the coloured tag. No tags are used on routine or deferred messages.

**3108. Coloured A.T. Tape**

The tape of all messages received on certain AT circuits, *e.g.* RATT ship/shore, may require special handling. In these cases, special tape with a coloured streak throughout its length may be used.

**SECTION 2****TRANSMISSION/RECEPTION OFFICES****3201. Rating in Charge**

a. The layout and organisation of the ship room and teletypewriter rooms will determine whether there is one rating in overall charge in addition to a rating in charge of each. Only where the two offices are interconnected is it appropriate to have one in overall charge.

b. The rating in charge should as far as possible avoid being a link in the message handling chain, but should be available to move round in order to exercise general supervision of his office.

c. He should normally delegate the following to his most experienced assistant:—

- (1) Inserting the head of all OUT messages for despatch in his office.
- (2) Transcribing the heads of all IN and THROUGH messages received in his office.
- (3) Ensuring that relevant details such as T.O.D. and T.O.R. are inserted on all messages or route chits which pass through his office.
- (4) Keeping a check of OUT traffic office numbers.

**3202. Siting of Bays**

The following points should be considered in planning the siting of bays:—

- (1) Circuits which have any connection with each other should be adjacent, *e.g.* ship-shore nets and ship broadcast.
- (2) Provision must be made for stowing tapes which await "re-running" on broadcasts.
- (3) Operational circuits should be nearest to the Traffic centre, and their operators should be visible to the rating in charge.

**SECTION 3****TRAFFIC CENTRE****3301. Function**

The traffic centre is the focal point of message handling where all recording, routing and where necessary re-routing should be carried out.

**3302. Duties of the Staff**

Principal duties of the staff are:—

- (1) *Router* (may be the CCY of the watch).—One or more routers will be required depending on the volume of traffic. The router's main duties are routing all **OUT** and **THROUGH** messages, determining whether rush distribution is required on **IN** messages, and supervising the work of ratings in the traffic centre. The router is the assistant to the D.S.C.O. He may be required to do the detailed routing (*i.e.* nominate actual circuits and/or crypto channels) but more usually, the system routing. In a large and busy headquarters, he will not be in such close touch with the state of circuits as will be the rating in charge of the transmission offices.
- (2) *Recorders*.—Work close to, and under the supervision of the router. They are responsible for:—
  - (A) Inserting the D.T.G. on **OUT** signals.
  - (B) Allocation of office numbers.
  - (C) Recording all traffic on a traffic record sheet.
  - (D) Marrying route chits, message and precedence tags and passing them to the required position.
- (3) *Traffic Centre Duplicator*.—The traffic centre duplicator produces additional copies of messages, as ordered by the router, for rush distribution, and makes additional copies of **OUT** and **THROUGH** messages which have to be transmitted from many positions. It may often be possible for such messages to be typed and run off quickly on an Ormig, the Ormig master subsequently being sent to the M.S.O. where only the top of the message would have to be typed in before distribution, thus saving typing twice. Alternatively a Thermofax machine should be used when available.

**3303. Numbers in the Staff**

The precise numbers in the staff will depend on the volume of traffic and the precise job of each will vary depending on whether several ratings each perform all the various functions required of the various traffic handlers or whether each performs one or two functions only, *i.e.*, if two messages are received in the centre one rating may insert the D.T.G. on each and another record it, alternatively each rating may insert the D.T.G. and record one message each. Additional ratings may be required as daymen.

**3304. Route Board**

A route board in the traffic centre is used to assist in routing messages. This should be a large board with bold lettering, kept up to date by the router, and checked by the D.S.C.O. This board should be divided up to include any or all of the following headings together with any additional local requirements:—

- (1) Ship's name.
- (2) Location (*e.g.* Sea Malta).
- (3) Arrival port.
- (4) Duty (*e.g.* Convoy S.C. 7).
- (5) Date.
- (6) Communication route to shore authorities.
- (7) Miscellaneous (*e.g.* single operator, via NOIC Bathurst).
- (8) Communication route (*e.g.* broadcast, local net, telephone and number).
- (9) Shore station.
- (10) Automatic responsibility.

**3305. Re-routing**

Re-routing of all messages should normally be carried out in the traffic centre, regardless of the method of receipt and of subsequent despatch. Certain exceptions will be necessary. For instance, departmental instructions should be given that all enemy reports and distress messages received on ship-shore nets are to be retransmitted on the Ship Broadcast before being sent to the Traffic Centre. Such exceptions should be reduced to urgent cases, since the traffic centre must keep a check on each message being handled. This can only be achieved by treating each incoming message firstly as an IN message, and then, if it has to be re-routed, as an OUT message. This seemingly laborious process will work smoothly if a cycle or message chain is adopted.

**3306. Trays and Clips**

Specially marked trays and clips are required for the smooth flow of traffic within the traffic centre and between the traffic centre and other offices. Much care is required in their selection and siting. The tendency to have too many must be resisted.

**3307. Stamps**

Special stamps will be required in the traffic centre. The number and position of these will depend on the detailed organisation of the centre.

## SECTION 4

### THE MAIN SIGNAL OFFICE

**3401. Task of the M.S.O.**

The task of the M.S.O. is to duplicate and distribute all messages except those classified Top Secret or Exclusive.

**3402. Rating in Charge**

The rating in charge of the M.S.O. is also responsible for the hand and General message office.

**3403. Layout of M.S.O.**

The following points should be considered when arranging the layout of the M.S.O.:—

- (1) The rating in charge's desk should be near to the traffic centre and crypto office.
- (2) The distribution pigeon holes should be sited near the exit to reduce messenger movement within the office.
- (3) Space should be allowed where possible to double up at the more likely bottlenecks, *e.g.* typists benches, in the event of heavy traffic.

**3404. Main Signal Office Staff**

The number of ratings and the proportion of watchkeepers to daymen can only be determined from experience. Particular care is required to anticipate the volume of traffic at different periods of the day and the organisation of the M.S.O. should be sufficiently flexible to allow easy interchange of jobs. The following ratings are required:—

- (1) Distributor—inserts the distribution and reference to messages quoted in the text. Records messages as required by the local organisation and acts as assistant to the rating in charge.
- (2) Typists.
- (3) Duplicator.
- (4) Filers.
- (5) Messengers.

**3405. Files to be Kept in the M.S.O.**

The following files should be kept in the M.S.O., assuming a queries and filing office is also used:—

- (1) Daily fair file (Secret and below).
- (2) Ormig master (Secret and below).

**SECTION 5****THE HAND AND GENERAL MESSAGE OFFICE (H.M.O.)****3501. Functions of the H.M.O.**

The functions of the hand and general message office are:—

- (1) To prepare messages for despatch by hand or mail to individual addressees in accordance with instructions in Chapter 4.
- (2) To act as a sorting office for messages sent between local ships and authorities.
- (3) To prepare general messages for distribution internally, and to local ships and authorities.
- (4) To keep files of back general messages for supply to ships newly arrived in harbour.

**3502. General Message Organisation**

a. The organisation for handling general messages should be as follows:—

On receipt in the main signal office, each message up to and including those classified Secret should be passed to the hand message office for duplication. Enough copies for internal distribution and filing should be sent back to the main signal office, and further copies for local ships and authorities should be placed in their pigeon holes.

b. Sufficient copies should be sent to small ships to meet their requirements in full.

c. Time and paper can often be saved by reproducing two or three short messages on the same master.

d. General messages classified Top Secret must be reproduced in the special cryptographic office, and should be distributed internally and externally in the same way as other messages of this classification. An acquaint chit should be sent to the hand message office in addition to the traffic centre and main signal office.

**3503. General Message Files**

a. General message files in accordance with A.F.O. S.1 and station orders should be kept in the following way:—

Masters and spare copies of general messages stowed in accordance with paragraph 1704. Ample spare copies must be kept of all current general messages so that requirements of ships may be met.

b. When a message becomes obsolete, a note of its disposal is to be made on the copy in the file. Spare copies and the master may then be destroyed.

c. Files must be kept constantly reviewed so that a ship requiring a complete set of a series is given only current messages.

d. Files containing previous series of general messages are to be kept until all their messages have become obsolete; the messages may then be destroyed.

**SECTION 6****THE CRYPTOCENTRE****3601. Task of the Cryptocentre**

a. The task of the cryptocentre is to encrypt-decrypt all off-line crypto messages.

b. The majority of on-line encryption/decryption is effected in the teletype room, though a small number of tails are progressively being installed in S.C.Y.O.s for the handling of Top Secret on-line traffic.

**3602. Principal Crypto Officer**

a. The Principal Crypto Officer is in charge of the C.Y.O. and S.C.Y.O. and is responsible to the S.C.O. for all cryptography.

b. He should handle personally all Exclusive Top Secret and Exclusive Secret messages, and, if no ratings specially cleared for Top Secret are available, all Top Secret.

**3603. Crypto Staff**

In addition to the P.C.O. in overall charge, there should be watches consisting of a senior rating and a number of junior ratings depending on the volume of traffic.

**SECTION 7****RECORDING AND CHECKING****3701. General**

a. It is customary in shore headquarters systematically to note the progress of each message at most, if not all, positions where it is handled. It is also the practice to check the message for transmission and distribution before it is sent to the queries and filing office where it receives a final inspection before being filed away.

b. Ultimately it is hoped that all message handling organisations will be so smooth and foolproof that these time-taking processes can be dispensed with.

**3702. Need for Traffic Analysis**

Over and above the requirement to ensure that messages do not get lost, recording does enable traffic analysis to be achieved, and this latter will become progressively more important as an aid to the design of circuit engineering. Accordingly certain recording will, rather than being done away with, gradually be made automatic.

### 3703. Choice of Recording Methods

The following paragraphs describe how recording and checking is now achieved, though the actual methods vary with the size of the organisation. Where the daily volume of traffic is small, it is sufficient to list details of messages as they are received, and to tick them off when action is complete. However, to do this when the number of messages is large, would entail lengthy searches before each message can be ticked off.

### 3704. Office Numbers

a. The work of checking can be made easier by arranging for recorders to allocate sequential reference numbers to messages in order of their time of receipt. These are known as "OFFICE NUMBERS" and are used as follows:—

- (1) To check that messages have been sent from the Traffic Centre to the appropriate offices for transmission and/or distribution.
- (2) To assist each office which handles a message, to check it in on receipt and out when passed on.
- (3) To provide a rapid means of tracing a message while it is still in the transmission/distribution stages, and establishing which offices have or have not handled it.

b. Fresh series of numbers should normally begin at 0001 local time. However, in some cases, it may be simpler to work from 001 to 999, and then begin a new series regardless of time or date.

### 3705. Traffic Record Sheets

a. Forms 1572/3 are traffic record sheets, specifically designed for use with office numbers. They are at present under revision with the object of making them sufficiently flexible to be used in any ship or shore headquarters. However, the present forms can be adapted to suit present requirements and in the interests of standardisation, this is preferable to a locally produced sheet. It should be noted that the revised Form S.1573 is designed as an IN and/or OUT traffic record sheet. Form S.1572 is being allowed to lapse.

b. When using these sheets, every message is allotted an office number, and the details (D.T.G., precedence, etc.) are noted against the number. Spaces are provided for "Ticking" and "Cross Ticking", showing which other offices have been sent copies for distribution/transmission/encryption, and which have returned them after taking necessary action. When the recorder is satisfied that all copies of a particular message have been returned to him, he initials the traffic record sheet alongside the appropriate office number.

### 3706. Alternate Uses of Office Numbers

Office numbers can be allotted in two methods:—

- (1) One group of numbers in RED allotted to OUT messages, and another in BLUE for IN messages. THROUGH, or IN AND THROUGH messages, will bear a RED and BLUE number. With THROUGH messages, the OUT recorder will be aware that he should initial his traffic sheet after all transmission copies have been returned to him, since the copy used for typing and distribution will have been returned to the IN recorder. This method has the advantage of dividing the load between an "IN RECORDER" and "OUT RECORDER" when desired.
- (2) One group of numbers for both IN and OUT traffic. This is the simpler but equally effective method, since only one traffic record sheet is required at all check points, and "THROUGH" and "IN" traffic needs no second office number.

### 3707. Check Sheets

The various communication offices should keep sheets of office numbers for checking messages as they pass through. There is no printed S Form to cover this requirement. Sheets of office numbers should be produced locally, with a space alongside each office number for ticking and cross-ticking.

b. The recorder should periodically check from his traffic record sheet whether any message has been outstanding for an unusually long time. If so, he should find out in which office it is being held up. Numbers are ticked on a check sheet as the messages enter each office, and cross-ticked when they leave. If therefore, the recorder asks whether a message with a particular office number is held, it should be obvious at once that either:—

- (1) The number has not been ticked at all, *i.e.* the message has not entered the office.
- (2) The number has been ticked once, *i.e.* the message is somewhere in the office.
- (3) The number has been cross-ticked, *i.e.* the message has been dealt with and has left.

c. The rating in charge of each office is responsible for checking that all necessary action, so far as he is concerned, has been carried out before returning copies of messages to the recorder.

### 3708. Top Secret and Exclusive Traffic

a. An office number for a Top Secret or Exclusive message should be obtained from the recorder at the same time as a D.T.G., requisite details being supplied to the recorder for notation on his traffic record sheet.

b. The acquaint chits for Top Secret and Exclusive messages should indicate by what means the messages are to be or have been transmitted, together with TOD's where applicable. The return of the acquaint chit to the recorder indicates that distribution action has been taken, and he can then treat the message in the normal manner, checking clearances and TOD's. This is important when such messages are being transmitted over broadcasts and other circuits in encrypted form.

### 3709. Queries and Filing Office

a. This is an annex to the traffic centre and is the office to which signal queries must be made regarding any message after it has been handled. It is the office responsible for arranging the retransmission of messages on the appropriate circuits after a ship reports a change of radio watch (*e.g.* from broadcast to LCN). It is also the final check position.

b. It is essential that an experienced senior rating with a thorough knowledge of all aspects of the Comcen be in charge of each watch. He should have under him intelligent ratings, and enough of them to enable them to move about the centre and investigate queries themselves; sending query chits to other offices merely adds unnecessarily to the amount of paper passing around.

c. The detailed organisation and the system of filing to be employed in the queries and files office is a matter for departmental orders. The following functions must, however be covered:—

- (1) After a message has passed through the Comcentre, all particulars of that message, including the master route chit, other route chits, transmission and duplicated copies, must be checked before filing.
- (2) All information required for analysis purposes, especially during major exercises, must be extracted, preferably before filing.
- (3) A record of, and the action taken to clear, all queries must be kept and all outstanding queries turned over to the next watch.

d. Messages, whether cleared or part-cleared, must be easily found. Each rating in this office must be fully conversant with the message handling system in use, in order that a message may be traced quickly.

e. Generally speaking, the aim should be to file in the filing office the original copy and route chits of every message handled except IN and OUT traffic encrypted in an off-line system, and Top Secret and Exclusive signals.

f. In these latter cases, there will be an acquaint chit only, original route chits, typed copy and groups, being filed in the crypto centre.

g. Since the filing office will contain messages classified up to and including Secret, steps should be taken to ensure that only authorised personnel have access to the files.

## CHAPTER 4

## HAND MESSAGE AND MAIL ORGANISATION

## CONTENTS

## SECTION 1—GENERAL

*Paragraph*

- 4101 Hand Messages.
- 4102 Postagram and Airgram.
- 4103 Routeing Messages by Hand or Mail.
- 4104 Preparation for Despatch by Hand or Mail.
- 4105 Obtaining a Receipt.
- 4106 Action on Receipt.

## SECTION 2—ORGANISATION AFLOAT

*Paragraph*

- 4201 Collection of Messages from Shore on Arrival and Sailing.
- 4202 Serial Numbers of OUT Messages.
- 4203 Records and Receipt Notes.
- 4204 Organisation for IN Messages.
- 4205 Despatch by Messenger.
- 4206 Despatch by Despatch Boat.
- 4207 Despatch by Mail.
- 4208 Hand Messages Sent for Onward Transmission.

## SECTION 3—ORGANISATION AT A BASE

*Paragraph*

- 4301 Hand Message Organisation at a Communication Centre.
- 4302 Internal Organisation at a Communication Centre.
- 4303 Communication with Ships in Harbour.
- 4304 Communication with Local Shore Authorities.
- 4305 Communication with Distant Bases.
- 4306 Messages to Ships in Harbour.
- 4307 Messages to Ships at Sea.
- 4308 Messages for Local Shore Authorities.
- 4309 Messages for Distant Authorities.
- 4310 OUT Records.
- 4311 IN Records.
- 4312 Basegrams.

## SECTION 1

## GENERAL

**4101. Hand Messages**

a. A message for delivery by messenger is prepared for despatch in the Comcen of origin and is then taken to the addressee's Comcen by despatch boat, despatch rider, or messenger. Alternatively, the addressee's representative may collect it from the office of origin. A message which is to be sent by any of these methods is known as a "HAND MESSAGE".

b. Top Secret hand messages are invariably to be carried by hand of officer. This usually necessitates the use of the message: "Send officer to collect hand message".

**4102. Postagram and Airgram**

A message for delivery by mail is prepared for despatch in the Comcen of origin, and is then handed to the Secretariat for transmission by land, sea, or airmail (or a combination of these) to the addressee's Comcen. If it is to go by surface mail, it is known as a "POSTAGRAM"; if by air, an "AIRGRAM".

*Note.*—For restrictions on Category B messages see Cryptographic Instructions.

**4103. Routing Messages by Hand or Mail**

Messages may be routed in part by hand or mail and in part by other methods. For example:—

H.M.S. VICTORIOUS at sea in war-time has messages which must reach addressees ashore and afloat quickly and, if possible, without radio silence being broken. They are sent ashore by aircraft, and from the Comcen at the air station they are relayed by A.T. and radio to the addressees.

**4104. Preparation for Despatch by Hand or Mail**

a. Messages for despatch by hand or mail are to be treated as follows:—

- (1) Messages are to be sent in envelopes which are to be stuck down.
- (2) Two envelopes are to be used for classified messages. In the cases of messages classified Confidential and above, and of all messages prefixed Exclusive, the inner envelopes are to be sealed with wax.
- (3) At least two copies of each message are to be enclosed. Under certain circumstances, it is helpful for larger organisations, e.g. shore comcens, flagships, to provide sufficient copies of messages to small ships to enable the latter to complete their distribution with "as received" copies, and thereby avoid a reproducing process.

b. Plate 2 shows how, depending on the classification of the messages enclosed, the envelopes of hand messages are to be addressed. Envelopes containing postagrams and airgrams are to be addressed in a similar way—but messages classified higher than Restricted should not normally be sent by mail.

c. Messages of the differing classification groups quoted below may be sent in the same envelope, which is to be marked and handled according to the highest classification.

- (1) EXCLUSIVE Top Secret, Top Secret and EXCLUSIVE Secret.
- (2) EXCLUSIVE Restricted, and EXCLUSIVE Confidential.
- (3) Confidential and Secret.
- (4) Unclassified and Restricted.

d. The following information is to be stamped, typed or written on each envelope in addition to that shown in Plate 2:—

- (1) The highest precedence of any message enclosed.
- (2) The serial number.
- (3) The name of the originating authority.

**4105. Obtaining a Receipt**

a. It is important to know without delay that a message has been delivered to its destination. When a message is sent to a ship about to sail, instructions to receipt by signal, normally quoting serial number, are to be typed or written on the envelope.

b. A supply and receipt note (Plate 3) is to be included with each envelope, so that the contents may be checked by the addressee. It should bear the date time group of all messages enclosed. Receipts are to be returned by hand or mail unless a signalled receipt is specifically demanded.

**4106. Action on Receipt**

The following action is to be taken on receipt of a message:—

- (1) If instructions to receipt by signal have been included, this is to be done at once.
- (2) The contents of the envelope are to be checked against the list on the receipt note. If they are correct, the receipt note is to be signed and returned to the office of origin by the first available means; if they are not correct, the office of origin is to be informed by signal.
- (3) The messages are then to be handled in the same way as messages received by any other system.

## PLATE 2

## ADDRESSING HAND MESSAGE ENVELOPES

ON HER MAJESTY'S SERVICE  
 HAND MESSAGE  
 THE MAIN SIGNAL OFFICE  
 H.M.S.

ON HER MAJESTY'S SERVICE  
 CONFIDENTIAL  
 HAND MESSAGE  
 THE MAIN SIGNAL OFFICE  
 H.M.S.

a. (1) Unclassified envelope.

(2) Restricted, Confidential, or Secret  
 (whether prefixed Exclusive or  
 not)—outer envelope.

b. Confidential—inner envelope.

The inner envelopes of Restricted  
 and Secret messages are to be similarly  
 addressed.

ON HER MAJESTY'S SERVICE  
 BY HAND OF OFFICER  
 THE COMMANDING OFFICER  
 (PERSONAL)  
 H.M.S.

ON HER MAJESTY'S SERVICE  
 TOP SECRET  
 HAND MESSAGE  
 THE COMMANDING OFFICER  
 (PERSONAL)  
 H.M.S.

c. Exclusive Top Secret, Top Secret—  
 outer envelope.

d. Top Secret—inner envelope.

The inner envelopes of all Exclusive  
 messages are to be similarly addressed  
 with the addition of the word  
 EXCLUSIVE.

PLATE 3

SUPPLY/ RECEIPT NOTE  
(This should be printed locally)

SUPPLY/RECEIPT NOTE

FROM: ..... ENVELOPE No.

DATE:

TO:

FOLLOWING MESSAGES ENCLOSED/RECEIVED:


T.O.D..... T.O.R.....

NAME. RANK/RATING.....

THIS RECEIPT NOTE IS TO BE RETURNED BY FIRST AVAILABLE MEANS  
TO OFFICE OF ORIGIN

## SECTION 2

## ORGANISATION AFLOAT

**4201. Collection of Messages from Shore on Arrival and Sailing**

a. A messenger is to be sent to the Comcen ashore or to the ship of the Senior Officer when there is no such Comcen ashore, to collect hand messages when the ship first arrives in harbour, and immediately before she sails. This organisation should be covered in local orders.

b. When the messenger visits on first arrival, he is to take with him a list showing the last numbered general message received in each series kept, and any missing messages.

**4202. Serial Numbers of OUT Messages**

A separate series of numbers for envelopes is to be used for each addressee. The serial number should be followed by the date, *e.g.* 4/29 would be the serial number of the fourth envelope sent to a particular addressee on the 29th of the month.

**4203. Records and Receipt Notes**

a. A record of OUT messages is to be kept in a book in order of serial numbers. Against each serial number should be written the D.T.G.s of messages enclosed, the addressees to whom they are being sent, and the time of despatch of the envelope.

b. A further column should be provided in the OUT record so that when the receipt note is returned by the addressee, this fact may be noted (*see* sub-paragraph 4306 b.).

c. On return from addressees, receipt notes are to be filed in the daily file, or a receipt note file.

d. It may be necessary for a Fleet flagship or radio communication guardship who has to send many hand messages (*e.g.* when distributing general messages to the Fleet away from the main base), to use the shore method of checking receipt notes (*see* sub-paragraph 4306 b.).

**4204. Organisation for IN Messages**

A record of envelopes received is to be kept in a book in order of serial numbers. The time of receipt should be noted against each. All supply notes should be filed together.

**4205. Despatch by Messenger**

a. The serial numbers and addressees of all envelopes given to a messenger before each trip should be listed in a book which he should check before starting out. He should take the book with him and obtain a signature from each person to whom he gives an envelope.

b. The messenger is also to initial the OUT record book against the serial numbers of the envelopes he is taking.

**4206. Despatch by Despatch Boat**

Envelopes for despatch by duty despatch boat (D.D.B.) or helicopter, are to be delivered to the Officer of the Watch in ample time before the D.D.B. calls.

**4207. Despatch by Mail**

a. Messages for despatch by mail may either be handed to the Secretariat onboard, or sent to the M.S.O. ashore for inclusion in the mail traffic for the M.S.O. which serves the addressee. Local orders should state which of these two procedures is to be carried out.

b. In either case a signature is to be obtained from the person to whom the envelopes are handed.

**4208. Hand Messages sent for Onward Transmission**

a. A message may be sent by hand to a relay station (usually the shore base or a ship acting as a communication transmitting guardship) for transmission by a different route.

b. Relaying instructions are to be inserted on the message form, or on a separate form. They should normally be merely "Pass to . . .". The route should not be specified, except where an unusual one is to be used.

c. If unclassified, three copies of the message are to be sent. One copy will be returned to the ship with signature and time of receipt inserted. No receipt note is therefore required.

d. If classified, the message is to be encrypted onboard, unless the relay station is cryptographic guard, or it is certain that the message will only be sent over on-line or secure circuits.

e. One copy of the encrypted groups, with passing instructions, is to be sent in one envelope, and one copy of the plain language version clearly marked "Check copy not for transmission" in another. Receipt notes are to be enclosed in each envelope.

f. The P.L. and encrypted versions are never to be sent in the same inner or outer envelopes. However, there is no objection to sending the P.L. version of several messages together in one envelope, and their encrypted versions together in a separate envelope.

g. The envelopes of P.L. and encrypted versions are to be addressed to the same office, and in accordance with Plate 2.

h. The relay station will normally deal with any cryptographic queries which may arise over a message, unless it is EXCLUSIVE and/or Top Secret.

i. When a message prefixed EXCLUSIVE and/or Top Secret is sent by messenger for onward transmission, the encrypted version only is to be sent unless the relay station is an addressee. The envelope containing the encrypted version for onward transmission is to be addressed to the M.S.O. of the relay station.

**SECTION 3****ORGANISATION AT A BASE****4301. Hand Message Organisation at a Communication Centre**

The communication centre at a base requires the following messenger or mail communications:—

- (1) With ships in harbour; using messengers and/or despatch boat service.
- (2) With other shore authorities in the harbour area; using despatch riders.
- (3) With distant bases; using postagrams, airgrams.

**4302. Internal Organisation at a Communication Centre**

When many messages sent by messenger and mail are handled daily at a base, a hand message office should be set up as part of the communication centre. Here messages for delivery by messenger to ships in harbour should be sorted and placed in appropriate pigeon holes, and those received from ships for onward transmission should be recorded and passed to the traffic centre for action.

**4303. Communication with Ships in Harbour**

a. When ships are all within easy reach of the shore, they should be instructed in local orders to send messengers to the communication centre at routine times daily for collection of hand messages. Messengers should sign for each envelope received.

b. At a large anchorage, it is more efficient to run a despatch boat at routine times to deliver hand messages to the ships present, and to collect OUT messages from each ship.

c. Messages and correspondence collected from ships will normally have to be sorted ashore. To save time this should be done as close as possible to the D.D.B.s starting point. For this purpose it may be necessary to set up a small office near the main landing place, and to connect it by D.R. service with the communication centre. The use of small canvas bags with ships' names painted on them is recommended. Each ship should have two bags; the D.D.B. can then deliver messages to the ship in the one, and receive them from her in another.

d. The D.D.B. orderly is to check and sign for each envelope at the start of a trip. A book is to be kept at the hand message office for this purpose. It will usually be impracticable to provide any further check at the moment of delivery to the ship, or to check messages from ships which pass through the hand message office, but envelopes addressed to the authority served by the communication centre will be listed in the in record.

**4304. Communication with Local Shore Authorities**

a. Hand messages can best be delivered to local shore authorities by despatch rider.

b. Times of trips should, as far as possible, fit in with times that messages leave for and arrive from ships. With careful planning, messages between ships and outlying shore establishments need remain only a very short time in the hand message office of the communication centre.

c. Before leaving on a trip, the D.R. should check all messages he is taking against a book in which they are listed. He should take the book with him and obtain signatures on handing over the envelopes. Each outlying establishment should keep a book in which the envelopes of all messages given to the D.R. should be recorded and signed for by him. The D.R. is also required to sign a book in the hand message office for the envelopes originating from the shore authority (but not for "Through" envelopes).

**4305. Communication with Distant Bases**

a. When a few messages have to be sent by mail between shore bases, each envelope is to be given to the Secretariat and signed for in the normal manner. It is then sent by service postal facilities.

b. When the volume of mail traffic is heavy, arrangements may be made to place the envelopes in a sealed bag containing a list of the serial numbers. A duplicate of the list is kept by the office of origin. The Secretariat then signs for the complete bag. On receipt at the distant communication centre, the envelopes in the bag are checked from the list; if any are missing, a report is made.

c. This organization enables the communication centre of origin to tell easily what messages may be compromised, or will have to be sent again, if the ship or aircraft in which the bag was placed is lost. When such an organization is in force between bases, it is normal for ships in harbour to send their airgrams and postagrams for distant addressees to the shore communication centre for onward transmission.

d. It is to be noted that whatever organization is used, receipt notes are still required inside each envelope.

**4306. Messages to Ships in Harbour**

a. Each ship should be allocated a pigeon hole in the hand message office. General, basegram and other messages for her are to be placed in it as they are received from the main signal office and special cryptographic office.

b. Receipt notes are to be kept for one month and then destroyed. They—or the skeletons in place of them—are to be filed in alphabetical order of ships, each ship's receipt notes being in order of serial numbers. A methodical check is to be made whether the return of any receipt notes is overdue.

c. Envelopes in which messages are sent to ships are to be numbered from 1 to 999, a separate series being used with each ship. If a ship is away from harbour for more than 14 days, a new series is to be started on her return.

#### 4307. Messages to Ships at Sea

a. When a ship is at sea and will be returning to the same harbour, messages for delivery to her by hand are still to be placed in her pigeon hole. Shortly before she is due back, an envelope is to be made up containing the messages which have accumulated, so that it may be delivered as soon as she arrives in harbour.

b. A periodic check should be made of the messages in pigeon holes of ships at sea to ensure that they do not need to receive any of them before return.

#### 4308. Messages for Local Shore Authorities

a. Messages for local shore authorities are to be dealt with in the same way as messages for ships in harbour, each authority being allocated a pigeon hole.

b. The file of receipt notes for shore authorities should be kept separately from that for ships.

#### 4309. Messages for Distant Authorities

a. Each authority to whom messages are sent frequently by air or surface mail should be allotted a pigeon hole. The envelope for messages should be prepared as for local messages (including receipt notes), and should be sent to the Secretariat with any envelopes which other ships or authorities may have sent to the hand message office for onward transmission.

b. Messages to be sent by hand should be prepared in the same way. In the case of a Top Secret message, to go by hand of officer, the officer preparing it is to obtain a serial number for the envelope from the hand message office, and is to give the skeleton receipt note to that office.

#### 4310. OUT Records

a. The serial numbers and time of despatch of envelopes to all ships and authorities by any of the above means should be recorded in a book in order of serial numbers.

b. Each envelope should be signed for by the person who takes it against the serial number of the office record.

#### 4311. IN Records

The serial numbers and times of receipt of envelopes received addressed to the main signal office should be recorded in a book in alphabetical order.

#### 4312. Basegrams

a. There should be an organization to cater for the handling of basegrams in shore Comcens.

b. Although certain ports are known as "Basegram Ports", this expression applies only in the case of messages of a general nature. Any originator may mark a message "BGRAM" for all or some of the addressees. The originating Comcen concerned does not necessarily have to be in a basegram port.

c. The organization must allow for the re-routing of basegrams when ships' movements are changed, *e.g.* diversions to other ports.

d. When ships are required to take action on basegrams (*e.g.* rendering reports by a specific date), consideration should be given to transmitting the messages by other means if they would otherwise not be received in good time to take the proper action.

e. It should be noted that, although A.F.O. S.9/58 paragraph 201 shows the basegram organization as being Intra R.N. and Commonwealth, a N.A.T.O. basegram system exists, details of which will be found in A.C.P. 121 N.A.T.O. Supplement No. 1.