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**COMBINED OPERATIONS**

**PAMPHLET No. 14 (e)**

**R/T PROCEDURE PAMPHLET**

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**1942**

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## R/T PROCEDURE PAMPHLET

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## R/T PROCEDURE PAMPHLET

### 1. Use of R/T procedure

(a) The basic R/T procedure is common to all three Services and may, therefore, be used for inter-Service working, as well as for Naval messages.

(b) Throughout R/T working, brevity and simplicity are essential.

### 2. Control of signalling

This is at all times vested in the controlling station, and all orders from the controlling station are to be obeyed promptly and implicitly. Controlling station frequency is to be taken as standard.

### 3. General considerations

*Speech.*—R/T messages must be spoken in a way which will ensure maximum intelligibility at the receiving end. From this point of view, the following factors are important :—

- (a) *Speed.*—The rate of utterance should be kept as constant as possible, neither too fast nor too slow. If it is too fast the message will be unintelligible, and if it is too slow it will waste time and be exasperating.
- (b) *Pitch.*—Experience shows that high-pitched voices transmit more successfully than low ones and, therefore, an effort on the part of the speaker to pitch his voice up will be all to the good.
- (c) *Intensity.*—For maximum intelligibility it is essential that the intensity of the speech transmitted should be as constant as possible, particular care being taken not to drop the voice at the end of a sentence. The type of speech in which some syllables are very loud and others very soft is always difficult to understand. Speech, therefore, should be kept of constant loudness, taking care that no part of the message is drowned by background noises.
- (d) *Rhythm.*—Any phrase spoken in ordinary conversation has a natural rhythm. The aim should be not to distort this rhythm when using R/T. The two commonest failings in this respect are :—
  - (i) A tendency to transmit messages word by word, instead of phrase by phrase.

- (ii) The inclination to add the syllable "er" at the ends of words, and to insert it between phrases.

Particular care must be taken to avoid both these faults.

- e) It must be remembered that it takes considerably longer to write down a message than it does to speak it, and this must be allowed for by the operator transmitting a message.
- (f) Messages which require to be reported to or acted on by a person other than the receiving operator, should be written down before they are answered.
- (g) Messages should be written in full whenever possible. It will often be necessary, however, to use abbreviations in writing down, and the greatest care is to be taken to use only accepted abbreviations which will cause no confusion.

#### 4. Phonetic alphabet

A Apples (Ac).	J James.	S Sugar.
B Beer.	K King.	T Tommy (Toc).
C Charlie.	L London.	U Uncle.
D Duff (Don).	M Monkey.	V Vinegar (Vic).
E Edward.	N Nuts.	W William.
F Freddie.	O Orange.	X X-ray.
G George.	P Pudding (Pip).	Y Yorker.
H Harry.	Q Queenie.	Z Zebra.
I Isaac (Ink).	R Robert.	

For normal Naval working only the word need be used.

For inter-Service working, or difficult conditions, letters should be passed in the form "S for sugar."

#### 5. Pronunciation of Numerals

(a) When figures are transmitted by R/T, the following rules for their pronunciation are to be observed:—

- 0 will be pronounced as "Zero".
- 1 will be pronounced as "Wun", with accent on "N".
- 2 will be pronounced as "Too", with accent on "T" and long "oo".
- 3 will be pronounced as "Th-r-ee", with slight rolling of "r" and long "e".
- 4 will be pronounced as "Foer", one syllable with long "o" and slightly rolled "r".
- 5 will be pronounced as "Fife", emphasising the consonants.

- 6 will be pronounced as " Six ", with accent on " x ".  
 7 will be pronounced as " Sev-en ", with two syllables.  
 8 will be pronounced as " Ate ", with accent on " A ".  
 9 will be pronounced as " Niner " with long " i " and emphasising the consonant " N ".

(b) Where communication is difficult, or interference is being experienced, a check of the figures may be adopted as follows :—

The figures will be spoken as above, followed by counting up to the figures, quoting not more than three figures.

*e.g.* Wun—Counted Zero—Wun.

Ate—Six—Seven—Ate.

## 6. The component parts of an R/T message

The component parts of an R/T message are as follows :—

- (i) The call.
- (ii) Indication of priority.
- (iii) Offer of message (for use in preliminary call only).
- (iv) Serial number of message (not used by Navy).
- (v) Address (if different to the call).
- (vi) Number of groups (code messages).
- (vii) Subject matter.
- (viii) Time of origin.
- (ix) Time of handing in (Army only).
- (x) Final instructions.
- (xi) Ending.

## 7. Component parts—instructions

(i) *The call.*—The call of an R/T message consists of the call sign(s) of the receiving station(s) made twice, preceded each time by " Hullo ", and the call sign of the transmitting station, followed by the word " Calling ". Call sign(s) of receiving station(s) are made once only between stations in good communication.

A " preliminary call " may be used in conjunction with an " offer " to establish communication before passing a message.

*e.g.* Hullo GREEN 3 Hullo GREEN 3, BLUE 17 calling.  
 Immediate message for you. BLUE 17 to GREEN 3.  
 Over.

(ii) *The indication of priority.*—The degree of priority, if any, which the originator may assign to the message to be indicated by the words :—

“ Most Immediate ” (O-U).

“ Emergency Enemy Aircraft ” (O-A).

“ Emergency ” (O).

“ Immediate ” (O-P).

“ Important ” (P).

Indications of priority higher than “ Immediate ” should only be used in exceptional circumstances.

(iii) *The offer of message.*—The “ offer of message ” consists of the words “ Message for you ” or “ Written message for you ”, and is employed in a preliminary call only.

*Note.*—The indication of priority, in addition to any other instructions that the originator may wish to include, is to be combined with the offer in a preliminary call, e.g. “ IMMEDIATE message for you ”.

(v) *The address.*—Except when the receiving station(s) and transmitting station are identical with the addressee(s) and originator of the message, the address of Plaindress Messages will be signalled here, either by call signs or P/L.

(vi) *Number of groups.*—The number of groups (including the time of origin), is to be included in code messages when applicable, i.e. “ Codress ” codes, Naval code when used “ Plaindress ” and SYKO. Counting commences with the first group of the subject matter (Navy), or with the address (Army), and includes the Time of Origin, when used. Time Handed In is not included.

(vii) *The subject matter.*—The subject matter of R/T messages consists of either P/L or code. When in P/L, the subject matter, except for procedure messages, is to be preceded by “ fullstop ”.

Code groups and difficult words, or place names, are to be spelt out, using the phonetic alphabet (see Article 4).

A group of figures is to be transmitted in the normal manner, followed, if necessary, by the check of the figure (see Article 5).

(viii) *The time of origin.*—(a) The time of origin is to be employed in all messages in which it would normally be inserted in W/T procedure, i.e. in general, those which require to be reported to, or acted on, by persons other than the receiving operator.

(b) The time of origin, when employed, is to consist of four figures, preceded by the words “ Time of Origin ”.

(ix) *Time of handing in.*—(a) Employed by the Army only.  
 (b) The time of handing in, when employed, is to consist of four figures, preceded by "TOC-HARRY-INK".

(x) *The final instructions.*—Instructions from the transmitting station to the receiving station, either regarding further messages, or the conduct of signalling (e.g. "Fresh message for you", "Wait one minute before answering", etc.).

(xi) *The ending.*—The control of R/T communication is made difficult by the fact that a transmission, once started, cannot be interrupted by the controlling station. Consequently, it is essential to indicate at the end of a message whether an answer is required or not. For this purpose, one of three ending signs is always to be used. They are :—

(a) "Over".—This indicates that the transmitting station is switching over to the receive position and that an answer or reply is expected. Any station required to answer or reply must await "Over" to its individual or collective call sign before commencing to transmit, e.g. "3 AF to FA 3 Over".

*Note.*—"Over" alone is used in manœuvring procedure.

(b) "Listening Out".—This indicates that the transmitting station is switching over to the receive position and has no further message to communicate. No answer or reply is expected in this case.

(c) "Switching Off—Off".—This indicates that the station is closing down.

## 8. Procedure phrases

It is inadvisable to lay down precise wording for all the procedure phrases likely to be required in R/T working.

The following are, however, in constant use and are to be adopted :—

Fullstop.	I say again.
Message for you.	Check.
Pass your message.	Verify.
Report my signals.	Acknowledge.
Hear you strength.	Repeat back.
Wait.	Cancel my last signal (or my....).
Correct.	Use D.C. (Difficult Communication procedure).
Correct version is.	Message received.
Speak slower.	O.K. (meaning message received, used in manœuvring procedure).
Say again.	
Carry on (equivalent to K in W/T procedure).	

Care must be taken to curtail all phrases to the minimum, consistent with clearness.

*Note.*—"O.K." may be used instead of the phrase "Message received" and does NOT imply that the message is necessarily understood.

## 9. Call signs

(a) Collective call sign .. a single call sign used to call several stations.

Multiple collective .. a combination of two or more call sign. collective call signs or collective and single call signs.

(b) Call signs may consist of words, letters or figures, or combinations of any of these.

The order of transmission and answering is to be :—

(i) Single word or letter call signs in alphabetical sequence of initial letters.

(ii) Two-word or letter call signs in alphabetical sequence of initial letters.

(iii) Word(s) or letter(s) and figure(s) call signs in alphabetical sequence and, where initial letters are the same, in numerical sequence.

(iv) Three-letter call signs in alphabetical sequence.

(c) Call signs are to be spoken either as written, or phonetically.

## 10. Failure to answer a call

(a) If the receiving station fails to answer a preliminary call, the following rules are to be generally observed :—

(i) The call may be repeated after a pause of ten seconds.

(ii) If the receiving station still fails to answer, the call may be repeated after a pause of one minute.

(iii) If the receiving station fails to answer this further call, the call may be repeated at intervals of not less than five minutes, or preferably the message should be passed through a suitable link.

The above rules do not apply to the controlling station.

(b) In the case of Multiple, Collective and Multiple Collective calls, if a station whose turn it is to answer fails to do so in ten seconds, the next station in the proper sequence will answer.

(c) In the case of a Collective or Multiple call, any stations which fail to answer in their proper turn will wait until all stations have answered.

(d) In the case of a Multiple Collective call, any station whose group is controlled to answer and which fails to answer before "Carry on" is given to the next group of stations, must await a further call from the transmitting station before attempting to answer.

(e) The time intervals given above should be greatly reduced when any abbreviated method is used.

### 11. The preliminary call

(a) The preliminary call and answer are to be of the form :—  
Hullo I 103 Hullo I 103, DI 5 calling. Important message for you. DI 5 to I 103 Over.

Hullo DI 5, I 103 answering. Pass your message. I 103 to DI 5 Over.

(b) In subsequent calls between stations in good communication, the call signs of receiving stations are to be made once only.

The call signs can be either spoken phonetically or alphabetically, depending on communication conditions.

### 12. Strength of signals

Strength 1. Hardly perceptible ; unreadable.

Strength 2. Weak ; readable now and then.

Strength 3. Fairly good ; readable, but with difficulty.

Strength 4. Good ; readable.

Strength 5. Very good ; perfectly readable.

### 13. Establishing communication

(a) *Station to station.*—If communication is not satisfactory on conclusion of the preliminary call (Article 11) due to tuning, the receiving station is to ask the calling station to transmit alphabets.

*Example :—*

Hullo RED 93, CONTROL answering. Hear you strength two. Send alphabet for ten seconds. CONTROL to RED 93 Over.

Hullo CONTROL, Red 93 answering. Apples London Beer Charlie Queenie, etc. RED 93 to CONTROL Over.

Hullo RED 93, CONTROL answering. Hear you strength four (or Pass your message). CONTROL to RED 93 Over.

(b) *Group working*.—When first establishing communication with a group of stations, the controlling station will, if time permits, call each station in turn.

On hearing the first station being called, all other stations are at once to net to the controlling station.

If a collective call is employed, stations answer in sequence (Article 9), or when controlled, if "WAIT" is included in the final instructions, netting to the controlling station before answering.

#### 14. Transmitting and answering a message— good communication

When stations are in good communication, all parts of the message are made once through.

In any message which is made without a preliminary call, the call sign of the receiving stations are made twice in the first transmission.

*Examples* :—

##### (a) Testing communication :—

Hullo Apples Green, Hullo Apples Green, Apples 72 calling. Report my signals. Apples 72 to Apples Green Over.

Hullo Apples 72, Apples Green answering. Hear you strength 5. Report my signals. Apples Green to Apples 72 Over.

Hullo Apples Green, Apples 72 answering. Hear you strength 4. Apples 72 to Apples Green Over.

Hullo Apples 72, Apples Green answering. O.K. Listening out.

##### (b) Passing a message :—

Hullo CONTROL, Hullo CONTROL, YELLOW 7 calling. Fullstop. Am returning to Beer one berth now. Time of origin 1245. YELLOW 7 to CONTROL Over.

Hullo YELLOW 7, CONTROL answering. O.K. Listening out.

### 15. Transmitting and answering a message-- difficult communication

When communication is difficult, each component of the message is to be made twice through. The repetition of the subject matter is to be preceded by the words "I say again".

*Example :—*

Hullo MODEL, Hullo MODEL, GREEN 1 calling.  
Message for you. GREEN 1 to MODEL  
Over.

Hullo GREEN 1, MODEL answering. Pass your  
message. Use D.C. MODEL to GREEN 1  
Over.

Hullo MODEL, Hullo MODEL, GREEN 1  
calling. Hullo MODEL, Hullo MODEL,  
GREEN 1 calling. Important. Important.  
Fullstop. Fullstop. FIVE mines, three,  
four, FIVE mines have now been swept.  
TWO, one, TWO are believed to remain.  
I say again. FIVE mines, three, four  
FIVE mines have now been swept. TWO,  
one, TWO are believed to remain. Time of  
origin Two one two five. Time of origin  
Two one two five. GREEN 1 to MODEL,  
GREEN 1 to MODEL Over. Over.

Hullo GREEN 1, MODEL answering.  
Message received. Listening out.

### 16. Broadcasting

When a message is to be broadcast, the following rules are to be applied :—

- (a) Each component is to be made twice through, as for Difficult Communication procedure.
- (b) The word "Broadcast" is to precede the subject matter.

*Example :—*

Hullo GREEN 17 Hullo GREEN 17, CONTROL  
calling. Hullo GREEN 17 Hullo GREEN 17,  
CONTROL calling. Broadcast. Broadcast.  
Fullstop. Fullstop. Steer for point Yorker.  
I say again. Steer for point Yorker. Time of  
origin 1334. Time of origin 1334. Listening  
out. Listening out.

- (c) If there is another message to be transmitted, the final instruction "Fresh message for you. Fresh message for you" is to be inserted and the message passed, after the ending, as above.

### 17. Repeating back a message

When a station is required to repeat back a message, "Repeat back" is included immediately after the address (or call when the same as the address). The receiving station repeats back the message exactly as received, except that "Hullo" is omitted, "From" replaces "calling" and call signs and subject matter are made once only, unless D.C. procedure is used, preceded by "I repeat back".

*Example :—*

Hullo M 12, Hullo M 12, Hullo M 72, Hullo M 72,  
F M 3 calling. M 12 repeat back. Fullstop.  
Re-embark all signalmen. Time of origin 1345.  
F M 3 to M 12, M 72 Over.

Hullo F M 3, M 12 answering. I repeat back.  
M 12, M 72 from F M 3 Fullstop. Re-embark  
your signalmen. Time of origin 1345. M 12 to  
F M 3 Over.

Hullo M 12, F M 3 answering. Word before  
signalmen, all. F M 3 to M 12 Over.

*Note :—*

In this case it would have been just as quick to  
"Say again" the whole message.

Hullo F M 3, M 12 answering. Word before signal-  
men, all. M 12 to F M 3 Over.

Hullo M 12, F M 3 answering. Correct. Listening  
out.

Hullo F M 3, M 72 answering. Message received.  
Listening out.

### 18. Repetitions

When words are missed or doubtful, repetitions are to be asked for by the receiving station.

The following phrases are to be used :—

"Say again".

"Say again all before....".

"Say again all after....".

"Say again from....to....".

"Say again word before (or after)....".

In making repetitions, the transmitting station is always to repeat the words used as the part identity in making the request immediately after the phrase "I say again".

*Example :—*

Hullo DUFF 17 Hullo DUFF 17, BEER WHITE calling. Fullstop. Close with all despatch. Time of origin 2323. BEER WHITE to DUFF 17 Over.

- (a) Hullo BEER WHITE, DUFF 17 answering. Say again word after with. DUFF 17 to BEER WHITE Over.

Hullo DUFF 17, BEER WHITE answering. I say again word after with, ALL BEER WHITE to DUFF 17 Over.

Hullo BEER WHITE, DUFF 17 answering. Message received. Listening out.

- (b) Hullo BEER WHITE, DUFF 17 answering. Say again. DUFF 17 to BEER WHITE Over.

Hullo DUFF 17, BEER WHITE answering. I say again DUFF 17 from BEER WHITE. Fullstop. Close with all despatch. Time of origin 2323. BEER WHITE to DUFF 17 Over.

Hullo BEER WHITE, DUFF 17 answering. Message received. Listening out.

## 19. Code message

Hullo POISON Hullo POISON, RED 1 calling. Immediate.

Five groups of code.

M6BA Y2B3 IFFQ BM5M.

Time of origin 1832.

Fresh message for you.

RED 1 to POISON. Over.

Hullo RED 1, POISON answering.

Message received. Carry on.

POISON to RED 1. Over.

## 20. R/T manœuvring and rapid manœuvring procedure

The following components are to be used in the manner indicated :—

- (a) *The call and answer.*—These will be in R/T form, abbreviated as shown in the examples which follow.

(b) *The subject matter.*—

- (i) P/L or Code groups may be used. The latter are to be spoken phonetically, *e.g.* "Preparative Pudding Zebra". The subject matter is always to be made twice through.
- (ii) The executive signal is "GO". It is not answered unless ships are controlled to answer. If there is no doubt of the station of origin, his call sign may be omitted.

(c) *The ending.*—Each transmission must end with "OVER" or "LISTENING OUT". When a message is made by this procedure to a collective call sign, receiving ships are always to use "Over". "Listening out" is used after an executive signal, except in rapid manœuvring procedure.

(d) MESSAGES ONCE TRANSMITTED CAN ONLY BE CORRECTED BY CANCELLING THE MESSAGE AND TRANSMITTING A FRESH VERSION.

(e) *Examples:*—

- (i) Hullo 3AF Hullo 3AF, FA3 calling. Alter course together nine zero degrees to Port. I say again, Alter course together nine zero degrees to Port. Over.
- A17 answering. O.K. Over.
- A23 answering. O.K. Over.
- A27 answering. O.K. Over.
- A91 answering. Say again. Over.
- A91. I say again. 3AF from FA3.
- Alter course together nine zero degrees to Port. I say again. Alter course together nine zero degrees to Port. Over.
- A91 answering. O.K. Over.
- Hullo 3AF Hullo 3AF. GO. Listening out.

(ii) *Rapid manœuvring:*—

- Hullo 3PB Hullo 3PB, BP3 calling. Stop engines. I say again Stop engines. GO Over.
- P135 answering. O.K. Over.
- P187 answering. O.K. Over.

(iii) *Manœuvring, verification required :—*

Hullo 17TB Hullo 17TB, BT17 calling.  
Speed one five knots. I say again, speed  
one five knots. Over.

T12 answering. Verify. Over.

T32 answering. O.K. Over.

T.12. O.K. Listening out.

When message has been verified and found  
correct :—

T12. Correct version is 17TB from BT17.  
Speed one five knots. I say again, speed  
one five knots. Over.

T12 answering. O.K. Over.

(iv) *Executing a part of a message :—*

Hullo 17TB Hullo 17TB, BT17 calling. Speed  
one five knots. Form single line ahead.  
I say again. Speed one five knots. Form  
single line ahead. Over.

T12 answering. O.K. Over.

T32 answering. O.K. Over.

Hullo 17TB Hullo 17TB, BT17 calling. Speed  
one five knots. GO. Listening out.

Hullo 17TB Hullo 17TB, BT17 calling. GO.  
Listening out.

N.B.—This executes all outstanding signals.

(v) *Repeating back a message :—*

The subject matter only is repeated back once  
through.

Hullo 3GR Hullo 3GR, GR3 calling. M7 repeat  
back. Speed two zero knots. I say again  
speed two zero knots. Over.

A17 answering. O.K. Over.

M7 answering. Speed three zero knots. Over.

M12 answering. O.K. Over.

M7 I say again. Speed two zero knots. Over.

M7 answering. Speed two zero knots. Over.

The transmitting ship does not make "correct"  
to the receiving ships after the latter have repeated  
back a message correctly.

(vi) *Acknowledging a message.*—Stations answer in the normal manner. They acknowledge when ready, irrespective of the order of call signs. The acknowledgment can only be originated by a responsible officer.

Hullo 17GR Hullo 17GR, GR17 calling. Speed one five knots. I say again, speed one five knots. Acknowledge. Over.

A72 answering. O.K. Over.

M52 answering. O.K. Over.

P12 answering. O.K. Over.

Then. M52 answering. Acknowledged. Over.

P12 answering. Acknowledged. Over.

A72 answering. Acknowledged. Over.

(vii) *Correcting a message* :—

Hullo 17PF Hullo 17PF, N17PF calling. Speed four five knots. I say again, speed four five knots. Over.

P23 answering. O.K. Over.

P24 answering. Verify. Over.

P25 answering. O.K. Over.

P24. O.K. Listening out.

N17PF verifies the message and finds it should have been "one five knots".

Hullo 17PF Hullo 17PF, N17PF calling. Negative. I say again, Negative. Over.

Ships answer in the normal manner. Had more than one signal been outstanding, N17PF would have to identify the signal to be negated, thus :—

Hullo 17PF Hullo 17PF, N17PF calling. Negative speed four five knots. I say again, negative speed four five knots. Over.

Ships answer in the normal way, and a new signal would then be made.

