

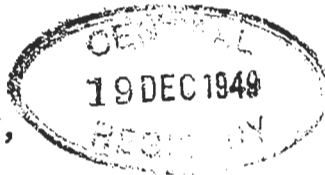
Part N. 9791/49

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H.M.S. "GANGES,"  
Ipswich,  
Suffolk.

14/ December 1949.

No. 1422/632/1 ✓



SECRETARY OF THE ADMIRALTY,  
HEAD OF NAVAL BRANCH I.

SELECTION AND TRAINING OF COMMUNICATION BOYS IN  
H.M.S. GANGES.

Reports on the selection and training of  
Boys for the Communication Branch and a skeleton syllabus  
of instruction are forwarded in accordance with Head of  
Naval Branch I's No. NI/N.9791/49 of 13th December 1949.  
No mention has been made of Cryptography and classified  
subjects other than a brief reference to the number of  
sessions devoted to coding.

W.A. Robson.

ENC.

CAPTAIN.

COMMUNICATION RATINGS IN THE  
ROYAL NAVY

The majority of communications ratings in the Royal Navy are obtained from boys entered between the ages of 15 and 16 and trained at the Royal Navy Boys' Training Establishments. In common with all applicants for entry as Naval ratings they complete a questionnaire to establish general suitability for the Navy and are required to pass a selection test lasting half an hour and consisting of four parts:-

- (i) 30 simple mechanical questions;
- (ii) 30 questions in arithmetic and mathematics;
- (iii) 20 spelling questions;
- (iv) a pure intelligence test of 20 questions.

2. Competition to enter the Communications branch is keen and candidates are, therefore, fairly highly selected on general educational ability and character.

3. Aptitude testing has followed similar lines in the British and United States Navies, and the subject is dealt with extensively in the following publications:-

- (i) "Personnel Selection in the British Forces" - by Vernon and Parry, University of London Press.
- (ii) "Personnel Research and Test Development in the Bureau of Naval Personnel" - by Stuit, and others, Princetown University Press.

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SELECTION OF COMMUNICATION BOYS  
IN THE ROYAL NAVY

All boys on joining the Training Establishment undergo a five week new entry course of instruction in Naval Discipline and customs, their purpose and necessity.

2. During the third week they are given a lecture by the Signal Communication Officer outlining the functions of the Communication Branch and the duties and prospects of Communication rating. On completion of the lecture each boy is required to state whether he wishes to volunteer for communications, irrespective of whether he had previously volunteered or not.

3. The volunteers are given the Morse Aptitude Test, and an eyesight test to determine their fitness for Visual Signalling. They are then interviewed by a selection board comprising the New Entry Divisional Officer, the Senior New Entry Instructor Officer and Signal Communication Officer.

4. The following factors are taken into consideration by the Selection Board.

<u>Factor</u>	<u>Standard Required</u>
(a) Morse Aptitude	50% marks and over desirable. 40% marks and over acceptable.
(b) Arithmetic and English (Test during 4th week)	Combined marks 90% and over desirable. 60% and over acceptable if necessary.
(c) Handwriting and Spelling.	Illegible writing not acceptable.
(d) Intelligence (Recruitment Test)	

- (e) Speech.
- (f) Boy's keenness on the Communication Branch.
- (g) Previous knowledge of Morse or Semaphore.
- (h) General impression given by the boy.

5. The boys selected for Communications then undergo a 35 week communication course, during which, at the 8th week, they are required to state their preference for Visual Signalling or Wireless Telegraphy. A selection for the V/S and W/T Branches is then made on the following considerations:-

- (a) Service requirements in each branch.
- (b) The wishes of each boy taken in order of merit of passing the 8th week examinations.
- (c) Suitability (including eyesight, hearing power and practical ability of each boy) for the branch he selects.

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TRAINING OF COMMUNICATION  
BOYS IN THE ROYAL NAVY

COURSE.

Communication boys undergo a 35 week course of 28 sessions weekly. The total of 980 sessions is divided as follows:-

Communication Instruction	588
School	278
Physical Training	35
Seamanship	14
Field Training	15
Gunnery	14
Kits	36
	<u>980</u>

2. The Communication instruction is divided into two main phases, the Preliminary course (common to all boys) and the V/S and W/T Final courses.

3. PRELIMINARY COURSE.

The following subjects are taught during the Preliminary Course:-

- (a) Morse Alphabet.
- (b) Semaphore Alphabet.
- (c) Reception of simple messages at 6 words per minute, Flashing and 8 words per minute when Buzzer and Semaphore.
- (d) Elementary communication terms and principles.

4. An examination to qualify boys for the final course, and to provide a basis for the selection of boys for V/S and W/T is conducted during the 8th week.

FINAL V/S COURSE.

5. The following subjects are taught during the final V/S course:-

Flashing reception and transmission up to 10 words per minute.  
Semaphore reception and transmission up to 20 words per minute.  
Copy typing up to 26 accurate words per minute.  
Practical operating procedure.  
Elementary Fleet work including Flag hoisting,  
Radio Telephony Procedure,  
Elementary coding.

FINAL W/T COURSE.

6. The following subjects are taught during the Final W/T Course.

Morse reception and transmission (Manual) up to 22 words per minute.  
Morse reception by typewriter up to 22 words per minute.  
Copy Typing.  
Practical operating procedure.  
Elementary Wireless organisation.  
Radio Telephony procedure.  
Elementary Radio Theory.  
Elementary Coding.

FINAL STANDARDS REQUIRED.

7. On completion of their initial training, communication boys are expected to be able to take their place as efficient V/S (or wireless) operators of the watch under normal conditions of passing messages and obtaining repetitions.

SYLLABUS.

8. Copies of Schedules of sessions for the Preliminary, Final V/S and Final W/T courses are attached. They include the amount of time devoted each week to the subjects mentioned above.

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MEDICAL STANDARDS FOR SIGNAL  
AND TELEGRAPHIST RATINGS

Candidates for the Signal and Telegraphist Branches must pass a detailed medical examination to ensure their general physical fitness for service in all parts of the world.

Visual Standards

The visual standards for the two branches differ.

(a) Signalmen

Visual standard required is Naval Eyesight Standard I. This is: Right Eye 6/6, Left Eye 6/6, as tested by Snellen's types. The near vision must be D. 0.5 (Snellen), each eye being tested separately.

Remarks: On entry the hypermetropia present in each eye (without a mydriatic) should not exceed 2.0 dioptrés; simple hypermetropic astigmatism should not exceed 1.0 dioptré; compound hypermetropic astigmatism should not exceed 2 dioptrés in the meridian of greater error, and of this not more than 1.0 dioptré may be due to astigmatism. The fields of vision must be full to confrontation tests. The colour perception must be Standard I, as tested by the Martin Colour Perception Lantern.

(b) Wireless Telegraphist.

The visual standard required is Naval Eyesight Standard II.

Right eye 6/9, Left Eye 6/9, as tested by Snellen's types. Near vision D. 0.5 (Snellen), each eye tested separately.

Remarks: The limits of hypermetropia, Colour Perception, etc., are the same as for Standard I, quoted above.

Hearing.

No special audiometric tests are required owing to the shortage of these instruments, but the forced whisper must be heard with each ear separately by the candidate when he is separated from the examiner by a distance of 20 ft.

Discharge from the ears or disease of one or both ears; a healed perforation of the tympanic membranes; radical and modified radical mastoid operations are considered to be disqualifying defects.

- Remarks:
- (i) Perforations are looked for in all cases. Where necessary, wax is removed from the ears by syringing, written consent to this measure being first obtained from the subject. A pin-point attic perforation may be missed unless special attention is paid to this part of the membrane.
  - (ii) A cortical mastoid operation, provided the ear is healthy and the tympanic membrane is intact and there is no defect of hearing, is not a cause for rejection.