

morse is present. The test can be invalidated by any boy who has had some slight previous training in morse. Even so, it appears worth while. Although the communications boys need to be quick and intelligent, no attempt is made to ensure that a high proportion of boys educationally suitable for the advanced school course is allocated to the communications boys. Roughly speaking, the boys qualifying for the advanced course are so allocated that both the seamen and the communications sides acquire a proportionate number. This ensures that the seaman branch is not denuded of the better educated boys for the benefit of the communications branch.

After selection, the communications boys, whether they will ultimately specialise in visual signalling or in wireless telegraphy, do a common preliminary course of eight weeks' duration—of which the first five are devoted almost entirely to technical training—involving mainly buzzer work and visual signalling. There is an alphabet test at the end of the fifth week, and a rating test at the end of the eighth. Boys are allocated, as a result of this latter test, either to visual signalling or to wireless telegraphy classes. The factors determining the choice are (a) the wishes of the boy, and his place in the order of merit; (b) suitability, including eyesight, hearing and practical ability; (c) the needs of the service. At present, this last consideration results in there being two wireless telegraphy classes to each visual signalling class.

The eight weeks' preliminary course is followed by the final course of forty-two weeks. The first thirty-three weeks of this period involve half-time technical and half-time school; the last nine weeks consist of almost full-time technical training. In both visual signalling and wireless telegraphy classes this forty-two week period may conveniently be regarded as consisting of three phases, the objects of which may be summarised in the following table.

Phase	Duration (weeks)	Objective	
		Wireless Telegraphy Class	Visual Signalling Class
A	9th — 27th	To consolidate the preliminary training, introduce basic procedure and master copy typing.	To consolidate the preliminary training, teach colours, meanings and mast work and master the type-writer keyboard.
B	28th — 41st	To improve practical ability, commence morse typing, introduce elementary cryptography and teach basic organisation.	To improve practical ability; to introduce visual signalling procedure, elementary fleet work and the associated mast work.
C	42nd — 50th	To achieve confident sending and consolidate operating generally; to teach voice procedure, radio theory, and miscellaneous subjects.	To achieve confident operating; to teach voice procedure, elementary cryptography and miscellaneous subjects.

Progress tests are held at the end of the 13th, 19th, 25th, 35th, 45th and 50th weeks. Of these, the most important are the "Badge Test" held at the conclusion of the 25th week, and the final examination. The badge test qualifies a boy for the award of the wireless telegraphy or visual signalling badge. To obtain it, a boy must be rated as a First Class Boy, his conduct must be satisfactory and he must pass in all subjects at the 25th week progress test. At the instructors' discretion, boys who do not qualify for a badge at the twenty-fifth week may be awarded it at any time up to two weeks later, if they have then reached the required standard. These badges are highly regarded by the boys, and the fact that they may be withdrawn for unsatisfactory conduct while under instruction constitutes a useful sanction.

As a result of these periodical tests some boys are demoted to a more junior class. The reasons for class changing are usually (i) failure to learn the morse alphabet by the end of the preliminary course; (ii) inability to maintain the morse or semaphore speeds which the programme requires; (iii) failure to master the typewriter keyboard before combining morse reception

and typing; (iv) failure to maintain the scheduled morse typing speeds; and (v) inability to write fast enough at high morse speeds. In fact, very few boys are demoted, for it is considered that the resulting dislocation of a boy's domestic life may often cause worse results in his new class. Even so, there was some evidence that, from the purely technical view-point, some boys would have benefited from repeating a particular section of the course. This was particularly evident in the case of some boys in the later stages of the course who were seen to have failed to master touch typing in the time available. As they were forced to look at the keys throughout their morse typing, it is unlikely that they will ever become touch typists. A few more hours at this part of the course might well have made a great difference. The trouble could perhaps be obviated by time tabled periods for individual instruction, perhaps on one afternoon per week. At present, the instructors are expected to bring the slow boys up to the standard of their quicker colleagues by giving individual instruction in their messes, after normal hours.

Each instructor, apart from domestic specialists, is also responsible for the general domestic life of a class. He has thus to teach seamanship during the preliminary stages, and to undertake the training of the boys from the general discipline point of view. There is little doubt that many petty officers who have spent a long part of their service on largely technical duties, and who are very well able to impart their specialist knowledge, are far from happy with those aspects of training other than technical. It would undoubtedly increase the technical efficiency of the teaching if the communications school staff did not have to undertake these general duties. Against this can be cited the undoubted advantage which accrues from regarding the whole of the training, both inside and outside the communications wing, as an entity, with one man largely responsible for the class. This matter is worthy of careful review: for there is little doubt that the present system imposes a considerable strain on the teaching staff and, in some cases, causes them to relegate the technical training to a second place, since the other aspects may cause them considerable personal anxiety.

The signal school staff is the responsibility of a Lieutenant Commander, who is assisted by two Commissioned Communications Officers. One of these is in general charge of the wireless telegraphy training: he has a personal assistant, and twenty instructors. The other is responsible for the general organisation of the preliminary course, and of the visual signalling classes. He also has an assistant, and there are ten instructors on the visual signalling side. The school has two regulating petty officers. There are also specialist instructors for touch typing, voice procedure, practical procedure and radio theory. Another petty officer is engaged in maintenance work for the school.

The general organisation of the school is necessarily complex, for there are twenty-five classes to fit into a complicated pattern. As accommodation is barely sufficient, and some rooms have necessarily to be equipped for specialist purposes, and can be used for little else, the fact that the arrangements work smoothly is a credit to the signal officer and his two assistants.

The chief petty officers, petty officers and leading seamen who make up the instructional staff all appeared keen and capable although, as is to be expected, some of them would benefit from some lessons in instructional technique. It was clear that some found the unaccustomed nature of the work a strain and it was not surprising that very few would willingly volunteer for a second tour of duty. Generally speaking, the tour of duty for an instructor is little longer than the time it takes to pilot a class completely through. As continuity of instruction is very desirable, all possible steps should be taken to ensure that, provided the exigencies of the service permit, a petty officer can take his class to the end of the course. Examples were noted where instructors had been moved shortly before the end of the course; this imposed a great handicap upon the boys concerned. Another policy question worthy of consideration is the desirability or otherwise of using reservists as instructors

on these courses. Here again the period of service is not much longer than the course; and, to be fair to the reservist, who in civil life may not be engaged in communications work at all, he should be given some sort of "acclimatisation" course. It is a little optimistic to expect him, almost at once, to be an efficient instructor in subjects which have not formed any part of his daily life. Thus, since such a course would take time, there might well not be sufficient of his service left to enable him to take a class through.

Of the teaching of individual subjects, it can be said that visual signalling, cryptography and mast work are adequately taught in the traditional manner. The rate of increase of speed with time appears reasonable. Buzzer is so taught that once a speed of about ten words per minute has been reached the characters are sent at about 22 w.p.m. The speed is adjusted by varying the space between the symbols, groups and words. Adjustment of the length of signal elements is never made. This method is not one which finds universal acceptance; but it must be admitted that the boys reach a good morse standard, so that the method apparently withstands successfully the only test which matters.

Voice procedure is taught well; special cubicle accommodation is used.

Copy typing is taught by the normal Pitman's method; the gramophone is used. Combining morse reception and typing takes place when the boys have reached 15 w.p.m. at morse. It seems to have become the accepted practice to drop to a "marrying" speed of 14 w.p.m. and this appears reasonable. One major criticism of the typing and morse typing is that much of the work goes unmarked. While this is an apparent criticism of the instructors—since all work is supposed to be marked—it is only fair to say that it does not seem practicable to expect this vast amount of marking to be done by an instructional staff with considerable duties outside the school. The remedy appears to be either an increase in the staff to allow for an exercise-correcting party, or a re-organisation which relieves instructors of a large measure of their duties outside the signal school. Procedure is well taught. The policy in the final stages, of allocating each boy to an imaginary ship in the fleet, and making him operate accordingly, is a good one. The class discussion of the mistakes made under these conditions is a valuable contribution to the instruction. Classes are also sent on board a reserve fleet destroyer to get a better "live" atmosphere. The radio theory is handled very capably by an instructor officer, who makes a good attempt at handling a syllabus quite impossible to cover, even in a cursory manner, in the 32 fifty-minute periods assigned to it. Either the syllabus in this subject should be curtailed, or the time increased to enable proper covering of the present syllabus. Some shortening of the syllabus, made with due regard to the very limited needs of the boys in this subject, should be possible. Some excellent demonstration apparatus is used in the teaching of this subject. The teacher's difficulties were increased by the fact that little of the school's teaching of electricity and magnetism seems to "carry over" to the radio theory part of the course. Perhaps more co-ordination might enhance the results.

An interesting point about the radio theory classes was that the experiment was being tried of taking two parallel classes and regrouping them according to their school ratings of "advanced" or "general". The "advanced" boys progressed considerably faster than the others. It might be worth considering whether this grouping method might be extended to other subjects in the signal school. It would be possible to do this with the wireless telegraphy boys, since there are two parallel classes in each intake. The effect of the wide variation in ability might thus be reduced.

The signal school is located in a separate two storey building and is well designed and equipped for the work. Special rooms are provided for typing, morse typing, procedure, lamp, radio theory, etc. One lecture room is especially well equipped with visual aids for fleet working procedure. There

is an extension, which is used for elementary buzzer, voice procedure and other classes. While there is no serious shortage of rooms, one or two more would obviate certain difficulties of organisation.

### *Physical Training*

The facilities for physical training are generous: there are three large gymnasias, over fifty acres of well maintained playing fields including a 440 yard cinder athletic track, two hard-surfaced areas which are used as hockey pitches, and an indoor swimming bath of 100 ft. by 48 ft. At times the gymnasias are used for general purposes and it is difficult to maintain the standards of cleanliness appropriate to physical training: sanding, with subsequent application of a non-slip sealing oil, would improve the surface of the floors, but this treatment is of little avail if traffic with heavy outdoor boots is permitted. Equipment for all the seasonal games and for the many activities included in the scheme is plentiful.

Each boy leads a very active life throughout the course, for in his first five weeks in the new entry division he is given two periods of gymnastics weekly, he competes in a divisional boxing tournament and he attempts the provisional swimming test. In addition he has three two-hourly periods of games, he listens to a lecture on physical training and sports given by the physical training and welfare officer, and he witnesses a demonstration of boxing techniques by the instructors. For the remainder of the course each boy is given each week one ninety minute period of gymnastics and two afternoons of games and he visits the swimming bath for divisional instruction once every eight days, this in addition to the manifold physical activities included in the more technical side of his training.

In gymnastics the boys are worked hard and a real effort is demanded. An instructor is attached to a class and as far as is practicable he retains responsibility for this group from the introductory table of exercises at entry to the examination table at the end of the course. Comparison between the work of a new entry class and the standard of performance reached in the final passing-out test shows a marked improvement in the general bearing and physique of the boys. The tables of exercises, vaults and agility practices are carefully prepared and are designed to provide a progressive scheme of training. By consulting the time table and syllabus it is possible to establish the precise exercises and activities which any instructor will be teaching to a particular group of boys, and consideration might well be given to allowing some degree of flexibility within the scheme which would take into account the varying ability and the different rates of progress of classes. During part of the lesson individual practice and work in small groups could afford increased interest and provide opportunities for developing qualities of self-reliance, initiative and leadership.

Considerable thought and careful planning is given to the instruction in swimming. On entry all boys are tested for the provisional swimming qualification, which consists of a swim of 40 yards in a duck suit followed by three minutes of floating. Of a total of 647 boys entered during a period of six months, 299 passed at the first attempt; many of the remainder were able to swim but were classed as backward swimmers. At the end of eight weeks those still unable to qualify attended for special instruction twice daily and, by the end of the course, all boys had passed the test. The standard of swimming is high and some individual performances are exceptional: successful life-saving classes are arranged on a voluntary basis, and there is a strong water polo team.

Games are organised divisionally and the spacious playing fields are used to capacity every afternoon. Each divisional officer, assisted by a team of instructor officers and a physical training instructor, accepts responsibility for the organisation, supervision and coaching of his own division and a creditable standard of play is reached in all games. Athletics are a strong

feature of the physical training programme for, in the recent inter-divisional athletic competition, over 1400 boys competed for standards, and these preliminaries were followed by a final meeting at which each of the eight divisions entered three boys for each track and field event. The recorded times and distances indicated that the coaching is on sound lines. The use of visual aids, including films and film loops illustrating coaching and techniques, might well be introduced into the scheme. In addition to the major seasonal games of association and rugby football, hockey, and cricket, opportunities are available and interested boys are encouraged to take part in tennis, cross-country running, basket ball, badminton, volley ball, fencing, boxing and shooting. Competition within the establishment is on a divisional basis and representative teams in a wide range of activities achieve considerable success in outside matches.

The organisation of the department is most efficient, and the care with which records are kept and the progress of individuals noted is worthy of mention. Including the officer in charge and a commissioned warrant officer, there were, at the time of the visit, seventeen members on the physical training staff, although it is understood that the recognised complement for the establishment is fifteen. This hard working and loyal team assumes full responsibility in the gymnasium and the swimming bath, gives assistance with the divisional games and athletics, maintains and supervises the use of equipment, and in addition must provide instructors for the ship's company P.T. and swimming classes, and for all the voluntary activities associated with this branch of the training; it is evident that to maintain the standard of efficiency in this department the effort of each member of the team must be taxed to the limit. Some of the instructors are better versed in the handling of adults than boys and the selection of instructors with the right temperament for training boys is therefore of vital importance. Before appointment their technical training might with advantage be followed by a short course in methods of instruction suited to boys of this age.

With all the mental and physical demands of the course, there would seem to be a danger of strain for those boys who have not easily fitted into the pattern of the training, and it is suggested that a very careful watch for signs of over-fatigue should be maintained, particularly in the backward P.T. and swimming classes to which boys not making satisfactory progress are drafted by the officer in charge of physical training.

The physical welfare of the boys is carefully looked after by all the officers of the ship. The medical staff, which is under the direction of a Surgeon Captain, R.N., includes specialists in medicine, surgery and ophthalmology. The Royal Naval Sick Quarters, which overlooks the river, is a self-contained unit with all the facilities of a small hospital, including an X-ray department, physiotherapy department and an operating theatre. A Surgeon Commander (D), assisted by a staff of fully qualified dental surgeons, is responsible for the boys' dental fitness.

## **THE DIVISIONAL SYSTEM AND CORPORATE LIFE**

The main establishment is divided for administrative and competitive purposes into eight divisions each named after a famous admiral. Each division is headed by a Lieutenant Commander or Lieutenant who, with the assistance of a branch officer and petty officer instructors, is responsible to the Captain for the discipline, training and welfare of the boys in his charge. When boys leave the new entry block they are put in classes, the composition of which does not normally change much after that. With a normal intake two A.C. classes of seamen boys go into one division, two G.C. classes into another and two other G.C. classes into a third. The three communications classes go into separate divisions, being paired five weeks later with the next three classes. This arrangement leads to a good deal of unevenness of the divisions but it does ensure that the boys remain together in their messes

throughout their stay in the main establishment as each mess takes two full classes. Furthermore the technical class instructors, who give the normal instruction, are also responsible for the messes. Thus, at any time, one of two instructors is looking after the boys of a particular mess. As messing, games, kits, requests for rating boys upwards and home difficulties are dealt with on a divisional basis, the instructors in charge of the messes are key members of the staff and the more carefully they are chosen, the better will be the general training. It is gratifying to note that three or four instructor-officers give help to each division for recreational activities and one instructor-officer falls in with each division on Sundays. The divisions are unfortunately very large. Furthermore, a great deal of detailed paper administration falls on the shoulders of the divisional officers and prevents them taking as active an interest in the boys as they would wish. In view of the fact that the system of divisions is largely the basis of the corporate life of "Ganges", every effort should be made to reduce this weight of administration. The establishment would benefit, as it would allow a much more accurate estimate of the tempo of the life and activity to be assessed, and such adjustments made as experience proved necessary.

There are Anglican chaplains, and a Roman Catholic chaplain, and one other chaplain who is responsible for all Free Church and Church of Scotland boys. There are three chapels so that it is possible for all boys to fulfil their normal church duties. Divisions and prayers are held each morning before instruction starts.

All the boys feed in the large new dining halls. Except for the breakfast menus, which appear meagre, food is plentiful and of good quality but a great deal of it is not eaten. This may be due to the fact that some of it has been put on plates some hours before it is served, although it has been kept hot meantime. There is some attempt to run the meals on a modified cafeteria system, with boys of a division sitting together. In fact the attempt to get the meal over quickly gives it an extremely impersonal character and at present it has no social value whatsoever. No reason could be found for the rush as the boys appeared to be allowed plenty of time to eat the meal in comfort. It would be most regrettable if the organisation of the fine new dining halls, with all their splendid equipment, proved a major handicap to satisfactory social training.

The centre of a boy's domestic life is his mess. Each mess has 40 boys. Here he has his bed, boot-rack and clothes locker. The messes are well heated and ventilated and contain their own washing facilities, bedding stores and airing rooms. The daily routine extends from 0600 to 2100, but boys start turning in from 2000 onwards. There is no instruction on Wednesday and Saturday afternoons, or on Sundays. For most boys the routine makes them healthily tired when they turn in. When extra-duties are added, boys might find themselves overloaded. It is very gratifying to note that the information room and library and a large number of voluntary activities (including hand-crafts and model making, drama and playreading, gramophone and choral societies, art classes, radio and photographic clubs) are available during off-duty periods. These are usually in the afternoon and dog watches. The provision of leisure time and the wide choice of interests are valuable means of developing character, and the officers responsible for these activities deserve every encouragement. Another important aspect is the provision of local leave on Saturdays and Sundays. This means that a boy may go to Harwich, Felixstowe or Ipswich on an average about every second week. The leave starts at 1300 and expires at 2030: it is interesting to find there have been no leave breakers. On Wednesdays, Saturdays and Sundays the cycling club go for a run. A number of dances, to which local girls are invited, are held and there is a Highland dancing group.

After sixteen weeks of the course for A.C. boys or twenty weeks for the others, a boy may be promoted to a first class boy with an increase in pay to

3s. 6d. per day. The divisional officer makes the recommendation after consulting both the school and technical class instructors. About forty per cent are promoted at their first opportunity. The cases of the others are reviewed every four weeks thereafter, and, if they are turned down twice, they are interviewed by the Commander. Boys of higher rank are called badge boys; they include leading boys, petty officer boys and instructor boys. Any time after eight weeks on the course the divisional officers can recommend boys for acting leading boys. In fact the normal time for such a recommendation appears to be at least twelve weeks. After a month as an acting leading boy, the rank is confirmed if the boy proves satisfactory. These boys help the technical instructors in the messes. A boy, who has been confirmed as a leading boy for eight weeks, can be recommended to the Captain as a petty officer boy. Instructor boys are very carefully selected. They remain in the establishment for ten weeks after their course is finished and give all kinds of help in the new entry block. Only about one boy out of one hundred and fifty reaches this rank; many are potential officers.

The boys were well mannered and tidy in appearance and habits. The improvement in their general attitude and outlook whilst at "Ganges" was very noticeable. This is a tribute both to the quality of the boys and to the interest of the officers and ratings who are responsible for their training.

## GENERAL CONCLUSION

There is much good solid work going on in the establishment but in practically every subject the quality could be improved if more individuality were allowed to creep into the instruction. The staff is suitably qualified and hard working. The equipment and facilities are often good and in some cases exceptional. The boys gain much from their stay in the "Ganges" educationally, physically and socially. In general the establishment is serving the Royal Navy well, and makes a serious and sustained effort to train citizens as well as sailors.

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## APPENDIX I

### Accommodation

#### *School :*

- 34 Lecture Rooms
- 2 Workshops (Woodwork and Metalwork)
- 2 Laboratories (Electrical and Mechanics)
- 1 16 mm. Cinema Projection Room

#### *Seamanship :*

- 15 Lecture Rooms
- 1 16 mm. Cinema Projection Room
- Pier and Hard taking 32 boats

#### *Gunnery :*

- 9 Lecture Rooms
- 2 16 mm. Cinema Projection Rooms
- 9 Demonstration Rooms (including Gun Batteries) for Fire Control, Gun Demonstration, etc.
- 3 Rifle Ranges

*Communications :*

- 1 Large Lecture Room (also used as 16 mm. Projector Room)
- 1 Radio Theory Demonstration Room
- 2 Visual Signalling Demonstration Rooms
- 2 Wireless Telegraphy Demonstration Rooms
- 2 Touch Typing Rooms
- 9 Classrooms fitted for Wireless Telegraphy reception and transmission
- 1 Voice Teacher comprising 24 cubicles with two control cubicles

*Physical Training :*

- 3 Gymnasia
- 1 Swimming Bath
- 50 Acres of Playing Fields

*Social Amenities and other Accommodation :*

- 2 Libraries and Information Rooms
- 1 Drama Club Room
- 1 Photographic Club Darkroom
- 1 Cycling Club Room
- 1 Aero Modelling Room
- 1 Leatherwork Room
- 1 Radio Club Room
- 1 Coxswain's Club Room
- 1 Museum

## APPENDIX II

### Technical Staff

*Seamanship :*

- 1 Lieutenant Commander, R.N.
- 3 Commissioned Boatswains, R.N.
- 34 Active Service Chief and Petty Officers fully qualified as technical instructors.
- 8 Divisional Officers (Lieutenant-Commanders or Lieutenants, R.N.) also instruct, part-time.

*Gunnery :*

- 1 Lieutenant Commander, R.N.
- 2 Commissioned Gunners, R.N.
- 26 Active Service and 4 Pensioner Chief and Petty Officers qualified after special course as Naval Gunnery Instructors.
- 8 Divisional Officers (Commissioned Gunners, R.N.) also instruct, part-time.

*Communications :*

- 1 Lieutenant Commander, R.N.
- (a) *Wireless Telegraphy.* 1 Commissioned Communications Officer, R.N.
- 28 Chief and Petty Officer Telegraphists qualified as Instructors and 3 Leading Telegraphists.
- (b) *Visual Signals.* 1 Commissioned Communications Officer, R.N.
- 17 Chief and Yeomen of Signals qualified as Instructors and 3 Leading Signalmen.

*Physical Training :*

- 1 Lieutenant, R.N., specialised in Physical Training and Sports.
- 1 Commissioned Physical Training and Welfare Officer, R.N.
- 2 Staff Physical Training Instructors.
- 16 Physical Training Instructors (all Petty Officers, Leading Seamen, or Sergeants, Royal Marines).

*New Entry Course :*

- 1 Lieutenant Commander, R.N.
- 1 Commissioned Gunner, R.N.
- 10 Chief and Petty Officer Instructors.



### APPENDIX III

#### School Time-Table

##### SEAMEN CLASSES "A" AND "B" WEEKS

Period	Monday	Tuesday	Wednesday	Thursday	Friday
0900-1045	S	P	0900-1200	P	S
1105-1250	P	S	'A' Week S	S	P
1700-1835	P	S	'B' Week P	S	P

##### COMMUNICATIONS CLASSES "A" WEEK

0900-1045	P	S	0900-1200	S	P
1105-1250	P	S	S	S	P
1700-1835	P	S		S	P

##### COMMUNICATIONS CLASSES "B" WEEK

0900-1045	P	S	0900-1200	S	P
1105-1250	S	P	P	P	S
1700-1835	S	P		P	S

Notes:—

1. A and B weeks follow one another alternately throughout the term.
2. When the starboard watch (S) is in school, the port watch (P) is at technical instruction, and vice versa.

#### Allocation of School Periods per Fortnight

<i>Advanced Course (A.C.)</i>		<i>General Course (G.C.)</i>	
<i>Subjects</i>	<i>Periods of 50 mins. each</i>	<i>Subjects</i>	<i>Periods of 50 mins. each</i>
Mathematics	7	Mathematics and Mechanics	8
Mechanics	2	Magnetism and Electricity	6
Magnetism and Electricity	6	Navigation	4
Navigation	4	English	3
English	2	History, Geography and Citizenship	6
History, Geography and Citizenship	6		
Total	27	Total	27

Notes:—

1. Each class spends 27 periods of average length 50 minutes in school per fortnight.
2. One half-hour period per fortnight, at times to suit the convenience of the chaplains, is devoted to religious knowledge.
3. During part of the course one session of 2 periods per fortnight is taken for other subjects, for woodwork and metalwork.

#### Technical Instruction (Seaman Boys)

<i>Subject</i>	<i>Total number of Periods of 50 minutes each</i>
General Lectures	20
Physical Training	70
Kits	50
Seamanship	148
Gunnery	152
Total periods of Technical Instruction	440

**Technical Instruction (Communications Boys)**

*General*

<i>Subject</i>	<i>Total number of Periods of 50 minutes each</i>
Gunnery	12
Parade Training	31
Kits	50
General Lectures	12
Physical Training	94
Seamanship	46
Communication (W/T or V/S)	626
Total periods of Technical Instruction	<u>871</u>