

H.M.S. "RALEIGH"—STOKERS TRAINING ESTABLISHMENT

by

COMMANDER (E) J. A. OSBORNE, D.S.C., R.N.

This article has been contributed to give some idea of the present training of Stoker Mechanics before they join the Fleet and is based on the experience of H.M.S. "Raleigh" after one year as a Training Establishment.

It is intended to contribute a further article dealing with special subjects in more detail.

ACCOUNTS OF EVENTS LEADING TO THE MOVE FROM "IMPERIEUSE"

In August, 1947, the Part II (Technical) Training of all stokers was carried out in H.M.S. *Imperieuse*, at Devonport. At this period *Imperieuse* consisted of the battleships *Revenge* and *Valiant* moored side by side in the vicinity of H.M.S. *Defiance* and the aircraft carrier *Unicorn* moored in mid stream abreast them. *Resolution*, the true partner of *Revenge*, had just completed a conversion refit and had not yet joined the group.

Accommodated in *Revenge* and *Valiant* were approximately 1,000 Continuous Service and Special Service Stokers, and in *Unicorn* approximately 750 National Service Stokers; the duration of the course at that period being eight weeks for Continuous Service and Special Service and five weeks for National Service Stokers. *Imperieuse* had then been in existence for some three years and, after what must have been considerable teething troubles, had been worked up into an efficient Establishment. It was apparent, however, that, although satisfactory as far as it went, *Imperieuse* training suffered from a number of grave disadvantages. The principal of these were lack of classroom accommodation, lack of amenities (not even a cinema on board and only one football ground available ashore), lack of assembly space and inferior living accommodation, and above all the difficulty of exercising strict supervision (which was absolutely necessary) in hulks which were full of holes and corners. By way of example the amount of petty thieving which went on in *Imperieuse* at this time was depressingly high.

Although it was realized that *Resolution*, whose conversion had included a covered Quarter Deck (providing limited gymnasium, covered assembly and cinema space), up-to-date messing arrangements and additional classrooms, would do much towards offsetting these disadvantages, it was generally felt at this time that essentially what the men required was disciplinary training in the broadest sense, even at the expense of Technical Training. For this purpose



H.M.S. "RALEIGH"—VIEW OF ESTABLISHMENT (TO RIGHT OF ROAD ONLY)

Imperieuse was and always would be unsuitable. Although such thoughts had been in mind for some time the incident which brought matters to a head was the suggested introduction of Boy Stokers entry. The scheme for training visualized for this entry would entail lads of some 15½ years of age spending nine months in *Imperieuse*; such a thought was appalling. Conditions were bad enough when applied to youths of 18 for only eight weeks; applied to young boys for nine months they were unthinkable.

It can be appreciated, therefore, that when the *Raleigh* establishment was offered to the engine-room branch as a replacement for *Imperieuse* as the Stokers Training Establishment the offer was accepted with alacrity. A shore establishment provided with an attached ship for afloat training seemed then, and still appears to be, the ideal training establishment for stokers.

The move from *Imperieuse* to *Raleigh* (Operation Ararat) started in mid December, 1947, and was completed in three phases without interruption in training by 2nd February, 1948, when Captain (E) P. C. Taylor assumed command of H.M.S. *Raleigh* as Stokers' Training Establishment.

It is interesting to note that one of the minor decisions to be made at this period was whether to retain the name *Imperieuse* or assume the mantle of *Raleigh*. In default of any convincing explanation why the name *Imperieuse* had been selected initially, it was felt that there was a strong reason in favour of retaining *Raleigh*. This was the magnificent spirit of co-operation displayed by the Commanding Officer and all concerned in H.M.S. *Raleigh*. These officers were extremely proud of their establishment and it was therefore decided to perpetuate the name.

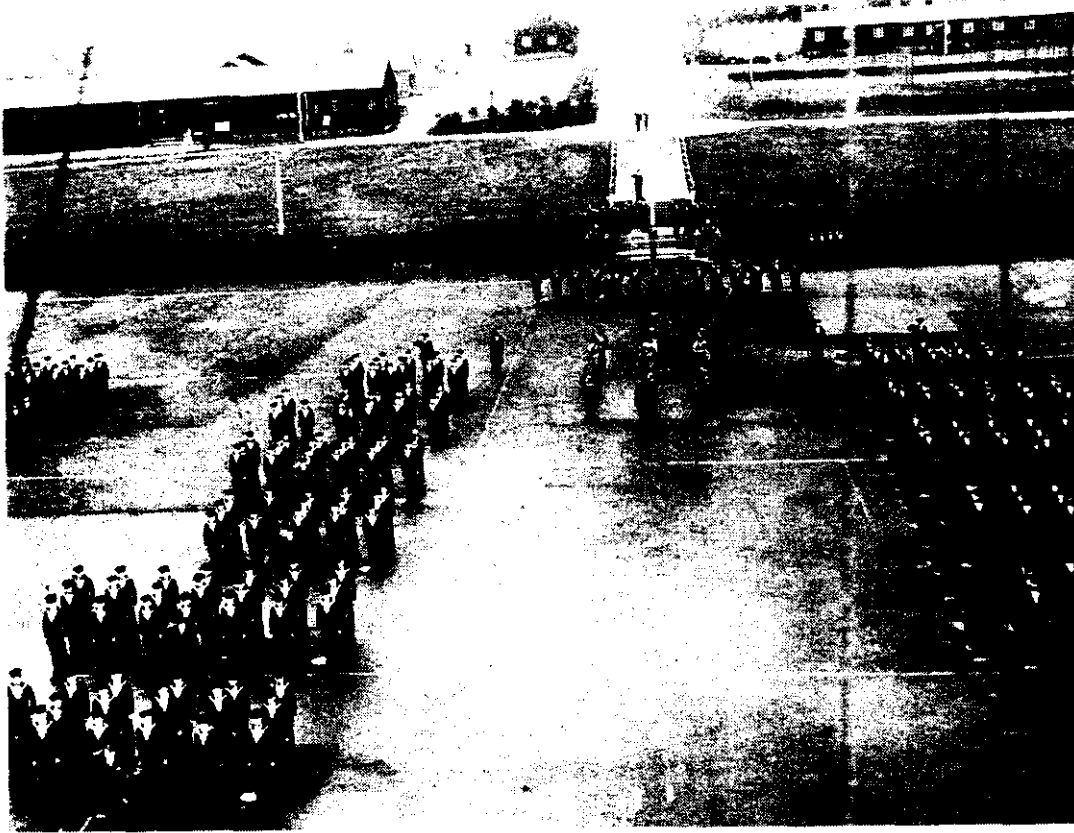
SITUATION AND DESCRIPTION OF ESTABLISHMENT

H.M.S. *Raleigh* is situated in the country about a mile west of Torpoint in East Cornwall, and lies to the north and west of the Gunnery School Rifle Range at Trevol. For the laying out of such an establishment this site was well chosen. The general aspect is south while the ground slopes in this direction and at the same time tends to converge upon Pisky Pool, an inlet off St. John's Lake, as a focal point, so that from the vicinity of the parade ground the land runs gently upwards along all radii of the semi-circle so centred. The enclosed area is about 130 acres.

The general layout of buildings can best be seen from the view on page 3. The main point to notice is that the buildings are grouped in four blocks. Each block comprises a self contained living unit though, as will be described later, the south westerly block is divided into two separate parts. Centrally situated and close to the entrance gateway are groups of huts occupied by the officers and staff of the main controlling departments such as administration, supply, training, etc. The main cinema and a canteen are also situated in this vicinity as are a post office and a shop. The entrance road, bisecting the establishment along a north and south line, runs direct to the centre of the parade ground, meeting the main circular road which runs along the south of the blocks.

As a site this might be said to be ideal, except for the shallow and muddy nature of St. John's Lake which makes boatwork or bathing from the foreshore impossible. Under all but high tide conditions the so-called lake is a muddy expanse and to see the place at its best the tide must be in. The best that can be said of the expanse of mud usually in view is that it does not smell.

On the north side of the main road and rather to the east of the main establishment are very good playing fields which occupy some 19 acres and include three soccer, one hockey and one rugger pitch for winter use or, in summer,



H.M.S. " RALEIGH "—PARADE GROUND

one good and some adequate cricket pitches and an athletic ground. In this vicinity also are the Main Sick Quarters which consist of a small and extremely well equipped hospital unit.

There are advantages and disadvantages of being on the Cornish side of the Hamoaze. There is little doubt that the situation of the establishment takes at least one hour off ordinary night leave, *vis-à-vis* the R.N. Barracks ratings. To miss one bus in Plymouth can mean missing the ferry at Torpoint, which inevitably means breakage of leave. This, however, corresponds with the missing of the liberty boat, and is therefore excellent training.

The overwhelming advantage of being away from city distractions outweighs any disadvantage the ferry barrier imposes, as far as training goes.

THE ATTACHED CRUISER

The *Fiji* class cruiser, H.M.S. *Newfoundland*, attached to H.M.S. *Raleigh* and moored in the Hamoaze nearby, allows of some practical instruction and experience of shipboard life during the Part II training period. Access to the ship is maintained from Trevol pier which is conveniently close to both the ship and the parent establishment.

A further important function of the attached cruiser is the preliminary training of accelerated advancement candidates which is an important sideline of the main training given in *Raleigh*. The success of this scheme is likely to be considerable and its corner stone is the *Newfoundland*.

THE FUNCTION OF THE ESTABLISHMENT

A brief outline of the particulars of the five different training categories follows. Of these the Adult Part II training is the basic and by far the largest commitment of the establishment. Part I training was introduced in January, 1949, to relieve overcrowding in H.M.S. *Royal Arthur*.

Adult Continuous Service and Special Service Stokers

These do two weeks at H.M.S. *Royal Arthur* on entry—for kitting up, joining routine, preliminary parade instruction and interview and test by the Personnel Selection Officer.

The Part I Training course at H.M.S. *Raleigh* lasts four weeks with a syllabus similar to H.M.S. *Royal Arthur*. The training is essentially disciplinary and seamanship.

The average entry number is about 70 ratings per week.

Adult Continuous Service and Special Service Part II

The course is of 15 weeks duration including three weeks in the attached cruiser. This is the standard training and consists broadly of theoretical technical instruction and school instruction.

The course comprizes, weeks 1-3—technical instruction; week 4—camp duties; weeks 5 and 6—school instruction; weeks 7 and 8—technical instruction; weeks 9-11—afloat training in H.M.S. *Newfoundland*; weeks 12 and 14—technical and educational instruction.

National Service Adult Stokers Part II

These are received from H.M.S. *Royal Arthur* having completed three weeks Part I training.

The duration of the course in *Raleigh* is eight weeks.

On arrival, this entry, after a part week joining routine, joins up with the appropriate ex-Part I Adult Continuous Service and Special Service entry and does a similar first eight weeks training (except that technical instruction replaces school instruction in the fifth and sixth weeks).

At the end of eight weeks instead of proceeding to *Newfoundland* with the Adult and Continuous Service and Special Service they are drafted to Depot for disposal.

The average entry number is about 30 per week.

Junior Stokers Part II

This entry is approximately one year younger than the Adult entry and is kept segregated as far as possible. They are received from *Royal Arthur* having completed six weeks Part I Training there.

The duration of their course is 15 weeks, i.e., the standard Part II training including *Newfoundland* time, except that additional school instruction replaces camp duties in the fourth week and technical instruction in *Raleigh* replaces the final (workshop) week in *Newfoundland*. In other words, apart from segregation these Juniors are treated almost the same as the Adult Continuous Service and Special Service entry.

The average number is 12 per week.

Accelerated Advancement Candidates

Approximately ten outstanding ratings per week are selected after eight weeks of the Part II course from Continuous Service, Special Service ratings and Junior Stokers.

These candidates proceed to *Newfoundland* in their ninth week with their ordinary contemporaries. They do normal ninth week instruction in *Newfoundland* (i.e., general engineering). They are then completely divorced from the remainder and complete their training there without returning to *Raleigh*. Training in *Newfoundland* consists of advanced school (approximately 75% pass E.T.1 equivalent before leaving) and a preliminary A.W.K. course.

The duration of the course in *Newfoundland* is five to eight weeks—the disparity in length being due to the fact that they are selected for onward draft monthly.

On completion of the course up to 35 per month are selected for accelerated advancement. Of these 20 go to the Training Squadron—the remainder (if any) to selected seagoing ships under special report (Admiralty Fleet Orders 1523/48 and 3579/48). Those drafted to seagoing ships must have passed E.T.1 equivalent. Those who are not selected for special advancement (i.e., have not made the grade during the course) are drafted to Depot in the normal way—but may count *Newfoundland* time towards sea time for advancement purposes.

TRAINING OBJECTIVES

The objects of Part II training are :—

- (a) To continue the disciplinary and citizenship training already begun in Part I training.
- (b) To give each man, within the limits of the time available and his powers of absorbing a new object, such knowledge as will equip him to carry out his duties as a stoker on arrival in his first ship and to form a sound basis upon which his future practical training will be founded.
- (c) To provide a general knowledge of the construction, layout and maintenance of main and auxiliary machinery as fitted in His Majesty's ships with a more detailed knowledge of boiler room machinery.
- (d) To provide as much practical experience as possible in the time, particularly of boiler room duties which are normally the lot of a man joining his first seagoing ship.
- (e) To give a general primary education in damage-control with particular emphasis on that part which a stoker must know if he is to play his part in ship damage-control organization.
- (f) To brush up and improve as much as possible, again in the very limited time available, his educational standard.

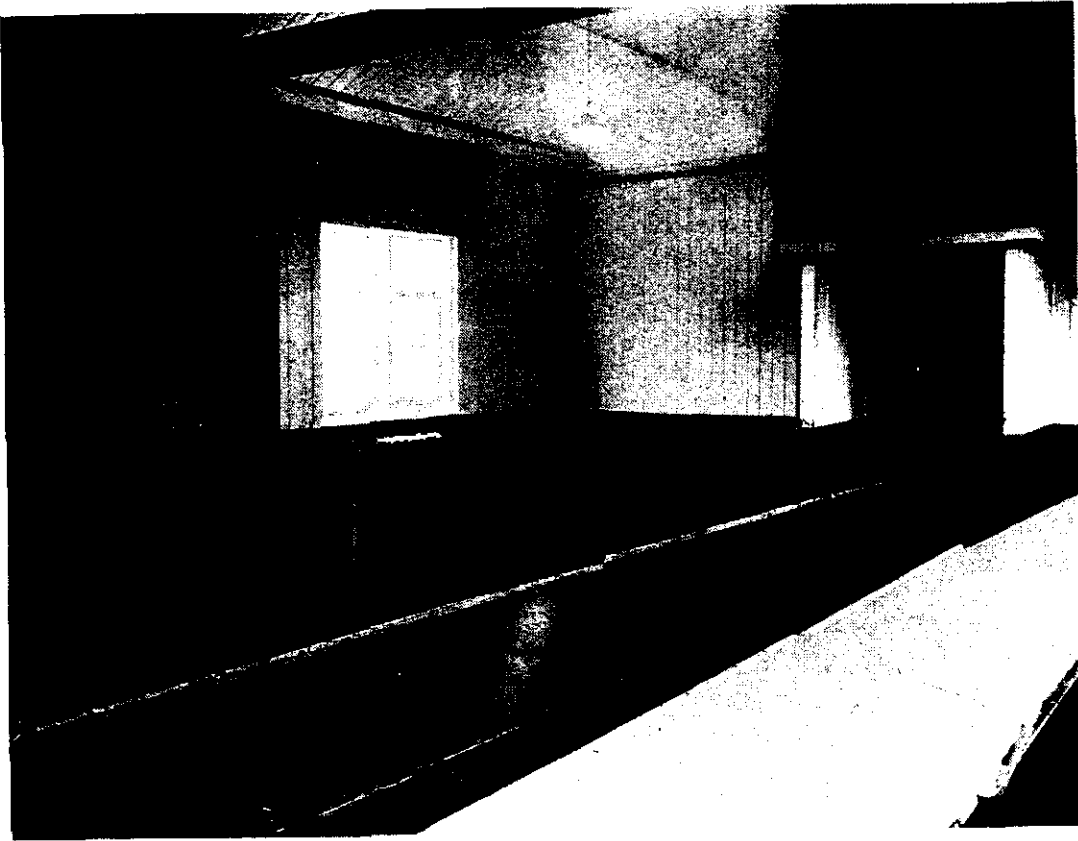
Of these six requirements the first is probably the most important as, with the quality of entry generally experienced, it is not possible in the six weeks of Part I training to do more than commence this training and it is very firmly believed that only a disciplined individual and a good citizen can make a good stoker mechanic.

STAFF AND METHOD

The syllabus briefly outlines the subject matter to be covered in each lecture and references to the Machinery Handbook, B.R.77, are noted.

Petty Officer Stoker Mechanic Instructors, with these aids, use their own methods to impart knowledge to their classes. Only in one or two cases are written lectures supplied, generally where subjects are not considered to be adequately covered by the Machinery Handbook.

Petty Officers, within certain limits, plan their own lectures, rather than using detailed written lectures. The latter course might lead to the employment of



H.M.S. " RALEIGH "—TYPICAL CLASSROOM

"copybook" tactics by the Instructor with consequent loss of the personal touch which is all important if instruction is to be "alive" and penetrating.

Similarly with the damage-control lectures only headings are given, the conduct of the lectures being left entirely to the Chief Petty Officer Stoker Mechanic Instructors. It should be noted, however, that in this case the Instructor specializes in the one subject.

GENERAL OUTLINE OF SYLLABUS

Joining Week

National Service ratings join direct from *Royal Arthur* on the Monday of each week and spend their joining week in settling down. Early in the week they draw loan bedding, are medically examined and so on, and later in the week they receive lectures on matters of general service interest and importance.

Continuous and Special Service (adult) ratings who join their Part II training block from Valiant Block have already worked a joining week routine in their *Raleigh* Part I syllabus. They are employed on camp duties in Valiant Block during this intermediate week although being accommodated in Part II billets.

First to Third Weeks

These consist of engineering and damage-control lectures with a normal allocation of recreation, P.T. and Divisional Officer's periods. Towards the end of the third week, after a short revision period, classes sit their first written examination in engineering and damage-control. A man who fails will be required to do extra work set by his Divisional Officer until he comes up to scratch.

Fourth Week—Camp Duties

Thirty-four of the Continuous Service and Special Service section provide the camp guard for the week ; the remainder are employed as messengers and working parties in the establishment.

Fifth and Sixth Weeks

The Continuous Service and Special Service section have school instruction with a written examination in English and arithmetic on the Friday of the sixth week. Failure to qualify with the requisite 40% in either or both of these subjects involves compulsory attendance at evening classes for the rest of a man's time on course and further examination in that subject in the fourteenth week.

A man who obtains 80% in each subject in this examination should be likely to pass an E.T.I examination and will, on the Headmaster's recommendation, be allowed to sit either E.T.I, or an equivalent examination.

For the National Service Section the fifth week is very similar to the instruction carried out by Continuous Service and Special Service stokers in the eleventh week in *Newfoundland*, in that one day is spent at the Fire Fighting School, one day at sea in a destroyer or frigate of the local flotilla, and one afternoon at the swimming bath. For the rest of the fifth week their time is spent in the demonstration rooms and on leadership training on the parade ground.

The sixth week consists of revision lectures in engineering and damage-control.

On Saturday of the sixth week National Service ratings sit a school examination similar to the one taken by their Continuous Service and Special Service counterparts. This is done to determine the educational standard attained by each rating and serves as a reference for use either in the event of future call-up or as the gauge of a National Service stoker who wishes to transfer to a long service engagement.

The National Service, Continuous Service and Special Service sections combine for recreation, P.T. and religious instruction in these weeks.

Seventh and Eighth Weeks

Consists of engineering and damage-control lectures and other instruction generally as for the first to third weeks.

On Thursday of the eighth week National Service stokers sit their final examination in engineering and damage-control, and, if they pass, they are drafted to their respective port divisions for onward drafts to ships. If they fail, they are back-classed a week or two weeks and have to take the examination again. So far only one has failed after being back-classed.

On the same day approximately twenty Continuous Service and Special Service stokers (adult and junior), picked for outstanding general ability, sit the same examination for selection for the Accelerated Advancement course. Of the twenty, about ten are finally chosen by a selection board and these transfer to *Newfoundland* for a special training at the end of their ninth week of normal instruction.

On Saturday of the eighth week the Continuous Service and Special Service sections are drafted to *Newfoundland* for three weeks ship training. The Divisional Officer, Divisional Chief Petty Officer Stoker Mechanic and Petty Officer Stoker Mechanic Class Instructors accompany the division to *Newfoundland*.



H.M.S. "RALEIGH"—DINING HALL

Ninth, Tenth and Eleventh Weeks—*Newfoundland*

Ninth Week—Technical Instruction

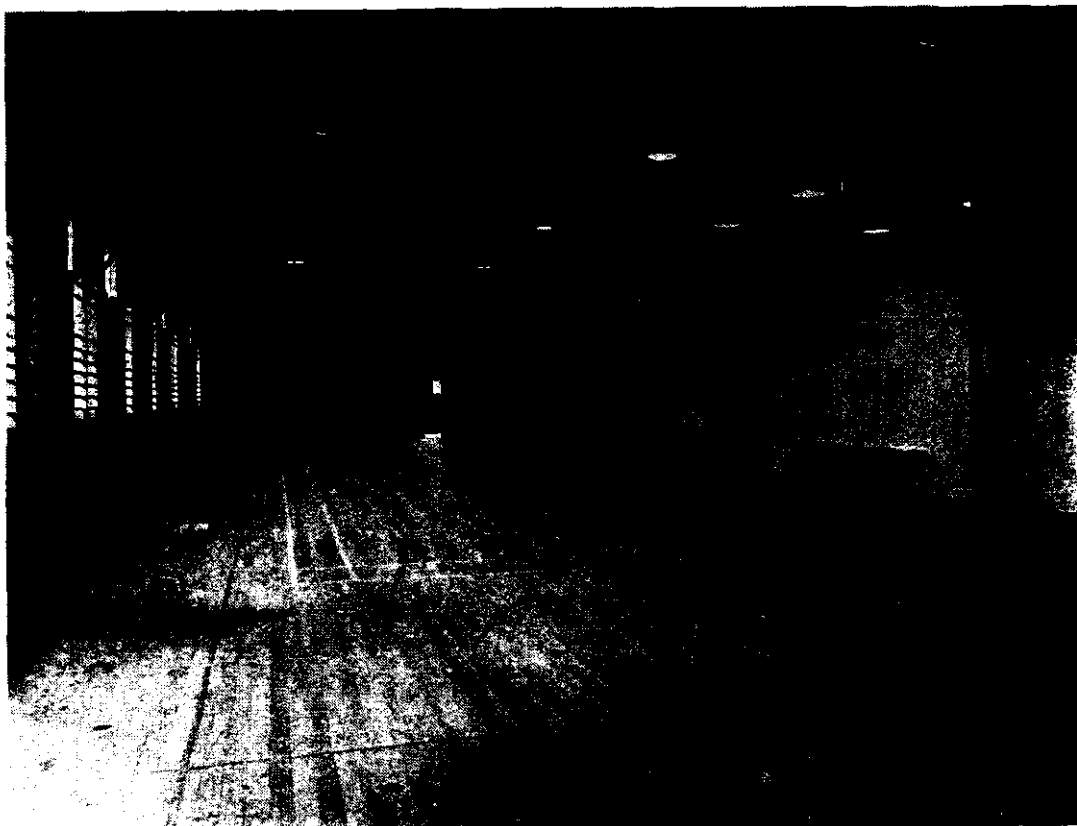
The division is split up into eight classes for this instruction ; the Divisional Petty Officer Stoker Mechanics take four of these classes and four "ship" Petty Officer Stoker Mechanic Instructors take the remaining four classes. Each class then visits every machinery space in the ship and receives instruction on the machinery therein. Each rating does one period of boiler tending to gain practical experience and confidence in sprayer manipulation.

Tenth Week—Work Ship

The division here provides all the upper deck hands required for working the ship. Boat crews are picked from those stokers who have passed the swimming test during their Part I training. *Newfoundland* was made available for use as a tender on the understanding that only a very small number of key seaman ratings would be required to "work ship" and so each division in its tenth week provides the working hands.

Eleventh Week—Seamanship Instruction

In this week the division does one day at the Fire Fighting School at the Royal Naval Barracks, and one day at sea in the Plymouth Flotilla duty destroyer or frigate, while stokers who have so far failed to pass the swimming test are given further instruction in the Royal Naval Barracks swimming bath.



H.M.S. "RALEIGH"—GYMNASIUM

Twelfth, Thirteenth and Fourteenth Weeks

This period is used for general revision of engineering and damage-control with a total of eight further "school" periods plus the normal recreation, P.T., Divisional Officer's and religious instruction periods.

Early in the fourteenth week stokers who previously failed the "School" examination at the sixth week sit a further examination.

On Thursday of the fourteenth week the division sits its final examination in engineering and damage-control. One or two ratings who do well in this examination may still be selected for special training for the accelerated advancement course—this small late selection is arranged as an inducement to those who came near selection in the eighth week to continue working in the later weeks of the course though only very occasionally are any suitable ratings missed at the eighth week selection.

Those who pass are drafted to their respective depots on Tuesday of the fifteenth week for onward drafts to ships.

Summary

The 15 weeks training consists of 74 instructional days of five periods each. Of this period 22% is devoted to engineering lectures and films, 11% to School instruction, 11% to P. & R.T., 9% to divisional officer's talks, etc., 7% to practical technical instruction, 7% to camp duties, 7% to part of ship in *Newfoundland*, 5% to seamanship, 4% to damage-control, 3% to parades and parade training, 2% to current affairs, 2% to religious instruction, 1% to fire-fighting, the remaining 9% being occupied by miscellaneous lectures, medical, dental, supply, R.N.B.T., master-at-arms, examinations, revision, kit musters, etc.

DISCIPLINE, BEHAVIOUR AND MORALE

The value of the high standard of entry as determined by the Recruiters Test (R.T.) score insisted upon by the Engineer-in-Chief has been fully justified.

The R.T. score was raised in late 1947 from 35% to 45% and as a result Divisional Officers, who had served in *Imperieuse* before the standard was raised, were vociferous in explaining how simple training had become. Punishment returns justified their claims.

That this was due in part to the transfer to the better environment of *Raleigh* there is no doubt, but there is equally no doubt that the entry standard is closely related to the standard of morale and behaviour.

Subsequently the standard had to be relaxed to 35% but it has recently been possible to advance it to 40%.

On the whole the material can be classed as adequate, but occasionally glaring examples of sub-normal intelligence and confirmed petty criminals slip through the recruiting officer's hands.

Generally behaviour is good and few civil complaints are received. Petty punishment returns are not low, because discipline is intentionally a little exaggerated. Offences which would merely earn a hard word at sea are often taken to higher authority, and these swell the returns. Occasionally a division, upon entry, does not possess enough ratings of sufficient calibre to provide class leaders with enough personality to take effective charge. Unless this Division has a very strong Divisional Officer, or exceptional Chief and Petty Officers, it will inevitably give trouble.

It is most gratifying to see how most of the engine-room branch Chief and Petty Officers react to their appointment here. Few have done much parade ground work in their careers, but almost all work at this in their spare time on arrival, and give of their best.

There is no doubt, however, that a course at the Petty Officers course would be most beneficial to each one of them. In an effort to remedy this deficiency, a short one week Petty Officers' course was instituted at *Raleigh* in the early days. This was of the utmost benefit and, somewhat surprisingly, extremely popular. This course has now regrettably had to be abandoned owing to a shortage of instructors. It is, however, hoped in the future to get a greater number of men who have undergone the Petty Officers' course.

There is little doubt that the effect of plenty of space, uncrowded huts and dining halls, unpolluted air, well kept, well flowered surroundings and good recreation amenities have an immediate reflection upon the ease with which these young men are disciplined. In many cases it is obviously a great and satisfactory change of environment.

The introduction of Part I training into *Raleigh* itself will also have beneficial results. Ratings no longer have to learn a new routine after a short introductory course. Nor do they any longer have the feeling that having "learnt the ropes" they will know how to "swing the lead" when they reach their next ship.

CONCLUSION

It is fitting as a tailpiece to quote the words of the first Commanding Officer of H.M.S. *Raleigh* as a Stokers Training Establishment :

"It appears to me that the modern trend in all walks of life is that a man's 'qualifications' should be judged almost entirely by his capability for absorbing knowledge and less and less account is taken of his character, integrity and powers of leadership.

“ I am convinced that no organization (and in particular a disciplined service such as the Royal Navy) can thrive under these conditions but will inevitably deteriorate.

“ If one accepts this, then the seed of reform must be sown early and at all levels in all communities and this must therefore include the Stoker Mechanic, and it is with this object in view that the observation that ‘ Failure to produce a decent citizen will almost inevitably mean failure to produce a Stoker Mechanic ’ has been made the keystone of the training.

“ The technical knowledge essential to a Stoker Mechanic could be learnt in a ship, but the teaching of citizenship (and in this I include education) is much more difficult and in any case I consider the ship has the right to expect a rating to be so trained before joining. This training can best be done by subjecting a rating to a strict, wise and fair discipline at the earliest opportunity under close supervision and in congenial, well kept surroundings in which he can take a pride. For this purpose H.M.S. *Raleigh* is ideal.”

POSTSCRIPT

(A.F.O. 117/50—*Training of New Entries*—lays down the Part I syllabus and transfers all of this training to H.M.S. *Raleigh*.)