TRAINING OF MIDSHIPMEN (E) AT SEA

by

LIEUTENANT (E) J. F. WEBB, R.N.
H.M.S. Anson

In implementation of the new Basic Engineering course which started at the Royal Naval Engineering College in September, 1948, the term of Cadets (E) who completed their training in H.M.S. *Devonshire* in December, 1947, were appointed to ships of the Fleet for a further eight months instead of joining the R.N.E.C.

At first some difficulty was experienced in convincing all those concerned that these were brand new Midshipmen (E) with little engineering training. Up to that time, the only Midshipmen (E) seen at sea had been those with 12-20 months seniority (R.N.E.C. fifth and sixth terms) who, however little their actual knowledge might have been, always succeeded in giving the impression of being acquainted with their subject. The position was further complicated by the shortage of sea-going ships which made it necessary for some ships to carry Midshipmen (E) of both categories.

In each ship an Instructor Lieutenant (†) has been available to deal with the 100 hours of mathematics and mechanics instruction, which is designed to consolidate and bring the knowledge of these subjects up to a common basis and replaces a considerable part of the R.N.E.C. First Year syllabus.

Organization of Engineering Training

Lieutenants (E) were either appointed specially or detailed from the ship's complement to take charge of the training arrangements. The organization of Engineering training has varied greatly in different ships, depending largely on whether the Lieutenant (E) in charge of Midshipmen (E) can afford to carry out full-time instruction or has other commitments. The procedure most usually adopted has been, after the initial introductory lectures, to attach groups of two or three Midshipmen (E) to each departmental Engineer Officer in turn. He is responsible for their instruction and employment in his particular department. This has been found to stimulate more interest in the Midshipmen (E) than to be shown round in a large group by someone who is not actually responsible for the machinery, etc., under discussion. It has, however, meant considerable additional work for departmental Engineer Officers and a heavy call on their time.

Every endeavour has been made to let the Midshipmen (E) feel that they are part of the ship's company ; all Midshipmen (E) are required to see any work of particular interest going on in the engine-room department and the Duty Midshipman (E) keeps in touch with any work continuing out of normal working hours. At sea they graduate through stages from boiler room stokers up to throttle watch-keeping E.R.A.s—in some cases, due to the manning situation, ships have been able to proceed to sea only by use of Midshipmen (E) in this capacity. As a result of sea and auxiliary watch-keeping during the dog watches in harbour it is considered justifiable to issue a form of Boiler Room and Auxiliary Watch-keeping Certificate. These are incorporated in the E.191 report form (similar to the E.190 but specially adapted for the new scheme of training).

The problem of letting Midshipmen (E) feel they are " in the run of things " is considerably eased when their numbers are reasonably small, about six–nine per ship being a good figure. Because of shortage of suitable ships this has sometimes been considerably exceeded—H.M.S. *Anson* had 18 for one four-month period and H.M.S. *Howe's* peak figure was 20.

Training with Other Departments

Courses with other departments have not always followed closely the time allocations of A.F.O. 4021/47, although this has been used for guidance. Particularly difficult to arrange in the Training Squadron have been Electrical and Supply Departments courses as both these departments are hard worked under present reduced complement conditions without the additional burden of teaching. Executive time has been fairly satisfactory though, with most ships, more sea time would make the watch-keeping less tedious. Where ships have large numbers of Executive Midshipmen whose employment in itself is a problem, the difficulty has sometimes been overcome by a complete exchange of Midshipmen between the Executive and Engineering Departments.

During such periods Midshipmen (E) have proved themselves every bit as capable of damaging boats and gangways as their Executive counterparts. However, with their determination not to be beaten by such things, they have proved quick to learn.

Gunnery and Aero Engineering

The Ordnance staffs in *K.G.V.* Class ships have given useful courses (though these may not have been so easy to arrange in carriers) and Gunnery Engineering interest has been further stimulated by lectures by the Fleet G/E Officer.

In ships other than operational carriers, the Aero Engineering interest has been successfully stirred by visits to R.N. Air Stations. R.N.A.S., Yeovilton, has been particularly co-operative in giving a very full week's course whenever requested.

External Courses

To provide small ship time has been difficult and has usually been done by ships making their own arrangements with local flotillas. It has rarely been possible to give more than a fortnight to this. Sea time was sometimes arranged in H.M.S. *Rochester* where there was a considerable amount of additional bunk accommodation. On one trip she was able to proceed to sea only because Midshipmen (E) made up numbers on the E.R. watchbill. On this occasion it was arranged that for one watch all the machinery compartments were manned entirely by Midshipmen (E). It was an anxious period for the Engineer Officer, and the C.E.R.A. was never far from the engine room ladder.

Local Submarine and M.T.B. Flotillas have proved ready and willing to take Midshipmen (E) to sea whenever they have been asked to do so and H.M.S. *Osprey* has been a great help in T.A.S. training.

Conclusion

Opportunities for visits to local experimental establishments, interesting ships, etc., are rarely passed by, and lectures on subjects of topical engineering interest, as well as introductions to such subjects as thermodynamics, are given at intervals throughout the course.

The practice in most ships has been to devote the last period of 10-14 days

to practical work in which Midshipmen (E), working in pairs, are given simple refitting jobs to do with as little supervision as possible which allows plenty of scope for individual initiative.

In short, as much as possible is done during the eight months at sea to stimulate a real engineering interest combined with a reasonable knowledge of how the Royal Navy works. We, at sea, hope and believe that the results of the First Year of the Basic Course at the R.N.E.C. will have justified our confidence in the value of this period of training.