

# THE FLEET SHORE ESTABLISHMENT

## SECTION: ENGINEER-IN-CHIEF'S

### DEPARTMENT

BY

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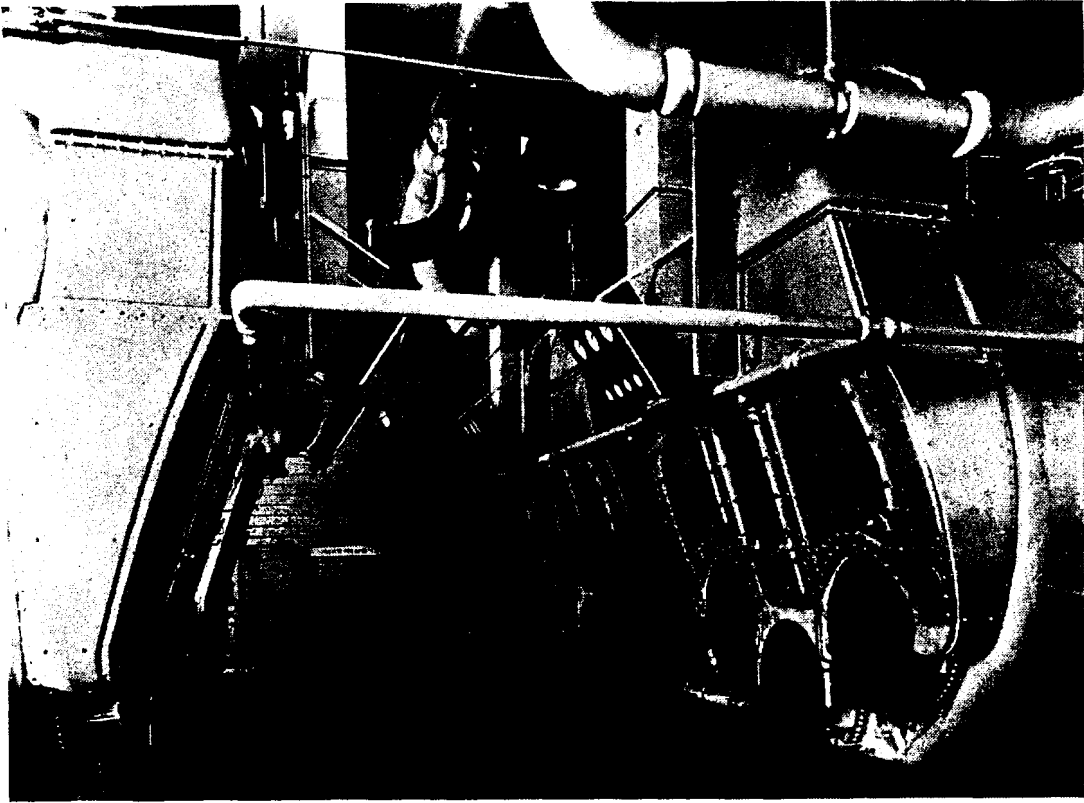
#### **Introduction**

A brief story of the activities of this Section may be of some interest now that it has passed from the orbit of the Department of the Engineer-in-Chief to that of the Director of Dockyards. Broadly, the Section was responsible for the examination of all machinery proposals for Fleet Shore and Research and Development Establishments, and the procurement and provision of approved items.

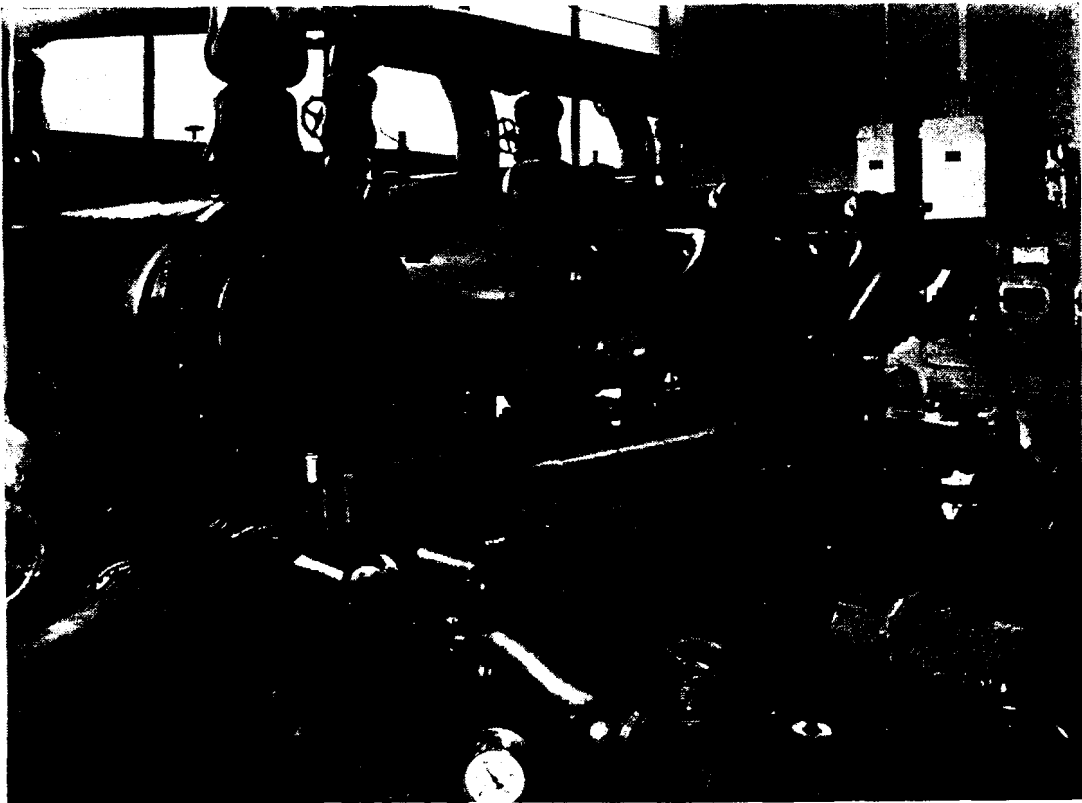
#### **Early History**

With the application of the 'Axe' after the First World War, which resulted in a large percentage of the Annual Proposal items being cut out, the work was dealt with by one draughtsman working at more than normal high pressure.

About 1936, with the rising power of Germany, the political situation became uneasy and this had early repercussions in the Section. Pressure was applied



A TYPICAL HIGH PRESSURE HOT WATER SYSTEM BOILER ROOM, INSTALLED BY G. N. HADEN & SONS LTD., AT THE ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT, PORTSDOWN HILL, PORTSMOUTH



OIL FUEL PUMPING INSTALLATION FOR HIGH PRESSURE HOT WATER SYSTEM AT A.S.R.E.

for the provision of increased shore accommodation and training facilities with consequent requirements for boilers, galley equipment, heating installations, machine tools and adaptations of requisitioned premises. Concurrently with this, many more items were included in the annual machinery proposals and a much higher percentage of items was approved as economy measures were relaxed. These circumstances led to a great increase in the volume of work in the Section and, in addition, machinery items were required for new boom defence depots and mine loop bases, etc. The tide of work continued to rise and by the time the war broke out in September, 1939, the Section had been expanded to three draughtsmen.

### **The Second World War**

Early in 1940 instructions were issued to all Commands that Annual Proposals were not to be forwarded, and only items which would contribute to the prosecution of the war were to be forwarded as and when they arose. The effect of this was to stop the normal supply of additional items and replacements for Fleet Shore Establishments, except certain training establishments which needed additions to cope with increased numbers.

However the tempo of the war continued to increase and the Fleet Shore Establishment Section was fully extended. It became necessary to equip rapidly new and requisitioned maintenance bases and new boom defence depots. Operations in Europe, Africa and elsewhere all required considerable quantities of equipment, often of a specialized type, and considering the normal delivery time, at comparatively short notice. Amphibious bases of various types and in ever increasing numbers were established, slipways sprang up all round the coast and many floating docks were built. Very large quantities of material were required for all these projects and the small hard pressed Section became even more hard-pressed than ever.

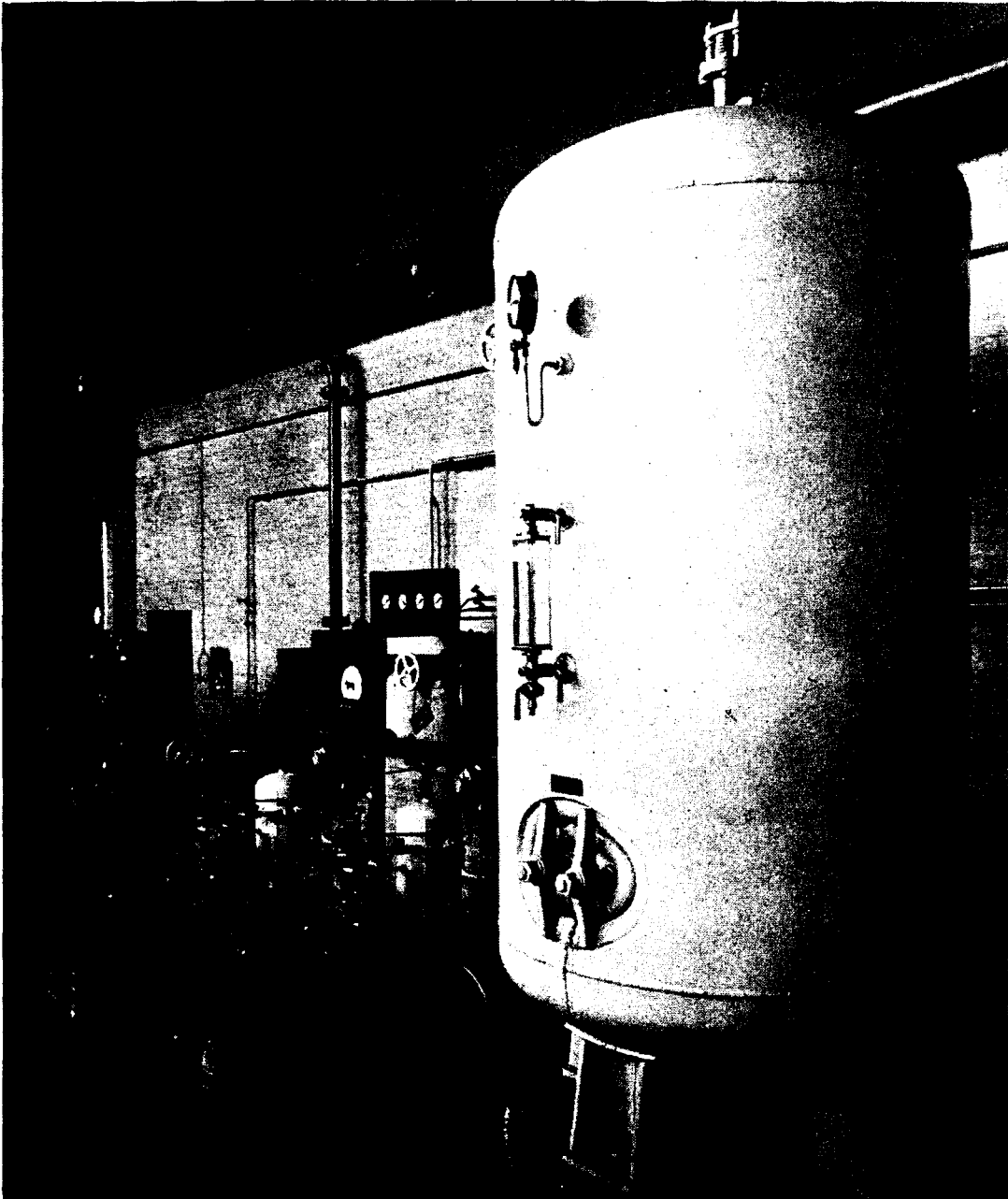
To meet the additional demand, the Section was increased from time to time by young but inexperienced people from the Royal Yards and outside. Their ardour was only equalled by their inexperience of Admiralty procedure. To complicate matters, controls were imposed on a great deal of equipment and although these served a good purpose generally they led to a great increase of paper work. Inter-Service and industrial competition for the equipment available greatly increased, and it became necessary to ensure that the naval requirement was carefully and adequately stressed—no easy task for those without a thorough knowledge of Admiralty ways.

Two of the greatest and perhaps most important problems at this time were the procurement of suitable slipway winches which were urgently needed to avoid holding up the offensive in Europe, and the supply of air conditioning plants, generators and workshop equipment for new wireless stations.

However, all's well that ends well, and the war work of the Fleet Shore Establishment Section was accomplished without disaster either to the members of the Section or to the Allied cause. With the successful cessation of hostilities it was hoped that there would be some easing of the strain. This was not, however, to be the portion of the Section.

### **The Peace**

The closing down of bases and de-requisitioning of property brought within its trail the urgent need for disposing of thousands of machine tools and other machinery, no easy matter in view of the shortage of storage space. Furthermore, all Fleet Shore Establishments required replacements for their old and worn out machinery which had been held in abeyance for the war years.



EXPANSION TANK, AIR COMPRESSORS AND BOOSTER PUMPS FOR THE HIGH PRESSURE HOT WATER SYSTEM

The review of the standard of living in the Navy and the quality and quantity of amenities, produced a large programme of expensive but necessary work and the Section found itself involved in the question of modernizing barracks and providing new and better galleys, heating systems and the like. It is notable that the Department was the first to arrange for the installation of the new and efficient high pressure hot water systems in Fleet Shore Establishments.

War experience had emphasized the great need for research and while the lessons were still fresh in the minds of the politicians, the Services and the public, Departments exploited the tendency to the utmost and there has in consequence been established a first-class chain of research establishments dealing with almost every phase of naval development. The price was great, but it is enough that it serves a vital need.

Two other complications arose to add to the work of the Section. Some members of the Section left the Admiralty Service to return to their proper peace-time occupations, and hard gained experience was lost. At the same time a return was made to the more formal peace-time procedure for Fleet Shore Machinery Proposals.

The stick seemed fully loaded for the now slender back of the Section, but a further difficulty was not long in presenting itself. The economic position of the country became increasingly grave as the work of national reconstruction, both material and social, was progressed. Heavy reductions in the Naval Votes, including that for machinery requirements of Fleet Shore Establishments, known as Vote 8.III.B(1), were imposed and as the list of vital requirements of equipment increased the amount of money available decreased. Large financial cuts were made even after the approved lists of work had been compiled.

These difficulties continued for some years, but, as shown by the following examples taken from the chief projects of the Section, the situation now seems to be fairly well in hand.

#### *Research and Development Establishments*

Unless there is any unforeseen additional commitment it is considered that the equipping of these establishments is almost completed, having regard to the large number of machinery items already supplied.

#### *Training Establishments*

A very large quantity of equipment has been supplied in recent years and further requirements should be few.

#### *Modernization of Barracks*

Most of the spade work has been done. Specifications for the 'High Pressure Hot Water Systems' have been agreed and tenders will shortly be invited in connection with Devonport Barracks. The system for the Royal Marine Depot at Deal is now in commission for those parts of the project which have been approved.

#### *Admiralty Signal and Radar Establishment, Portsdown, and Admiralty Gunnery Establishment, Portland*

The heating systems and workshop equipment are practically complete. Outstanding work is the extension of the existing contracts for the high pressure hot water system for the A.S.R.E. to include a further stage of the building contract. A few more machine tools are required for the Admiralty Gunnery Establishment.

### **Conclusion**

The change in Department for this Section is largely being made to ease administration and save cost, and it is also hoped that there will be some saving in personnel. Already the Director of Dockyards handles similar work for Naval Air Stations and Civil Establishments.

Having regard to the advanced stage of completion of most of the big jobs it is felt that the pressure on the Fleet Shore Section will now steadily ease. It is fortunate perhaps that the transfer is occurring now rather than two or three years ago. The recently revised procedure for Annual Proposals, and the making of the Director of Research Programmes and Planning responsible for research and development establishments, should also help to ease matters considerably.