FUTURE FLEET SUPPORT

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This article is based on the presentation given by the author at the Royal Naval Engineer Officers' Conference on 4 May 1984.

Only a small part of current work on future fleet support is covered in this article. Nevertheless it illustrates the wide range of subjects in the support field and serves to emphasize the changes and evolution taking place.

The Dockyards and Naval Bases-their Future Structure

The future of the Dockyards and Naval Bases has attracted a considerable number of studies in recent times. It remains a very topical subject in the Ministry of Defence and the future in some areas must remain as conjecture

until current work has proceeded further and some significant decisions have been taken. The current situation is that Chatham has closed and Gibraltar ceases to be a Dockyard on 31 December 1984. Gibraltar will then be operated on behalf of the Government of Gibraltar as a commercial shipyard by A & P Appledore International Ltd.; plans are in hand to retain a small base maintenance facility there able to support visiting ships and to undertake Assisted Maintenance Periods. Portsmouth Dockyard became a fleet maintenance repair organization on 1 October 1984 and it is currently planned that Portsmouth, in addition to its main task of providing support to ships in operational time, will undertake a single stream refit of Type 42 destroyers as well as Docking and Essential Defects periods. A unique feature of the transition from Dockyard to Naval Base at Portsmouth has been the negotiation of agreements to allow flexible working between Service personnel and civilians, a move which can only enhance the already close cooperation between Service personnel and civilians in the support area.

These changes will, of course, leave the two major dockyards at Devonport and Rosyth. It is possible that the future may see changes in the management of Devonport and Rosyth and current studies include the option that these Yards might be run by a contractor on a commercial basis with the Ministry of Defence still retaining overall ownership.

Support Ships

A significant fall-out from the Falklands campaign has been the reemergence into the Navy of the forward repair ship. The *Stena Inspector* (FIG. 1), an oil rig support ship, entered the naval service earlier in 1984 as R.F.A. *Diligence* (FIG. 2). She has a naval party embarked to man the



FIG. 1-M.S.V. 'STENA INSPECTOR'



FIG. 2--R.F.A. 'DILIGENCE' AFTER CONVERSION

workshops, craneage, and other maintenance facilities. For the foreseeable future it is expected that the forward repair ship will remain deployed in the South Atlantic. However, contingency work has been completed to set out the possible use of this flexible asset in other areas.

The replenishment ship of the future, the AOR (Auxiliary Oiler Replenishment) (FIG.3), is being designed as a one-stop Royal Fleet Auxiliary to provide general and victualling stores, ammunition, and POL. It will be cheaper than the equivalent number of single commodity ships and has an important part to play in the developing concept for the support of the Type 23 frigate.

Support for Trident

Inevitably as Trident support facility requirements evolve—including jetties, docking arrangements, and Trident missile support—significant effort is being allocated to this area.

ADP in the Support Area

The use of ADP in support is expanding. Current work includes the use of ADP for DGST(N)'s storeholdings, for the Naval Maintenance Data Centre, in the Dockyards, and in the Fleet through the OASIS Project. We are all working in areas where the need for efficient handling of data becomes even more apparent as the quantity of information to be handled increases, and as manpower decreases and becomes more expensive. These projects are high on Chief of Fleet Support's list of objectives—particularly assistance to the sharp end through OASIS, which is worth considering in more detail.

OASIS is being installed in ships to take on a whole series of support tasks covering stores, personnel, and engineering administration. In providing support OASIS is not attempting to change what is done, only how it is done.



FIG. 3-THE AOR-AN ARTIST'S IMPRESSION

The aim is to use machines to take over the repetitive and time-consuming manual handling of information to improve the availability of information both afloat and ashore, and to allow ships' staffs to devote more of their time to primary tasks. As with most developments there are other benefits which will follow from the achievement of the main purpose and the enhanced awareness of the cost of stores usage is one example.

The hardware used for OASIS is standard commercial equipment. This keeps cost and development down and enables the project, as it develops, to benefit from the rapid advances being made in equipment performance, and in the reduction in equipment size and cost. Nevertheless, a series of environmental trials have been imposed to ensure that the equipment will stand up to the rigours of shipboard life.

OASIS was approved by the Admiralty Board in 1979 and is going into the Fleet in phases:

- (a) The first phase started to be deployed in mid-1983 and has been designed to give the customers access to the information in the stores account with the aim of cutting down time spent on chasing stores and spare gear.
- (b) Implementation of the second phase started in 1984 and aims to support general administration including assistance to Divisional Officers and in the handling of non-public funds. Additionally, facilities for word processing will help the paper-bound staff of all departments, not least in the area of engineering support.
- (c) The third phase of the project is aimed entirely at engineering administration. It is currently under study, and fitting will commence in 1987. However, some aspects have been advanced and included in Phase I to allow the Fleet to benefit earlier from feedback on equipment maintenance and stores usage.

OASIS is to be the ADP workhorse for administration afloat. The whole purpose is to reduce the load on those at sea, and to improve the logistic and engineering support that they receive. The plan is for the bulk of the Fleet to be fitted with OASIS Phase I and parts of Phase II before manpower reductions start to bite hard in 1986.

Armament Support

As new weapons and replenishment ships are introduced there must be concurrent development of the facilities for handling, storing, and maintaining the missiles and ammunition ashore. Geography, safety, and base porting all influence the decision-making process.



Fig. 4—Integrated weapons complex for an armament depot

The assembly and testing of complex weapons have benefited considerably from the introduction at some armament depots of integrated weapon complexes which consist of four weapon assembly and check rooms adjacent to one test equipment bay (FIG. 4). This enables more weapons to be tested in safety, faults diagnosed, and units exchanged.

Major developments are in hand and planned for the support of the new AOR.

Concluding Remarks

Security considerations have, of necessity, reduced the content of this summary from that given to the Conference in May 1984. The passage of time since then has also meant that a number of issues have evolved further, some uncertainties have been resolved and, perhaps, others introduced. The aim of the presentation was, however, to emphasize the requirement for support considerations to develop, as a minimum concurrent with, but preferably ahead of the introduction of new ships and weapons, and to highlight the need for the management of support assets to be developed so as to provide the best possible service to the Fleet.