

# PORTSMOUTH YOUR FLEXIBLE FRIEND

BY

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HM Naval Base Portsmouth established as a Fleet Operating and  
Maintenance Base exists to serve the Fleet.

(*The opening sentence of the Naval Base Commander's Terms of  
Reference*)

## Introduction

Two of the major decisions affecting support of the Fleet contained in the Defence Review of 1981<sup>1</sup> were the closing of Chatham Dockyard and the reshaping of Portsmouth as a Fleet Operating and Maintenance Base. Both were traumatic, not only to the bases themselves, but also to their parent towns and cities. Both have now been achieved, and arguably the evolution of a Fleet Operating and Maintenance Base at Portsmouth was the more difficult task in that decisions on facilities for the future had to be made and the transition accomplished whilst carrying on with a decreasing but continuing programme of work. The transition was interrupted in 1982 by the Falklands campaign and on resumption ideas had to be recast in light of various 'addbacks' to the Fleet which necessitated the addition to the Portsmouth programme of a single, nose-to-tail, refit stream together with weapon up-date capability. As a result there was a significant increase in civilian numbers to be employed and, due to the delay caused by the hiatus, the target date of 1 April 1984 for the new concept to 'go live' was put off to 1 October 1984. The latter date was met successfully and the intention of this article is not to relive the many discussions and problems which had to be solved but to outline the new organization and its capabilities to give readers—as customers—an idea of what to expect at Portsmouth and how they will be served. Flexibility has been the key word throughout and the firm intention has been to achieve as versatile a Naval Base as possible to allow it to respond satisfactorily to a wide range of tasks.

## Concept

The main thrust of the concept was to change the emphasis of the warship repair task from the predominance of work out of operational time to work in operational time. The concept had to be accompanied by significant reductions in the cost of supporting the Fleet and the rundown of Dockyard personnel from approximately 7000 in July 1981 to 2800 in October 1984 provides a measure of the cost reductions that were sought. A major reorganization was required by the concept, involving the integration of the Fleet Maintenance Group, the CSO(E) staff, and the remaining Dockyard personnel under a common management structure headed by the Naval Base

Commander (NBC)—who is also Flag Officer Portsmouth—, supported by the Captain Fleet Maintenance and Repair (CFMR) and the Director of Finance and Personnel (DFP). The numbers to be employed within the new group—to be known as the Fleet Maintenance and Repair Organization (FMRO)—from 1 October 1984 were finally approved by the Secretary of State in December 1983 as 2800 civilian (2050 industrial and 750 non-industrial) and 500 R.N. complement posts. To reflect the change in emphasis of the warship repair task, it was decided that line management of the FMRO should be a C-in-C Fleet responsibility.

The Captain of the Port and PSTO(N) tasks and organizations were largely unaltered except that with the latter the Materiel Manager (who is responsible for materiel procurement and supply for the FMRO) became one of CFMR's line managers with some lessening of his links with PSTO(N). The Fleet Accommodation Centre (H.M.S. *Nelson*) remained essentially unaffected by the organizational changes elsewhere in the Naval Base. The separate line accountabilities of the Naval Base establishments necessitated the continuation of the task of local direction and co-ordination formerly undertaken by the Port Admiral. This task is now undertaken by NBC but is quite distinct from his task as Head of the FMRO.

Having set the scene, this article will now concentrate on the CFMR side of the FMRO; its task, its facilities, and its organization.

### Task

The primary task of CFMR is to service, maintain and repair in operational time all ships and submarines based at Portsmouth or visiting the Base. This means that, in general, operational ships and submarines base-ported at Portsmouth can look to CFMR support for AMPs, BMPs, OPDEF rectification, unprogrammed repair, emergency docking, DEDs and Capability Update Periods. The CFMR warship repair programme includes a single, nose-to-tail, restorative refit stream, this not only to supplement the total refit capacity available to the R.N., but also to provide for CFMR a modest base-load to underpin the warship repair programme and to provide an opportunity for deep skills to be exercised on a regular basis. H.M.Y. *Britannia* will also be refitted by the FMRO as will H.M.S. *Endurance* (subject to available capacity).

The secondary tasks of CFMR include:

- (a) Refit and repair of local RMAS craft.
- (b) Technical support for Naval Base and Shore Establishments within the geographical boundaries of Hampshire and Dorset.
- (c) Restoration and maintenance of H.M.S. *Victory*.

The planned apportionment of manpower to the main task headings is shown in FIG. 1 and TABLE I. Shipwork is contrasted with the capacity available at Devonport in FIG. 2. The level of CFMR overheads shown in

TABLE I—Planned manpower in Portsmouth Naval Base

	Man-weeks		
	service	civilian	total
Warships	18 540	35 860	54 400
R.M.A.S.	—	3 200	3 200
H.M.S. 'Victory'	—	1 800	1 800
Overheads	4 325	44 950	49 275
Naval Base and shore establishments	—	13 700	13 700
Total	22 865	99 510	122 375

FIG. 1 may initially appear high, but it includes repairs and maintenance of fixed assets (including caissons and the floating crane), provision of utility services throughout the Naval Base, and the net cost of apprentices, the training of whom was resumed in October 1984. The subject of overheads was an item which came under rigorous scrutiny in the evolution of the FMRO but, in the ultimate, it is worth recalling that MOD accounting conventions are such that if all ship repair work by civilians were to cease, the activity necessary to support the remainder of the Naval Base, e.g. the provision of shore services, falls entirely within the 'overheads' charge.

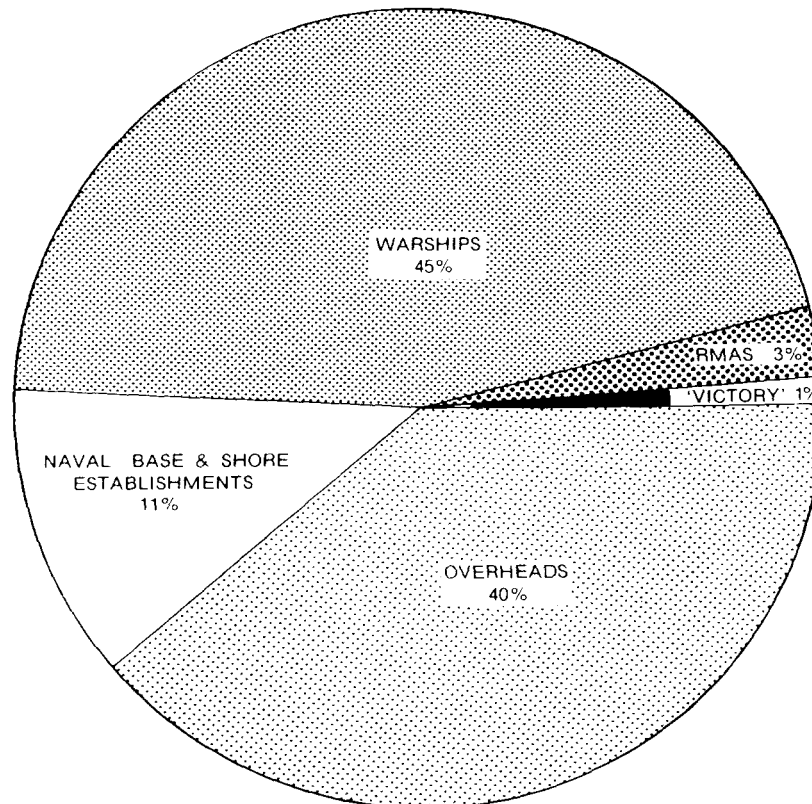


FIG. 1—PLANNED APPORTIONMENT OF MANPOWER IN PORTSMOUTH NAVAL BASE

The programme of ship work to be undertaken by CFMR will be included in the Long Term Review prepared by CED. The work so included will be determined as a result of iterative discussions between CFMR and C-in-C Fleet, and C-in-C Fleet and CED. The ship programme will be reviewed formally by all three parties at quarterly intervals. AMPs will continue to be programmed by C-in-C Fleet and promulgated in the Fleet Operational Programme, but otherwise the uniformed element of CFMR has to be treated as a costed manpower resource, with spare capacity being used to best advantage.

The emphasis on warship work in operational time results in a very management-intensive programme of short-dated projects. The basic programme has to provide a reasonably even level of activity for all trades represented in the work-force, allow for the priority accorded to individual ships, and leave a margin for the unexpected. About 25% of CFMR capacity is allocated for unprogrammed work and this requires particularly careful balancing of manpower and financial resources. Fast turn-round times can certainly be achieved but normally at the cost of civilian overtime and weekend working. The need for such working has to be weighed against FMRO cash limits.

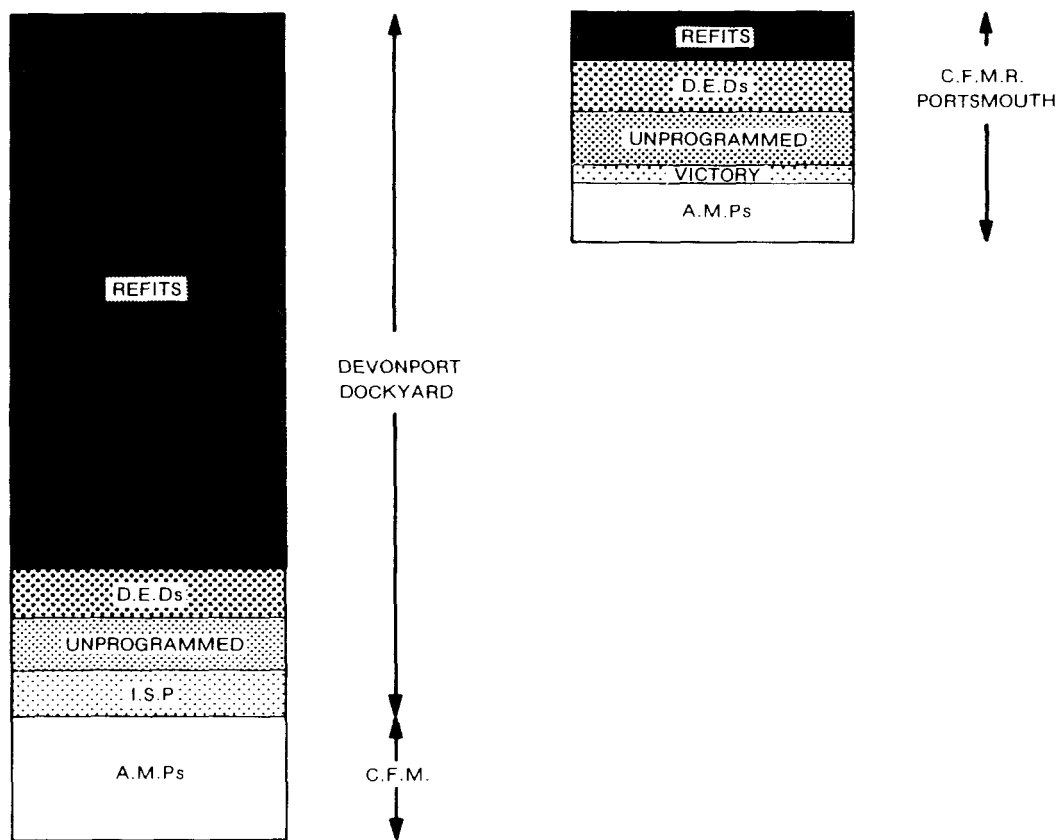


FIG. 2—SHIPWORK: COMPARISON OF CAPACITY AT DEVONPORT AND PORTSMOUTH, 1985/86  
I.S.P.: Indirect Shipwork Programme (repair of spares)

The level of overtime expenditure represents a dilemma for CFMR managers in that the nature of the programme demands relatively high overtime expenditure to meet operational requirements and to compensate for delays occasioned by late deliveries of materiel, complex industrial processes (e.g. the application of preservative coatings and the handling of asbestos) and adverse weather, whereas MOD policy is to cut overtime allocations drastically. The CFMR programme does not justify a permanent shiftworking agreement and the use of casual shifts to compensate for delays has also to be funded from the overtime allocation. The situation can and is being managed, but the manpower and financial constraints need to be understood by all who look to CFMR for support.

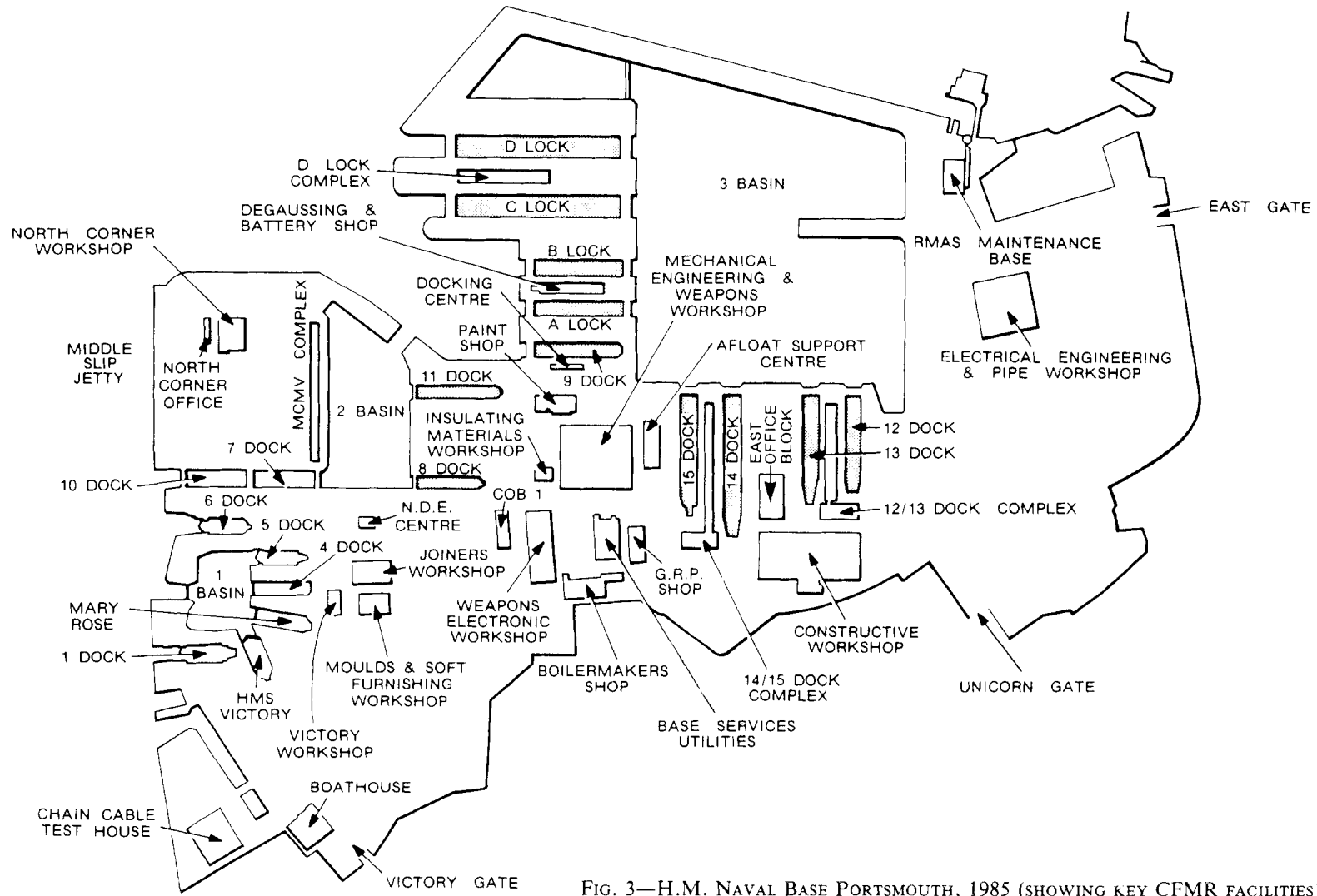


FIG. 3—H.M. NAVAL BASE PORTSMOUTH, 1985 (SHOWING KEY CFMR FACILITIES)

## Facilities

The geographical boundaries of the Base remain virtually unaltered (FIG. 3). It is intended, though, to develop the historical part of the Dockyard in the south-west area as a major tourist attraction, showing various aspects of naval heritage including H.M.S. *Victory*, *Mary Rose*, H.M.S. *Warrior* (1860) and a greatly enhanced Museum of the Royal Navy. This area will eventually be fenced off from the Operational Base. All the tidal berths have been retained.

A number of docks are surplus to CFMR requirements. They are those surrounding No. 1 Basin and Nos. 6, 7 and 10, i.e. all those to the south and west of No. 2 Basin.

The focal point for destroyer and frigate refits, DEDs and emergency dockings will be the 12 to 15 Docks complex to the south of No. 3 Basin. SSK submarine DEDs will be carried out here also in No. 12 Dock. The remaining docks and locks retained in service are broadly allocated as follows:

8 Dock	MCMVs
9 Dock	SSK Fleet Dockings
11 Dock	RMAS
A Lock	Caisson Maintenance
B Lock	Transporting Lock (3 Basin to Harbour)
C Lock	SSN
D Lock	CVS

Flexibility and high utilization are major factors taken into account in the short-term allocation of docking facilities and, subject to consultation with the main users, alternative allocations are made from time to time as demand requires.

AMPs will normally be undertaken at the new Middle Slip Jetty or at North Corner adjacent to the recently completed workshops. BMPs for MCMVs will be programmed for No. 2 Basin, where the former submarine refit complex along the West Wall has been adapted to provide a new base and support complex for the MCMVs and minor war vessels previously based at H.M.S. *Vernon*. It is intended that the Basin shall be tidal but after early experience it has been found necessary to strengthen the Basin Walls and until this is done, the caisson at the Basin entrance remains in use and only vessels in BMP or repair are being berthed inside the Basin. Others are being accommodated at tidal berths either side of the Basin entrance.

The retention and conversion of workshops to suit the CFMR task has had to be undertaken in a climate of severe restraint on capital expenditure. New construction was out of the question and FIG. 3 shows how the FMRO workshops are disposed, with the main grouping to the south of No. 3 Basin. The disposition is less than ideal, with the Electrical Engineering and Pipe Workshop out to the east, and the Joiners Shop, Mould Loft/Soft Furnishing Workshop, Boathouse and Chain Cable Test House out to the south-west in the Conservation Area. TABLE II shows the former and present use of workshop buildings. Retention of the Battery Shop was a recent decision resulting from battery problems being experienced by SSKs, and looking ahead to the requirements of the new Type 2400 UPHOLDER Class submarines. The aim has been to match the fixed assets retained as closely as possible to the task. However, an inevitable consequence of the shift in work emphasis from a mainly refitting activity to one of support to ships in operational time has been that the in-depth engineering capability of the former Dockyard has been significantly reduced.

The Relocation Programme has required a major contribution from both the Property Services Agency (PSA) and CFMR. Much has been achieved

TABLE II—Former and present use of workshop buildings

<i>Dockyard</i>	<i>CFMR</i>
Pipe Shop	Electrical Engineering and Pipe Shop
RMAS Maintenance Base	(no change)
Heavy Plate Shop	Constructive Workshop
No. 1 Weapons Equipment Shop	Mechanical Engineering and Weapons Workshop
No. 2 Weapons Equipment Shop	Afloat Support Centre
No. 3 Weapons Equipment Shop	Base Services Utilities Workshop
No. 4 Weapons Equipment Shop	GRP Shop
No. 2 Joiners Shop	Boilermakers Shop
No. 2 Electrical Shop	Weapons Electronic Workshop
Insulating Materials Workshop	(no change)
Paint Shop	(no change)
Joiners Shop	Joiners Workshop (including Colour Loft and Sail Loft)
Mould Loft	Moulds and Soft Furnishing Workshop
No. 4 Boathouse	Boathouse
Chain Cable Test House	(no change)
Degaussing and Battery Shop	(no change)

but the full programme of workshop conversions planned for CFMR will not be completed until the middle of 1986.

The North Corner Workshops were completed in 1983, having been in an advanced stage of construction when options for the CFMR facilities were being evaluated. As completed they provide a wide range of facilities, economically suited to AMP support.

The principal offices are:

- (a) Central Office Block I NBC, CFMR, DFP and Managers  
Base Services Division  
Finance Division  
Personnel Division
- (b) East Office Block CSO(E)/Project Staff  
Base Planning and Quality Division  
Assistant Fleet Support Managers and Foremen  
Materiel Division
- (c) North Corner North Corner Group (Fleet Maintenance and Craft Support Units)

To complete the picture for those who remember the former Dockyard, the following is a list of the major workshop and office buildings either vacated or in the course of being vacated. All these are now allocated for other, non-FMRO, purposes; most of the surplus workshops are being converted to receive Naval Stores from Llangennech, Woolston, and Deptford.

- (a) Workshops
 

Factory	Light Plate Shop
Toolroom	No. 1 Smithery
No. 1 Electrical Shop	No. 2 Smithery
No. 8 Combined Workshop	No. 5 Boathouse
Pipe Laundry	No. 6 Boathouse
Galvanizing Shop	No. 7 Boathouse
- (b) Offices
 

Central Office Block II	Frigate Office Block
North Office Block	Sunny Walk
Murray's Lane	

Of other landmarks, the floating dock AFD 26 has been transferred to Rosyth and the 240 ton hammerhead crane of 1913 vintage yielded 1600 tons of steel scrap.

### Organization

The organization at Naval Base Management Board level and above is explained in DCI RN 350/84 and, having also been outlined earlier in this article, will not be repeated here.

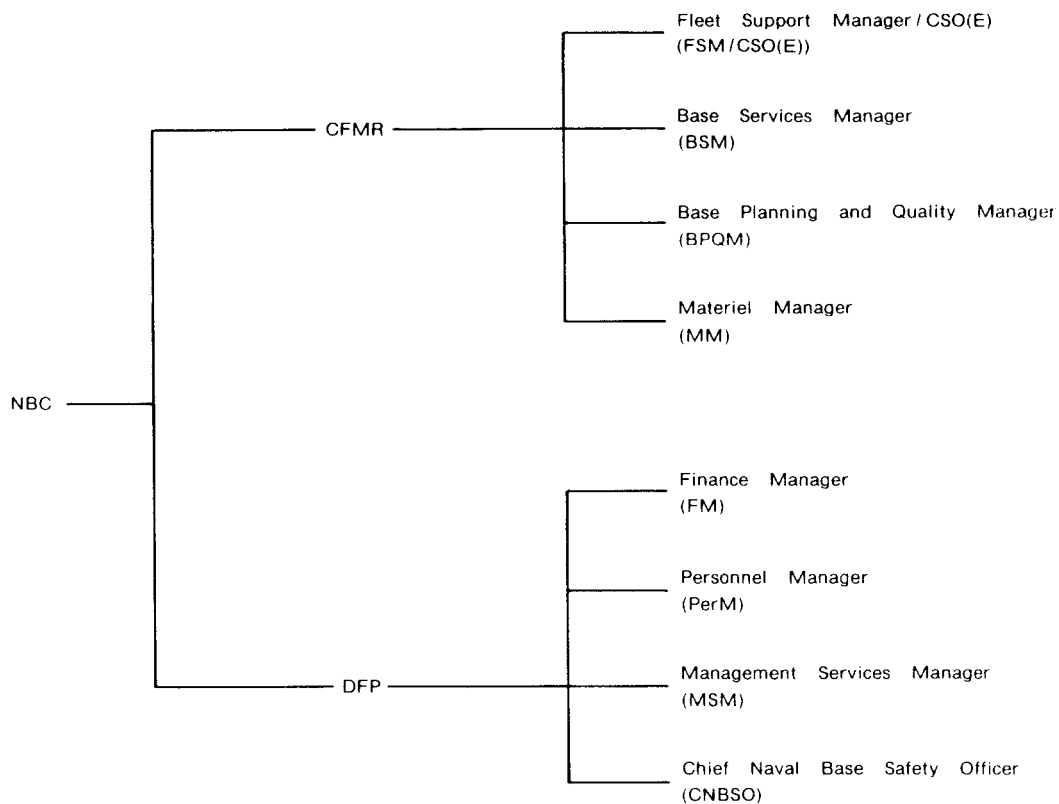


FIG. 4—FMRO ORGANIZATION AT SENIOR LEVELS

The FMRO organization at senior management level is shown in FIG. 4. The FMRO is headed by NBC. He is supported by CFMR, whose post combines the operating functions of the former General Manager and Captain Fleet Maintenance appointments, and by DFP whose post sees the appointment to a Naval Base for the first time of an administrator at assistant secretary level to head the finance, personnel and administrative functions. He also has responsibility for management services and safety policy. DFP is also required to co-ordinate financial information and personnel policies across the Base as a whole.

*Captain Fleet Maintenance and Repair* is a senior engineering branch captain, Royal Navy, or senior constructor captain, R.C.N.C., of Grade 5 level. He, in turn, is supported by two senior subordinates: the Fleet Support Manager (FSM) for all shipwork, and the Base Services Manager (BSM) for all Base and Establishment work. FSM also acts as CSO(E). CFMR has two other subordinates, a Base Planning and Quality Manager (BPQM) and a Materiel Manager (MM).



The *Fleet Support Manager* is a R.N. captain of the engineering branch. As well as being responsible for all engineering support to ships he heads the R.N. personnel who work for CFMR and, as CSO(E), is responsible for maintenance of Fleet Engineering Standards. He is supported by eight assistant managers at commander or constructor commander level. His organization (FIG. 5) is a matrix of ship support teams under Assistant Manager Ship Support (AMSS) and Project Manager Refits (PM Refits) on the one hand, and line managers in charge of the work-force on the other.

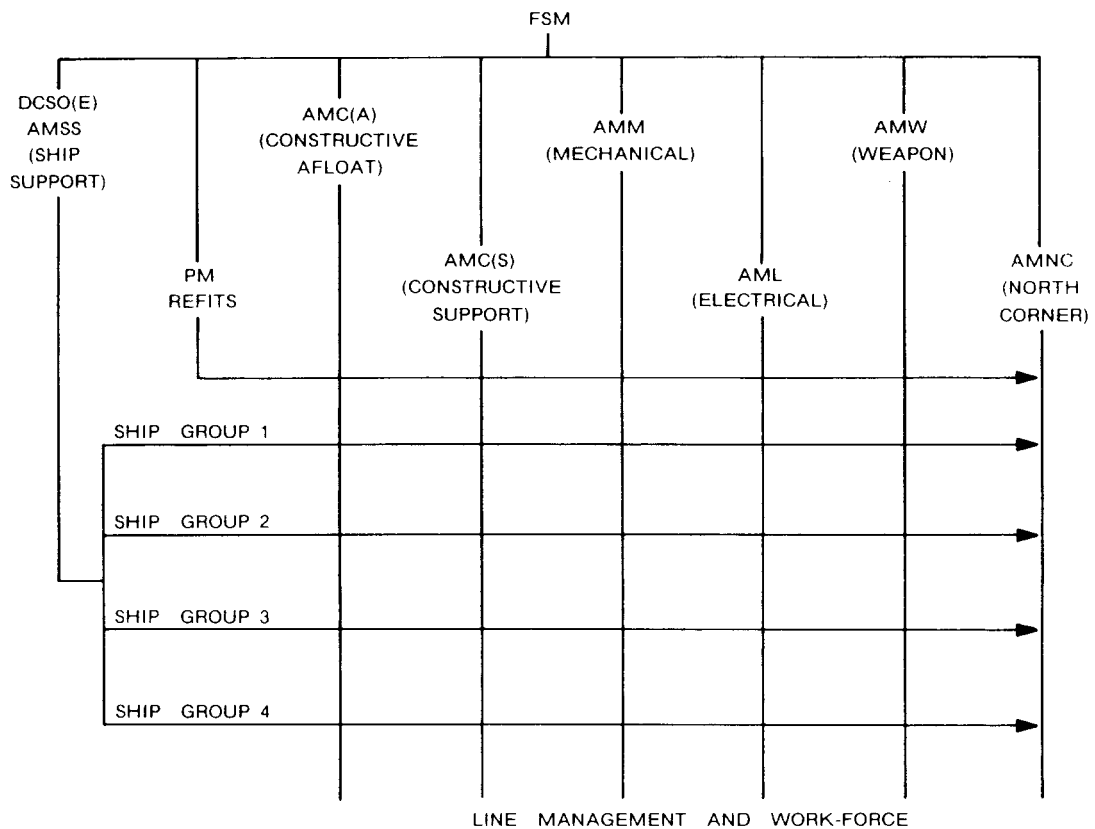


FIG. 5—FLEET SUPPORT MANAGER'S ORGANIZATION

The responsibilities of the line managers and PM Refits are straightforward and traditional. However those for AMSS, who is also deputy CSO(E), are novel in that with the placing of the NBC under the line authority of C-in-C Fleet there is no longer a requirement for the Area Flag Officer to negotiate Fleet requirements with the Base. The opportunity has therefore been taken to meld together the old CSO(E) and Project Management staffs, with consequent saving in posts and, perhaps more importantly, in time spent in discussion between the two groups. There is now one group which is responsible for both establishing the work requirement and then getting it done. AMSS, the head of this group, is an engineering branch commander, R.N., and leads integrated teams of R.N. and civilian personnel. He has retained the responsibilities of the old style DCSO(E) both as far as the ships are concerned and for day to day liaison with the operational staff at Northwood. In order to establish expertise in a type of ship and, importantly, a good rapport with ship's officers and senior rates, the group comprises four separate Ship Groups, each responsible for different types of ships, viz:

Ship Group 1—CVS, Type 42.

Ship Group 2—Type 82, DLG, LPD, LEANDER (Batch III), *Endurance*.

Ship Group 3—Submarines.

Ship Group 4—MCMV, *Britannia*, RFA, RMAS, Minor War Vessels, de-equipping, and painting covered by the C-in-C painting fund.

These Ship Groups form the first point of contact with the Base for ships' Engineer Officers. The intention is that all appropriate information on individual ships and equipment will be held at desk level. The Ship Groups are responsible for all shipwork acceptance and authorization within overall parameters set by BPQM and are also responsible for negotiating the content and timescale with the line officers. The fact that the Ship Groups are housed together with the appropriate line officers on the same floor of the East Office Block makes for much speedier dialogue and response.

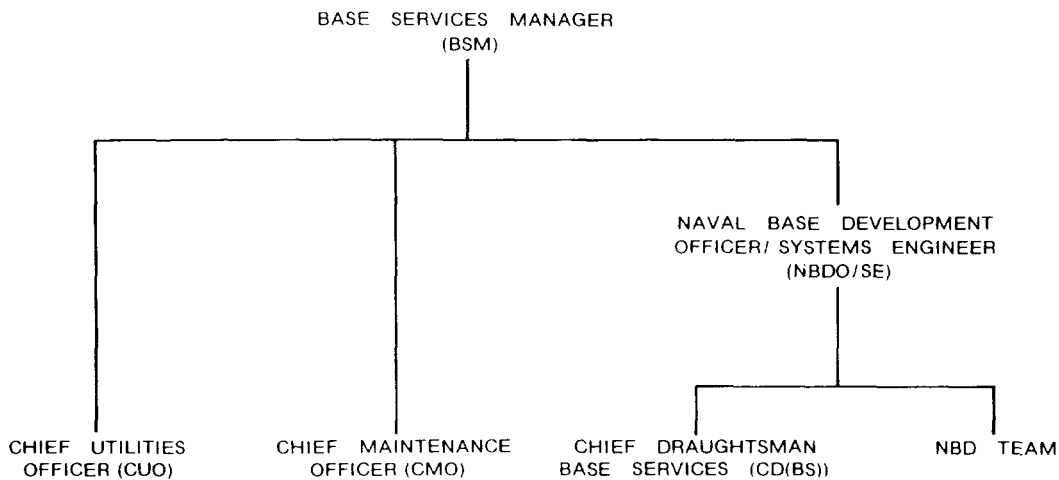


FIG. 6—BASE SERVICES MANAGER'S ORGANIZATION

The *Base Services Manager* is a constructor captain, R.C.N.C., of Grade 6 level. He is supported by three main subordinates as shown in FIG. 6.

- (a) Shore Systems Engineer/Naval Base Development Officer (constructor commander) who is responsible for Utility Systems design support and traditional Naval Base Development Officer's duties.
- (b) Chief Utilities Officer (PTO I (L)) responsible for the operation and maintenance of the utilities and services within the Base and establishments.
- (c) Chief Maintenance Officer (PTO I (M)) responsible for the installation and repair and maintenance of all electrical and mechanical plant installed in the Naval Base and of functional machinery in fleet and civil shore establishments.

The *Base Planning and Quality Manager* is a constructor commander supported by a small staff who are responsible for all first level planning activities, i.e. ships programme, total programme of work, long-term programme, etc. He works closely with AMSS and C-in-C Fleet staff at Northwood on all programme matters. He is also responsible for the Ship Drawing Office and the Quality Management cell. The BPQM organisation is shown in FIG. 7. It is intended to seek registration to Def Stan 05-21 for the FMRO late in 1985.

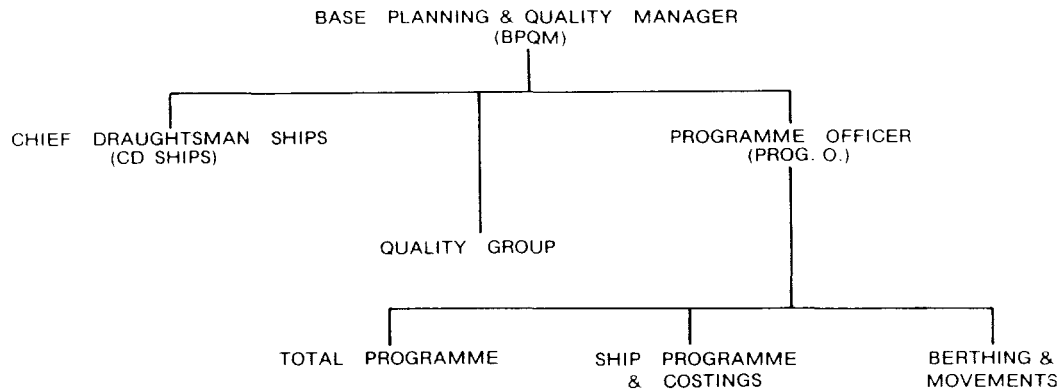


FIG. 7—BASE PLANNING & QUALITY MANAGER'S ORGANIZATION

The *Materiel Manager* is an administrative civil servant of the rank of principal. He is supported by two subordinates:

- (a) A higher executive officer, responsible for local purchase and workshop stores support to FSM and BSM.
  - (b) A stores officer grade B, responsible for all ready-use stores.
- Civilian and R.N. personnel are integrated within the organization.

#### Work Allocation Philosophy

As previously mentioned, the FMRO complement has been limited to a ceiling of 2800 civilians and 500 R.N. personnel. Of these, virtually all the R.N. personnel and 1750 civilians are employed in FSM Division, and 750 civilians in BSM Division.

The normal workload for the FSM civilian workforce will be the refits, DEDs, BAMPs (Base Assisted Maintenance Periods for CVS) and CUPs (Capability Update Periods), and that for R.N. personnel the Assisted Maintenance Periods. However there will be no firm demarcation. With the stringent limit on numbers in relation to the CFMR task it is essential to have interchange of expertise and capacity in order to make every post tell. To do this, working conditions and arrangements must be as flexible as possible and optimum use will have to be made of *all* manpower and material resources in both FSM and BSM Divisions. It is *not* part of the concept to substitute R.N. personnel for civilians but rather to ensure that both are capable of contributing sensibly to the support of the Fleet, helping each other out as necessary. Nevertheless there will occasionally be demands which CFMR cannot meet from his own resources. Under these circumstances CFMR will use contract labour to lop the peak loadings in individual trades.

#### Flexible Working Arrangements

In negotiating the future size and shape of the Base, the trades unions have been involved and have recognized the need for changes in various working practices in order to provide the necessary flexible response for the overall task to be met from the relatively small numbers at CFMR's disposal. After detailed negotiations over this, a number of agreements have been signed. There are eighteen of these but the main ones are, briefly:

- (a) *Use of R.N. crane drivers.* R.N. personnel normally operate all cranes at North Corner and 2 Basin, and operate other cranes throughout the Base on an 'as required' basis.

- (b) *Use of R.N. Berthing Parties.* R.N. personnel form complete berthing parties or supplement the riggers as required.
- (c) *Connection of overside services.* R.N. personnel presently connect overside services in the western end of the Base. Any extension to this area is limited by the availability of R.N. supervisory effort. Ships are required to provide humping parties for shore cables, etc.
- (d) *General use of workshops and facilities.* All CFMR workshops and facilities throughout the Base can be used by suitably skilled civilian or R.N. personnel.
- (e) *Work allocation.* There will be no demarcation in the allocation of work between civilians and R.N. personnel. Previous demarcation policies established to cover the Dockyard/FMG interface are no longer relevant.
- (f) *Project Management Teams.* In order to utilize expertise and skills fully these teams are manned by mixed civilian and R.N. staff.
- (g) *Use of Contractors.* The decision to put work to contract is a management decision which will be taken by management.
- (h) *General Flexibilities:*
  - i. Management reserves the right to allocate work to any craft or non-craft employee, being limited only by the suitability and status of the individuals concerned.
  - ii. Craftsmen will undertake minor work of other trades where it forms a subsidiary part of the main job.
  - iii. Employees will accept freedom of movement of labour by management direction between surface vessels, submarines, shops and other work.
  - iv. Employees accept across the work-force the trial and (where this is found to improve the efficiency of working) the full application of new production procedures, techniques, machines and equipment.
  - v. Essential services and safety requirements will be maintained at all times.
- (j) *Parallel manning of stores.* The main Base retail store and its satellites are mostly manned by service personnel but civilian storekeepers will work there when required to cover absence for leave, sickness, etc. Similarly the remaining stores and lay apart facilities will normally be manned by civilians but uniformed personnel will work there when required.
- (k) *Oil fuel installation at North Corner.* The ready-use fuel installation on Middle Slip Jetty is normally manned by R.N. personnel.

### **Progress Report**

The FMRO 'went live' on the planned date of 1 October 1984 when Commander-in-Chief Fleet, Admiral Sir William Staveley received the 'Deeds' of the Dockyard from the Chief Executive Royal Dockyards, Rear-Admiral A. S. George. A number of the changes had been instigated ahead of this date—for instance the MCMVs moved from H.M.S. *Vernon* to No. 2 Basin in July 1984 and the AMSS Ship Groups were formed in June 1984.

The FMRO has now been in existence for a year, and as memories of the Dockyard rundown traumas have faded, so has morale risen. There is a determination to make the FMRO concept succeed and, with this new sense of purpose, the demands of operational programmes are being met. Despite the pressure on manpower resources created by 'unprogrammed' work,

warship repair projects are regularly completed to time and within budget, frequently with extra As & As thrown in for good measure. The Flexibility Agreements are being honoured and there is no doubt that productivity has risen. As examples of the former, the Ship Support Groups are knitting into teams which are proving their worth, the civilian and R.N. ladders are working from a common facility, the integrated Materiel Manager's Department is solving problems more quickly, the ready-use fuel tanks are operated by a 'Chief Stoker', a 'Chief Electrician' and his team are providing overside services, and R.N. crane drivers are accepted as commonplace. The greater integration between civilian and R.N. staff is certainly paying dividends as each learns more about the other. This must be to the benefit of the Fleet as the principal customer.

There is of course still much to be done, the rationalization of the workshops is still far from complete and is unlikely to be finished before the middle of 1986 as mentioned earlier. Following a major change in organization such as this and a major change around in people, it will take time for staff to become fully conversant with their new tasks. New working methods to take advantage of the flexibility agreements will take time to evolve. The change of tempo from a preponderance of refitting work to short, sharp work packages requires its own discipline. However progress is being made on all these fronts and others besides. Ultimately the success of the FMRO will be judged by its performance and the balance sheet. Competition and survival are the names of the game. Satisfied customers are not enough—but they certainly help!

#### *Reference*

1. 'The United Kingdom defence programme: the way forward'; Cmnd. 8288, H.M.S.O., June 1981.

NOTE. A copy of this article, commissioned by the *Journal of Naval Engineering*, was sent also to the *Naval Electrical Review*. Both editors were unaware of the duplication until it was too late. Nevertheless the subject matter is of sufficient importance to merit the widest possible distribution, so this may have been a fortunate accident.

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