THE SUPPORT INFORMATION JUNGLE

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Some new jargon has been appearing in the world of technical support. MSIP (pronounced Emsip) is not a new product for curing the common cold: it stands for 'Management of Support Information Project'. In April 1982 MSIP produced its final report, two far-from-slim volumes recommending a strategy for developing support information in the 1980s.

'The Management of Technical Information for the Fleet' was the subject of a lengthy article in this Journal[1] in June 1982. The purpose of the present article is to provide an informal introduction to the Support Information Network being created, some of which is already functioning. Thus the heart of the article is FIG. 1.

Recognizing that the many authorities in the support community very often need the same information, MSIP introduced this concept of a SUPPORT INFORMATION NETWORK, exploiting the new information technology. Much time and effort is wasted because different authorities each generate data on the same subjects. This duplication of work results in variations in the records and causes confusion.

Probably the most essential 'communal' information needed to provide technical support for a ship is the list of equipments fitted. Often referred to as the SHIP FIT DEFINITION, the only certain thing is that no one knows with complete accuracy what is fitted in any particular ship. This may not be surprising in such a complex creation but it is very important that we get it right.

The time when knowledge of equipment fit can be relied upon most is when the ship is being built. The shipbuilder knows what is going in because he puts it there—and records the fact. Configuration Accounting records the make-up of the ship.

One shipbuilder, Yarrows, has been established as a MASTER RECORD CENTRE for data pertaining to equipment fits of H.M. ships after they have left the shipbuilders. Apart from the equipment data, details are held there of the associated documentation, As and As (which may change the fit), and other data relevant to an equipment or system. The Yarrow computer is known as the MASTER RECORD DATA BASE (MRDB). It can manipulate the data to provide users with the output they need, including, for ships' technical staffs, indexes called SHIPCIST outputs. SHIPCIST stands for Ships Comprehensive Indexing System. The main SHIPCIST output is the Equipment/Document Account which lists all the equipments fitted, together with the technical handbook number, the drawing numbers, and parts catalogue number for each, and a few more details besides. SHIPCIST outputs can be produced as hard copy, which is bulky, or as microfiche which is better, or—when OASIS III comes along—as magnetic discs for viewing on the screen.

Of course not all the data required by the Master Record Centre to carry out these tasks is originated by the shipbuilder, particularly after completion of build. That is where the Support Information Network (FIG. 1) comes in. BR details come from Woolwich; PIL and IPC numbers come from Foxhill; E Lists from AUWE and ASWE—to name but a few links in the network. MSIP wants to see all these authorities with a direct link to the Master Record Centre. Failing this, they would send their data using fast magnetic transfer methods at regular intervals so that it is kept up to date. Actions to establish the Network are in hand. Perhaps the most important information required by the Master Record Centre after ships leave the shipbuilder is FEEDBACK about changes in the ships' configurations. This is reported by the Naval Maintenance Data Centre (NMDC) at Portsmouth, who get the information from the ships, and by the Dockyards after As and As and other work which change the equipment fit.

The authorities responsible for providing the Master Record Centre with the essential data they need are termed MASTER CUSTODIANS. So CS(PS)3 at Woolwich is Master Custodian of the BR Numbers of the Technical Handbooks; C-in-C Fleet will be Master Custodian of Temporary Support Documentation (e.g. FETIs).

Confidence in the accuracy of the Master Record Data Base is growing, particularly for the more modern ships which were able to get off to a better start, and more and more ships' records are being taken on. There will be a separate Master Record Centre for submarines at Vickers in Barrow. It will of course be linked into the Support Information Network. Their SHIPCIST will be called SUBCIST!

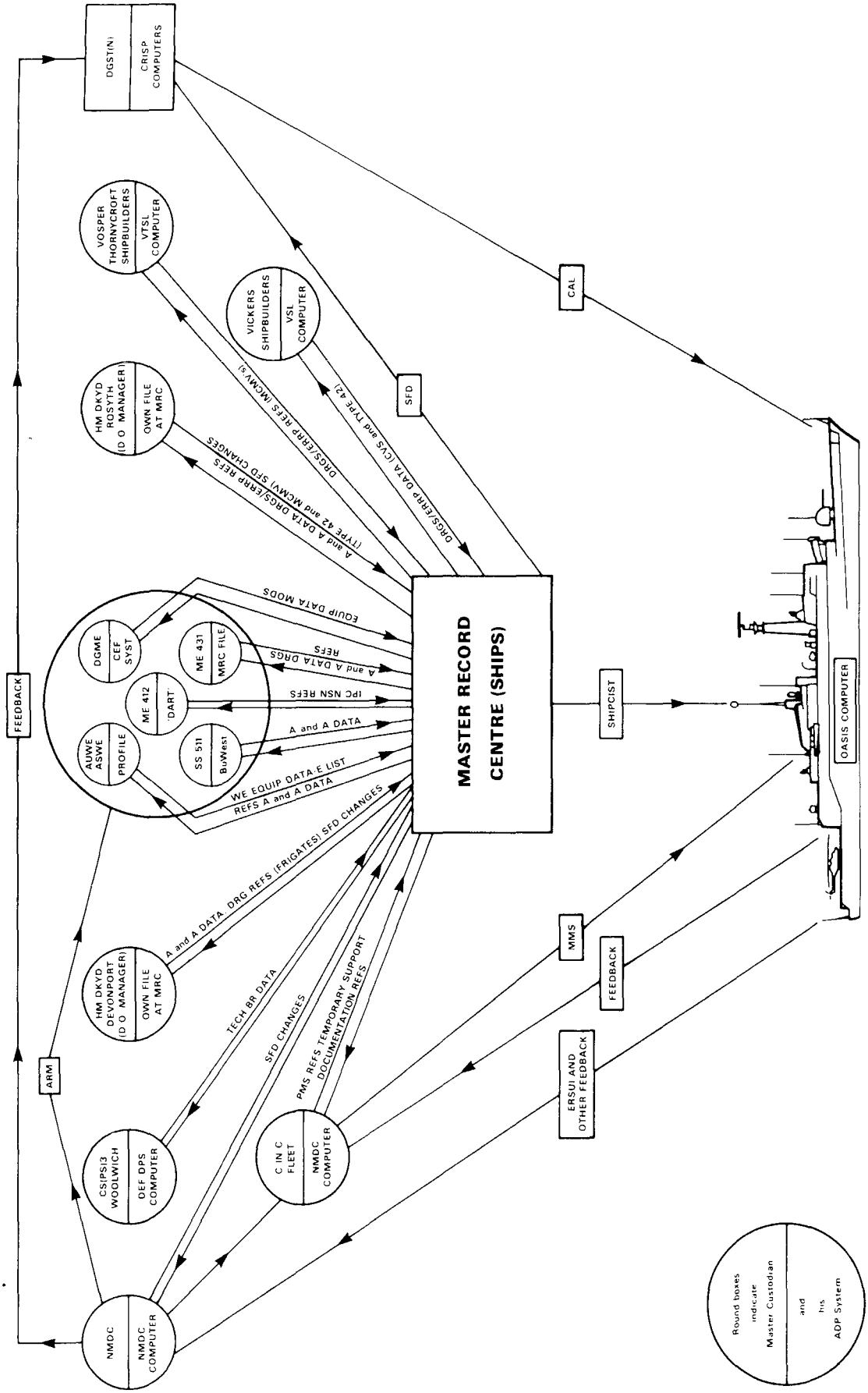
DGST(N)
CRISP COMPUTERS
VOSPER THORNYCROFT SHIPBUILDERS
VTSL COMPUTER
VICKERS SHIPBUILDERS
VSL COMPUTER
HM DKYD ROSYTH (D O MANAGER)
OWN FILE AT MRC
HM DKYD DEVONPORT (D O MANAGER)
OWN FILE AT MRC
CSIPS13 WOOLWICH
OEF DPS COMPUTER
C IN C FLEET
NMDC COMPUTER
NMDC
NMDC COMPUTER
DGME
CEF SYST
ME 431
MRC FILE
ME 412
DART
AUWE ASWE
PROFILE
SS 511
BuWest
MASTER RECORD CENTRE (SHIPS)
SHIPCIST
OASIS COMPUTER
CAL
SFD
FEEDBACK
ARM
MMS
FEEDBACK
ERSUI AND OTHER FEEDBACK
EQUIP DATA MODS
A and A DATA DRGS REFS
IPC NSN REFS
A and A DATA
WE EQUIP DATA E LIST
REFS A and A DATA
A and A DATA DRG REFS (FRIGATES) SFD CHANGES
TECH BR DATA
SFD CHANGES
PMS REFS TEMPORARY SUPPORT DOCUMENTATION REFS
A and A DATA DRGS/ERRP REFS (TYPE 42 and MCMV's) SFD CHANGES
DRGS/ERRP REFS (MCMV's)
DRGS/ERRP DATA (CVS and TYPE 42)
Round boxes indicate Master Custodian and his ADP System

Fig. 1 (OPPOSITE)—ADP SUPPORT INFORMATION NETWORK (SURFACE SHIPS)

Key:

ARM	—Availability, Reliability, Maintainability information
CAL	—Consolidated Allowance List
CEF	—Comprehensive Equipment File
DCWE	—Deputy Controller Warship Equipments
DEF DPS	—Defence Data Processing Service
DGME	—Director General Marine Engineering
DGSS	—Director General Surface Ships
DGSW	—Director General Surface Weapons
DGUW	—Director General Underwater Weapons
ERRP	—Equipment Removal Route Procedure
ERSUI	—Equipment Related Stores Usage Information
IPC	—Illustrated Parts Catalogue
MMS	—Maintenance Management System
MRC	—Master Record Centre
NMDC	—Naval Maintenance Data Centre
PMS	—Planned Maintenance Schedule
SFD	—Ship Fit Definition
SHIPCIST	—Ships Comprehensive Indexing System
VSL	—Vickers Shipbuilding Ltd.
VTSL	—Vosper Thornycroft (U.K.) Ltd., Shipbuilding Division

Part of the plan is to provide a link between the Master Record Centre and CRISP, so that DGST(N) will have quick access to Ship Fit Definitions whenever he needs them for storing ships. This in time could lead to more frequent updates of stores Consolidated Allowance Lists (CALs).

A particular problem in the achievement of this grand strategy is knowing what to call each individual equipment. There is no common language acceptable to all the support authorities concerned, although most have their own private tag. MSIP quoted the humble ten-dish roasting oven as an example of an equipment which has at least 5 different code numbers and no two authorities acknowledged the existence of any but their own. More fashionable equipments like missile launchers and gas turbines were in the same boat! MSIP's solution was to give every equipment a NATO Stock Number (NSN), something which computers could recognize and which could be quoted between authorities to ensure all are talking about the same thing. Unfortunately the allocation of NSNs is not a quick and easy task and there is already a backlog at the R.N. Codification Authority.

Support Information has little glamour but is vitally important. These brief notes only touch on the subject. The purpose is to explain some of the terminology and to give a rather bare outline of what is going on to ease the struggle of the maintainers at sea. Better support information, readily available in the right place at the right time without having to search for it, must mitigate that struggle.

Reference:

1. Bowen, J. T. G.: The Management of technical support information for the fleet; *Journal of Naval Engineering*, vol. 27, no. 1, June 1982, pp. 72-85.