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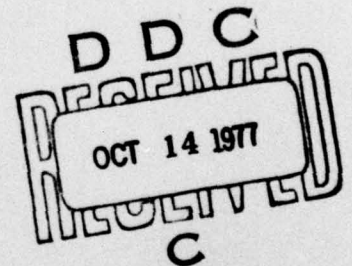
**POM-79 MINI-NAMPS
Concept and Operation**

30 July 1977

Christa Lake

**This report was prepared for the
Assistant Deputy Chief of Naval Operations
(Manpower Planning and Programming)
under Contract N00123-76-D-1356**

**by
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1. MINI-NAMPS OVERVIEW

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1. MINI-NAMPS OVERVIEW

1.1 Historical Perspective

The concept of an overall Navy Manpower Planning System (NAMPS) had its genesis in 1973 in response to the recognition that Navy manpower costs amounted to approximately 50% of the Navy's Budget for FY 73¹.

This concept included the further recognition that although various ADP systems were already in use in support of various segments of Manpower and Personnel Planning functions, there was insufficient interface between these various systems and there were as yet many processes whose efficiency and timeliness could be improved by automation. Additionally there appeared to be a pressing need for a re-evaluation of the whole Manpower and Personnel Planning process toward the goals of avoiding duplication and achieving consistency and integration of all functions in the Manpower Personnel Planning Community.

NAMPS was born of this re-evaluation and is conceived as the future vehicle for the Navy Manpower and Personnel Planning process. Since its beginning, NAMPS implementation has made use, to the fullest extent possible, of existing systems throughout the planning community, where previously unrecognized needs were identified, analysis was initiated and many systems have been implemented or are in the process of implementation. The overall NAMPS development has and still requires the analysis of numerous decision making paths and their interrelationship, the identification of relevant information and its eventual systemization, and the ability to incorporate design changes generated by completed and ongoing analysis. Its implementation is necessarily staggered over time as well as distance. This situation, coupled with the necessity for prompt action to improve Navy Manpower planning, generated the need for a tool which was immediately useful, and whose usefulness

¹Memorandum, Deputy Chief of Naval Operations (Manpower (OP-01), 13 February 1973, Serial 10049)10, "RDT&E Funding for the Development of the Navy Manpower Planning System (NAMPS)", with one enclosure, "Proposal for Advance Development Research in Support of the Navy Manpower Planning System (NAMPS)", 15 January 1973.

would grow as various modules of the overall NAMPS become available. It was essential that the nature and function of such a module would accommodate interfacing with or integration of other modules of NAMPS as they are completed. Toward this purpose MINI-NAMPS was conceived and has been developed by B-K Dynamics under the joint sponsorship of ONR, OP-01, PERS-2, and the Naval Personnel Research and Development Center in San Diego.

Its primary focus of application during FY 75-77 has been on the coordination of the Navy manpower requirements of individual and aggregate sponsor program changes during development of the Program Objectives Memorandum (POM) and the assessment of their manpower and personnel implications. The intense utilization of MINI-NAMPS during the past three POM assessments has helped manpower planners identify and clarify the nature of the Navy's manpower/personnel allocation problems and thus take action to alleviate some of them. As such MINI-NAMPS has shown that NAMPS will be a powerful and effective analytical tool for the Manpower planning community.

1.2 Relationship with the Manpower Planning Community

In order for MINI-NAMPS to function as an effective Manpower Planning tool it must effectively interact with members of the Manpower Planning community. To accomplish this, MINI-NAMPS is designed to accept data input and guidance criterion from various Naval offices and, in turn, provides them with information that contributes to the accomplishment of their tasks and to their decision making process. Figure 1.1 graphically illustrates their relationship to MINI-NAMPS, and the following summarizes their role in the operational process.

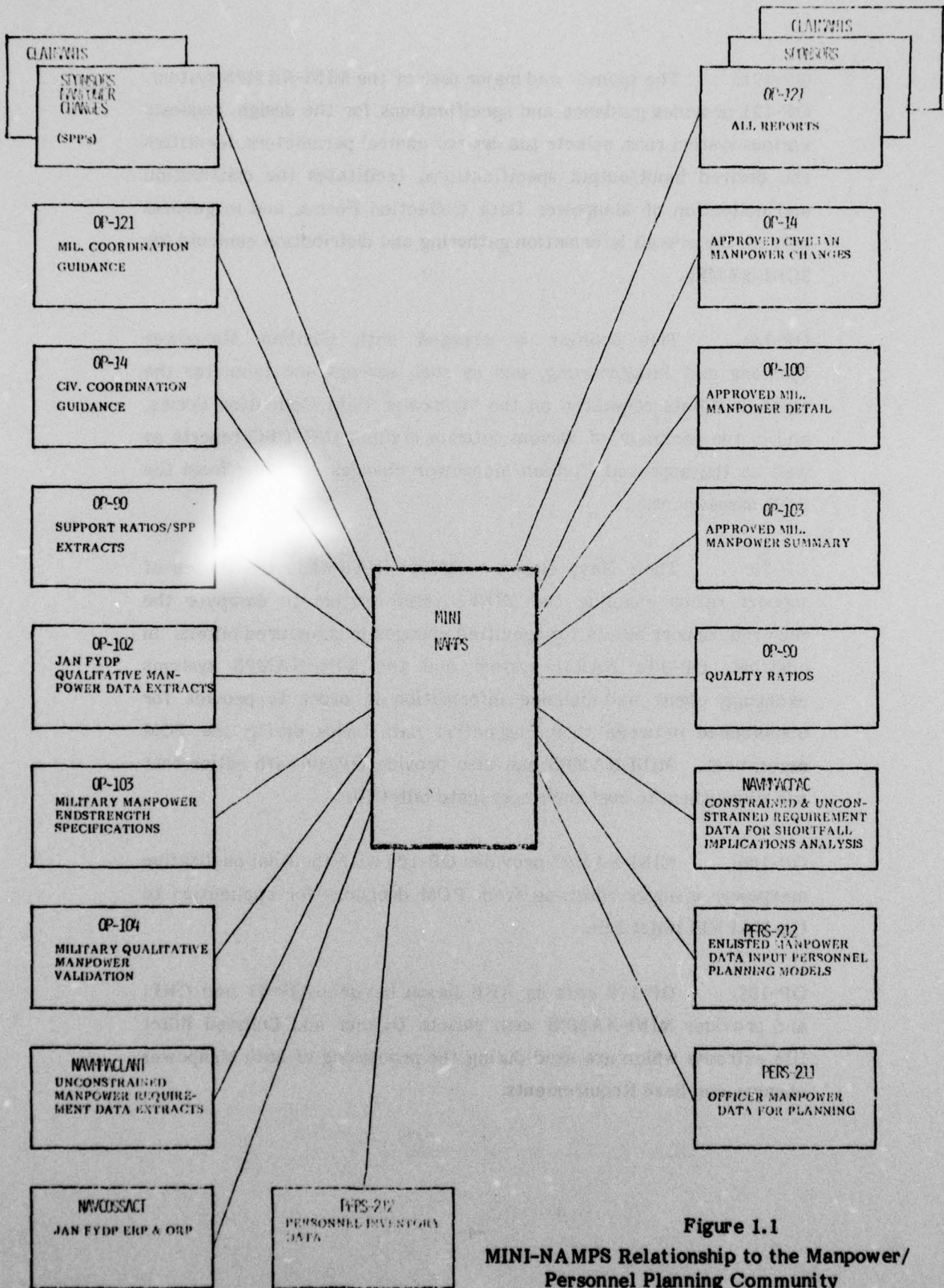


Figure 1.1
**MINI-NAMPS Relationship to the Manpower/
Personnel Planning Community**

OP-121: The sponsor and major user of the MINI-NAMPS system. OP-121 provides guidance and specifications for the design; requests various system runs, selects the desired control parameters, identifies the desired input/output specifications, facilitates the distribution and collection of Manpower Data Collection Forms, and in general acts as the overall information gathering and distribution centroid for MINI-NAMPS.

OP-14: This sponsor is charged with Civilian Manpower Planning and Programming, and as such screens and tabulates the Civilian Billets requested on the Manpower Data Collection Forms, and is the recipient of various interim civilian INC/DEC reports as well as the approved Civilian Manpower changes resulting from the POM assessment.

OP-90: Their Navy Resource Model (NARM) is the source of support ratios enabling the MINI-NAMPS system to compute the required support billets for specified changes in structured billets. In addition, OP-90's NARM system and the MINI-NAMPS systems exchange check and balance information in order to provide for coincidence between their respective data bases during the POM assessment. MINI-NAMPS can also provide OP-90 with ratios that will allow them to cost their aggregate billet file.

OP-100: MINI-NAMPS provides OP-100 with the final qualitative manpower changes resulting from POM decisions for application to the MAPMIS Billet File.

OP-102: OP-102 acts as ADP liason between OP-01 and CNP, and provides MINI-NAMPS with various Officer and Enlisted Billet file extracts which are used during the processing of both Manpower changes and Base Requirements.

OP-103: OP-103 is the source of military manpower endstrength specification and is provided by MINI-NAMPS with the final quantitative manpower changes resulting from POM decisions for application to MAFIOSO.

OP-104: The Military Planning Branch provides MINI-NAMPS with the qualitative adjustments to the Officer and Enlisted requirement base received from NAVCOSSACT's QRA System. Their guidance and billet count validation function facilitates the generation of the PRE-POM ORP and ERP.

NAVMMACLANT: Their Navy Manpower Requirement System (NMRS) provides MINI-NAMPS with Documented Requirement input. This along with MAPMIS Data is processed to generate input for NAVMMACAPAC's Alternative Generator Model (AGM).

NAVMMACAPAC: NAVMMACAPAC is provided a formatted UIC level file comprised of Documented Requirements from the NMRS System and M+12 Requirements and Authorized Requirements from the MAPMIS System. This data is used by the AGM to generate the implications of manpower shortfalls.

NAVCOSSACT: NAVCOSSACT's QRA SYSTEM provides MINI-NAMPS with an aggregated Enlisted and Officer requirement base which is coincident with the January FYDP MARP.

PERS-212: The MINI-NAMPS System provides PERS 21221 Manpower Requirements for use as input to the ADSTAP model. They provide in return the Enlisted Inventory projections, enabling MINI-NAMPS to provide comparison reports for the purpose of determining the feasibility of various Manpower changes. PERS 2123 is provided with the PRE-POM and POST POM Enlisted Requirement base for generating A-school plans.

PERS-211: MINI-NAMPS makes available to PERS 211 the Officer Base before and after Officer Manpower changes resulting from the POM assessment.

Since many of the above Naval Offices also make use of Data Processing techniques, MINI-NAMPS interaction with them provides for automated interface with their ADP Systems. These are shown in Figure 1.2 along with an indication of their input/output relationship to MINI-NAMPS. A more detailed identification of the data derived from or provided to these systems is found in Section 2 where the function of the various subsystems that comprise MINI-NAMPS are discussed.

1.3 MINI-NAMPS EVOLUTION, POM-77, 78, 79

1.3.1 POM-77 MINI-NAMPS

The focus of POM-77 MINI-NAMPS was confined to the Enlisted community. Qualitative Enlisted Manpower was expressed in terms of rating and paygrade, and quantitative manpower per rating/paygrade was stored to the Program Element Sponsor level by Fiscal Year 77 through 81. The system was comprised of 4 subsystems as shown in Figure 1.3, whose functions are summarized below:

- Requirements Formatting, Updating and Adjusting - This subsystem contained modules which loaded the Enlisted Requirements Base, updated manpower changes generated by sponsors during the POM-77 assessment, and applied endstrength and topsix ratio constraints to the resulting requirements base. The manpower changes were stored by sponsor, rating and paygrade, and INC/DEC #. No capability for INC/DEC query or automated selection existed. Support overhead, based on the manpower changes, was estimated over all enlisted ratings as a function of the Sponsor who was affected by the manpower change.

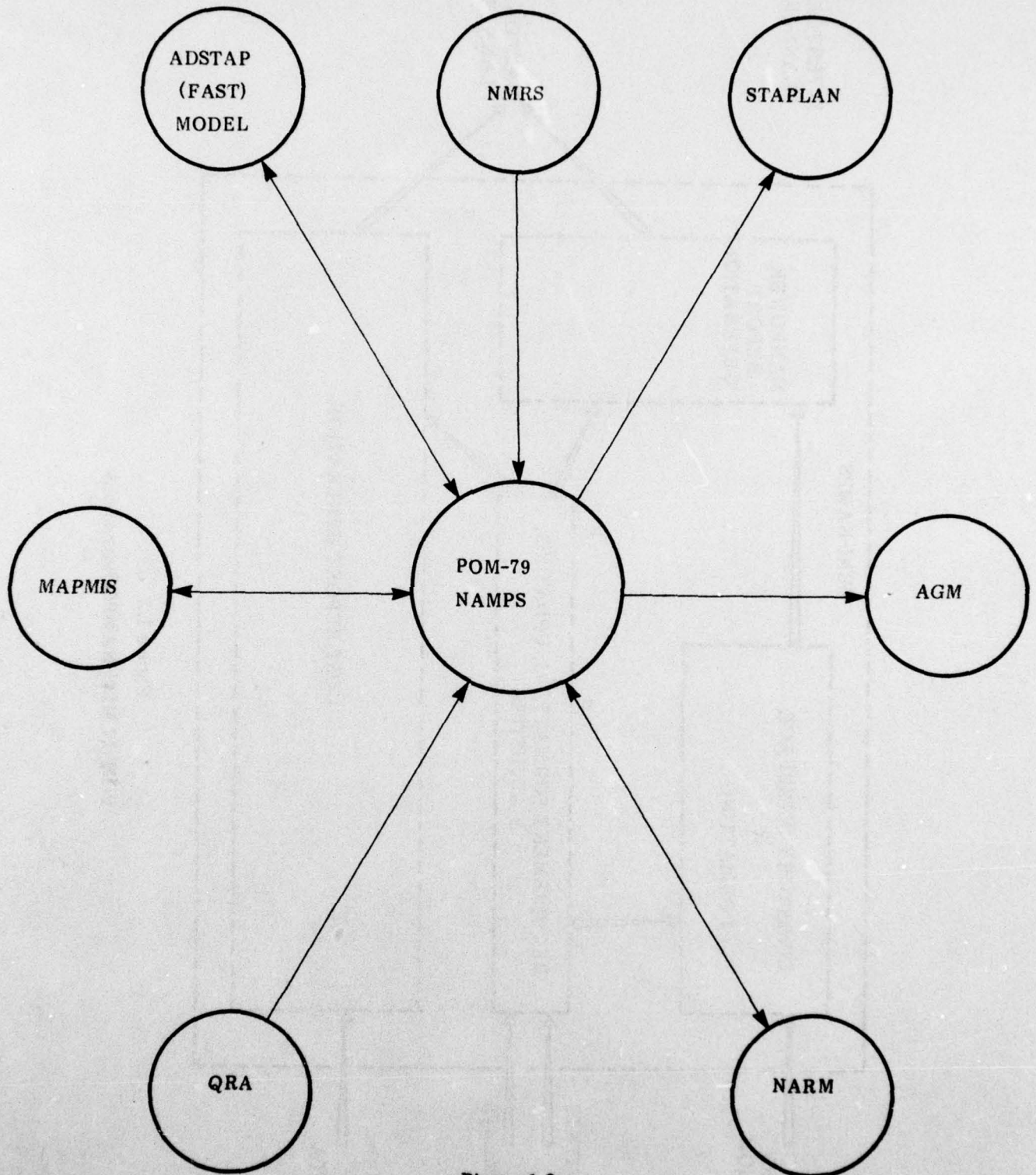


Figure 1.2
MINI-NAMPS And Its Relationship With Other EDP Systems

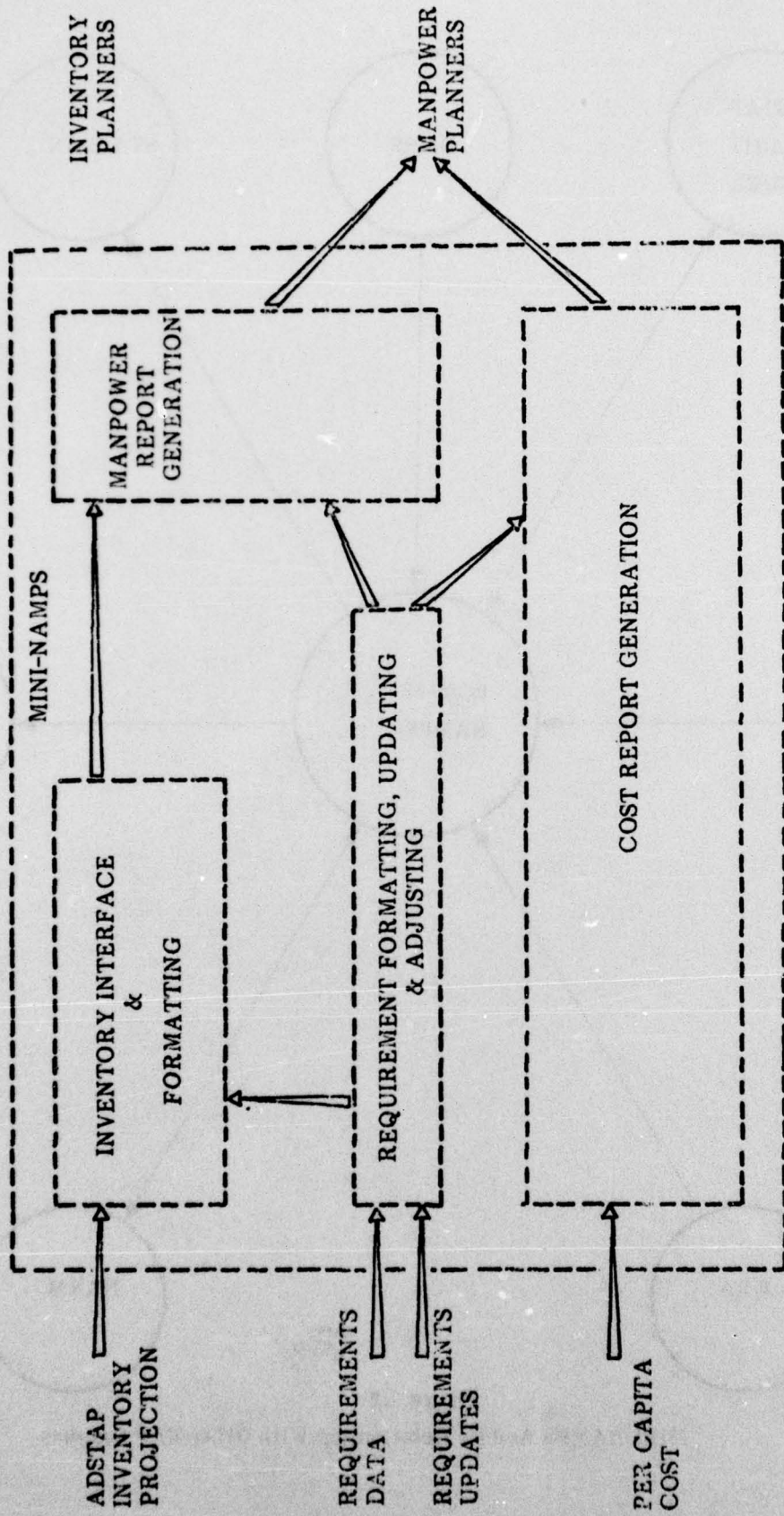


Figure 1.3
POM-77 MINI-NAMPS Subsystems

- Inventory, Formatting, and Interface - Modules of this subsystem loaded the Enlisted Inventory which was projected by the ADSTAP system, and formatted the data so as to coincide with the format of the Enlisted Manpower.
- Manpower Report Generation - This subsystem was comprised of modules whose functions included all POM-77 MINI-NAMPS reports as well as an interactive plotting capability allowing the user to compare manpower and inventory in terms of rating and paygrade.
- Cost Report Generation - The modules of this subsystem allowed the user to interactively cost the quality of the manpower associated with a sponsors submitted manpower changes. It also provided several additional reports indicating costs at various aggregation levels.

The POM 77 planning and programming cycle marked the first time qualitative manpower requirement feasibility determination in the evaluative mode was attempted. MINI-NAMPS usefulness to the Manpower Planning community during the POM assessment, and the identification during its operational phase of additional required capabilities gave impetus to its further development for POM-78.

1.3.2 POM 78 MINI-NAMPS

For POM 78 a greatly improved version of MINI-NAMPS was implemented. The first three modules summarized in 1.3.1 above were incorporated to the fullest extent possible for implementation of POM 78 MINI-NAMPS.

Figure 1.4 shows the subsystems implemented for POM 78 MINI-NAMPS along with several new interfaces to other operational Navy ADP systems. The Subsystem functions are summarized below:

- DELTA Subsystem - Manpower changes collection, editing, query, selection and extraction.
- SUPPORT Subsystem - Qualitized support generation using NARM support ratios and selected DELTA.
- ENLISTED REQUIREMENTS Subsystem - Enlisted Requirement loading, constraints application and update.
- ENLISTED INVENTORY Subsystem - Enlisted Inventory Base loading, sponsor distribution and M-FAST projection.
- ENLISTED NEC Subsystem - NEC Base loading, comparison, formatting and extraction.
- OFFICER Subsystem - Officer Requirements loading, and update.
- BASE REPORTS/DISPLAY Subsystem - Data base loading, interactive plotting and comparison, Numerical Base Comparison, Automated ERP generation, automated ORP generation, PLOT Report generation, BASE identification and tracking.

In addition, basic improvements were made in data storage methodology, transfer and interactive capability; and integrated data tracking and identification standards were established. For a detailed description of POM-78 MINI-NAMPS, consult: POM-78 MINI-NAMPS Concept and Operation (Report # TR-3-208).

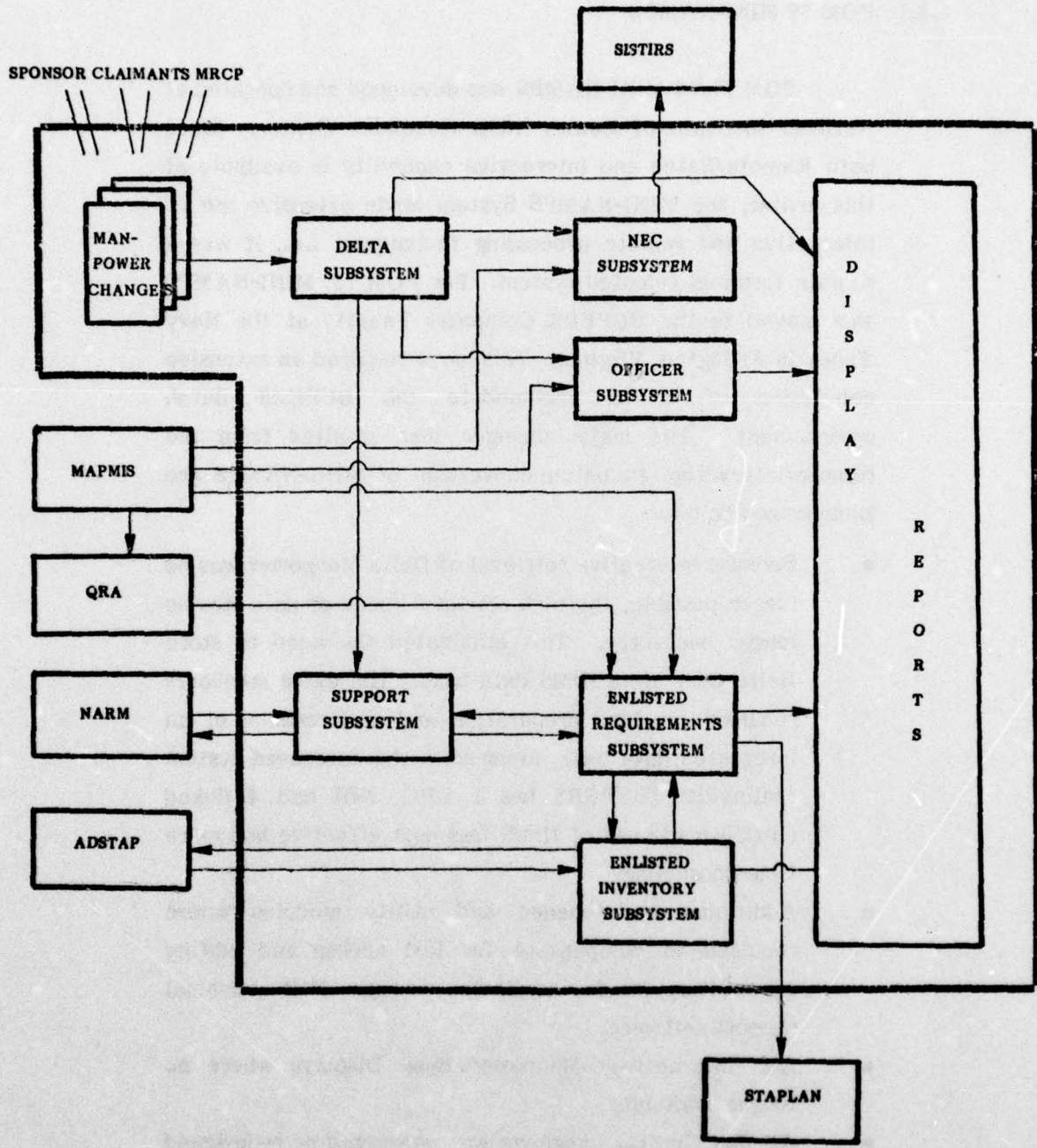


Figure 1.4
 POM-78 MINI-NAMPS System/Subsystem Interface

1.3.3 POM 79 MINI-NAMPS

POM 77/78 MINI-NAMPS was developed and operated at National Institute of Health (NIH) Computer Center. Since both Remote/Batch and Interactive capability is available at this center, the MINI-NAMPS System made extensive use of interactive and remote processing techniques, i.e., it was a remote terminal oriented system. For POM 79, MINI-NAMPS was moved to the BUPERS Computer Facility at the Navy Annex in Arlington, Virginia. This move required an extensive conversion effort to accomodate the BUPERS Batch environment. The major changes that resulted from the remote/interactive to batch conversion of MINI-NAMPS are summarized below.

- Because interactive retrieval of Delta Manpower was no longer possible, the high retrieval speed of data was no longer necessary. This eliminated the need to store Delta data in an IDMS data base. The extra manhours required for load preparation and maintenance of an integrated data base, along with the decreased system reliability (BUPERS has 1 CPU, NIH had 4 linked CPU'S) made use of IDMS less cost effective and more time consuming.
- Additional maintenance and utility modules where required to compensate for lost access and editing capabilities made available through NIH terminal support software.
- All "interactive" Manpower Base Displays where no longer available.
- All Job Control Language was converted or redesigned to conform to the BUPERS operational environment.

While the conversion of MINI-NAMPS to a batch environment had some loss of technical capability associated with it, none of the POM assessment support functions

implemented for POM-78 were lost;* on the contrary several new capabilities were added to POM-79 MINI-NAMPS. They include the following:

- Update capability for the aggregated Delta data base.
- Capability to load and update ORP data generated by NAVCOSSACT'S QRA System.
- Improved design of the Manpower Data Collection Form and "Using UIC" extraction process.
- Automated approved Delta implementation process.
- Numerous additional Reports for Civilian Planners.
- Additional interface capability with the NARM system during the SPP collection phase.
- Improvements to the support ratio algorithms.

POM-79 MINI-NAMPS Subsystems and Interface with other Manpower Systems are shown in Figure 1.5.

Given the above enhancements for POM-79 and those outlined in section 1.3.2 for POM-78, the evolution of MINI-NAMPS can be summarized as follows: In each successive year, additional capabilities have been implemented existing functions have been enhanced, and broader interface capability with other Manpower Systems have been achieved.

*An exception was the NEC Subsystem; its utilization was too low during POM 78 to warrant its cost in man hours and computer resources.

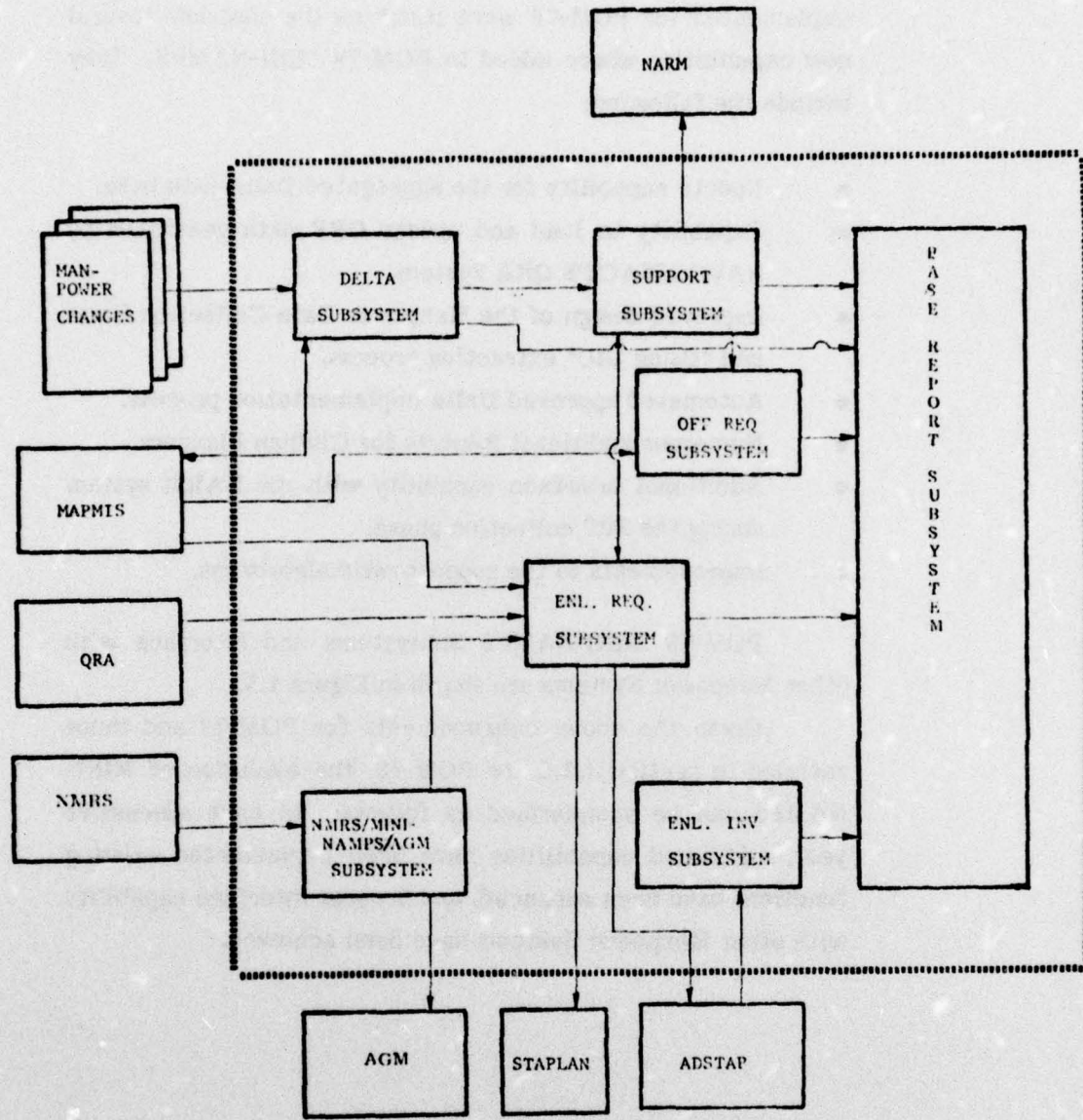


Figure 1.5
 POM-79 MINI-NAMPS System/Subsystem Interface

2. POM 79 MINI-NAMPS - FUNCTIONAL DESCRIPTION

2. POM 79 MINI-NAMPS - FUNCTIONAL DESCRIPTION

2.1 Summary

The POM-79 MINI-NAMPS System presently comprises the 7 Subsystems indicated in Figure 1.5 and summarized below:

- DELTA Subsystem - Manpower changes collection, editing, selection, extraction, and report generation.
- SUPPORT Subsystem - Qualitized support generation using NARM support ratios and selected DELTA.
- ENLISTED REQUIREMENTS Subsystem - Enlisted Requirement loading, constraints application, sponsor distribution, and update.
- ENLISTED INVENTORY Subsystem - Enlisted Inventory Base loading, sponsor distribution, and M-FAST projection.
- OFFICER Subsystem - Officer Requirements loading, sponsor distribution, and update.
- BASE REPORT Subsystem - Data base loading, Numerical Base Comparison, Automated ERP generation, automated ORP generation, PLOT Report generation, Problem Rating Detection, BASE identification and tracking.
- NMRS/MAPMIS/AGM INTERFACE - NMRS Documented Requirement loading, Auth/M12 Requirement merge, Authorized/Documented Requirement report generation, Extraction and loading of AGM input.

The Delta and Support Subsystem deal exclusively with manpower changes to the all Navy requirements; the remaining subsystems deal with the following: application of changes to a

requirement base; application of endstrength, paygrade and rating constraints; inventory projection and interface; determination of training implication, Base comparison and Base report generation. The Enlisted Requirements subsystem together with the Enlisted Inventory subsystems deal specifically with the Enlisted community. This constitutes the major problem area with respect to manpower planning and therefore the major focus point of the manpower planning community. Consequently the extent of its development in MINI-NAMPS is greater than the subsystem supporting the Officer community.

During the System's activation all seven subsystems are utilized; some are exercised repeatedly and others are exercised only at certain stages of the POM process - all are, however, interdependent and therefore each subsystem is necessary to the function of MINI-NAMPS as a whole.

2.2 MINI-NAMPS Terminology

In order to better understand the exposition of MINI-NAMPS subsystem functions in section 2.3, a familiarization with the MINI-NAMPS data terminology is helpful. This terminology consists of dynamic terms which are logically structured so as to define a data aggregates' source, content, and applied constraints. These terms are used as names for specific data aggregates both by the user in conversation, in specifying report content, and by the system for data identification and tracking. The terms and their definition appear below:

- **BASE** Any one of the following data aggregates (data sets) which are stored separately, but in the same format:
 - 1) ALL NAVY Enlisted Requirements
 - 2) ALL NAVY Enlisted Projected Inventory
 - 3) ALL NAVY Officer Requirements

- DELTA99 The collection of all increments/decrements loaded into the Data Base
- DELTA99 A collection of increments/decrements whose selection was stipulated by OP-121 (see section 2.4.1 - Delta data, for further information on DELTA content) which is a designated subset of DELTA99.

EXAMPLES:

DELTA99 - All INC/DEC's
 DELTA01 - First selected DELTA
 DELTA06 - DELTA01 with selected
 INC/DEC's deleted, or added.
 DELTA50 - Final selected DELTA

- BASEID The 5 character alphanumeric code that uniquely identifies a Base to the system and its users. The positional characters are defined as follows:

POSITION 1:

E Enlisted Requirements
 I Enlisted Projected Inventory
 O Officer Requirements

POSITION 2:

A 1 February starting Base
 B 1 March starting Base
 .
 .

POSITION 3 through 4:

00 No DELTA has been applied
 01 DELTA01 has been applied.
 XX DELTAXX has been applied.

POSITION 5:

0 No constraints
 1 Authorized end strength constraints
 2 Authorized endstrength and paygrade
 constraints
 .
 .

EXAMPLES:

- EA001 = a) Enlisted Requirements
b) 1 February starting base used
c) No DELTA applied
d) Authorized endstrength constraints
- EB200 = a) Enlisted Requirements
b) 1 March starting base used
c) DELTA20 applied
d) Unconstrained
- IA 201 = a) Enlisted Projected Inventory/Requirement used to feed projection:
b) 1 February starting base
c) DELTA20 applied
d) Authorized endstrength/DOD Paygrade constrained
- OA002 = a) Officer Requirements
b) 1 February starting base used
c) No DELTA applied
d) Constrained

2.3 MINI-NAMPS Subsystem Functions*

2.3.1 DELTA Subsystem

The Delta Subsystem accomplishes 5 major tasks or functions. They are:

- Delta Collection and Load
- Delta Edit and Update
- Delta Select
- Delta Report
- Delta Apply Extract

Figure 2.1 shows the functional flow of the Delta Subsystem.

*See Appendix B for technical system flow of MINI-NAMPS Subsystems.

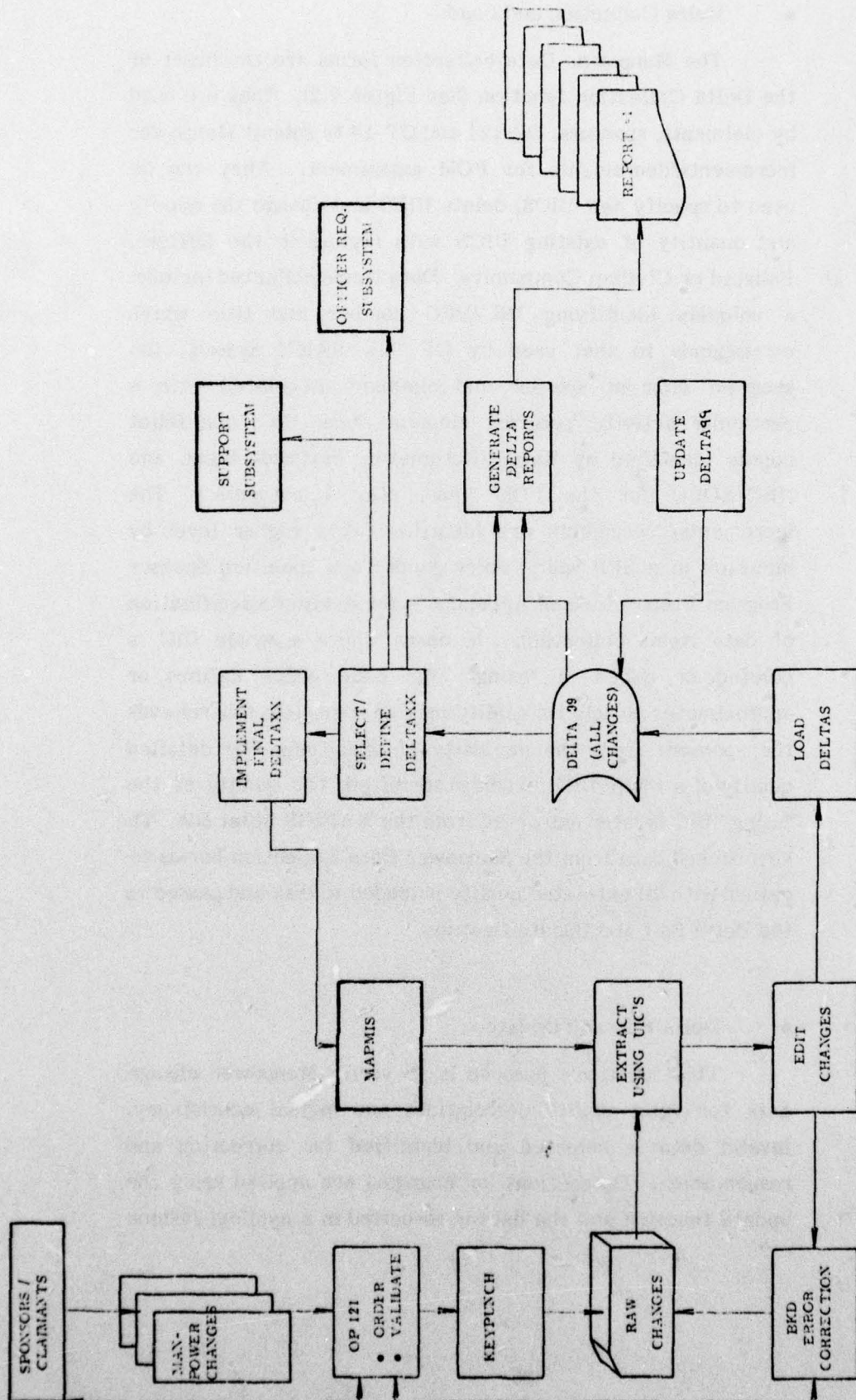


Figure 2.1
POM-79 MINI-NAMPS DELTA SUBSYSTEM FUNCTIONAL FLOW

- **Delta Collection and Load:**

The Manpower Data collection forms are the heart of the Delta Collection function (See Figure 2.2). They are used by claimants, sponsors, OP-121 and OP-14 to submit Manpower increments/decrements for POM assessment. They can be used to specify new UICS, delete UICS and change the quality and quantity of existing UICS with regard to the Officer, Enlisted or Civilian Community. Data items collected include: a uniquely identifying INC/DEC number and title which corresponds to that used by OP 90's NARM System; the program element sponsor and claimant associated with a particular activity; program element code; UIC; and Billet counts identified by Rating/Designator, Paygrade/Rank, and NEC/NOBC for the POM year, plus 4 outyears. The increments/decrements are identified at a higher level by inclusion in a SPP which corresponds to a specified Sponsor Program Proposal. (see Appendix A for detailed specification of data items collected). In cases where a whole UIC is deleted or added, a "using" UIC code which defines or approximates closely its quality may be specified; this relieves the sponsors from the necessity of specifying the detailed quality of a whole UIC. When so specified, the quality of the "using" UIC is later extracted from the MAPMIS Billet file. The keypunched data from the Manpower Data Collection Forms together with all extracted quality is loaded to disk and passed to the Delta Edit and Update function.

- **Delta Edit and Update:**

This function's purpose is to verify Manpower change data for valid quality descriptions and logical consistency. Invalid data is rejected and identified for correction and resubmission. Corrections (or changes) are applied using the update function and the data is re-edited in a cyclical fashion

until all data is error free. The edited data is reformatted, appropriately sorted, and is now ready for use by Delta select, Delta Report, and Delta Apply.

- **Delta Select:**

This function allows the user to select a unique subset of all loaded Manpower change data by simply specifying (i.e. flagging) the INC/DEC numbers he wishes to include. The selected subset is then identified as DELTAXX, where XX is some unique integer between 00-98. Up to 98 different subsets, i.e., DELTA's, can be created with the use of this flagging process, and all report and Base Apply processes can subsequently be limited to any one of these defined Deltas.

- **Delta Report:**

This function provides the users of MINI-NAMPS with various summary and detailed reports of the data contained in DELTA99 or any defined DELTAXX. Over 50 unique reports are presently available and with the use of the CULPRIT report generator additional reports can easily be produced on an 'upon request' basis. For sample Delta reports see POM-79 MINI-NAMPS USERS GUIDE (Report # TR-3-232).

- **Delta Apply Extract:**

Once a set of increments/decrements has been selected and designated as a specific DELTAXX, its impact on Total Navy Requirements and Personnel must be assessed. Delta Apply/Extract allows the extraction of skill and P.E. Sponsor aggregated data for use by: The Support Subsystem which generates the support tail before application to an Enlisted requirement base; and by the Officer Subsystem for application to the Officer base.

2.3.2 SUPPORT Subsystem:

The Support Subsystem accomplishes the following tasks:

- Support Ratio Generation
- Support Billets Generation

See Figure 2.3 for the Support Subsystem functional flow.

- Support Ratio Generation:

Support ratios are derived from the NARM's support ratios, defining the "support tail" by program element and fiscal year, and the "quality ratios" computed from the enlisted requirements file. These "quality ratios" provided a distribution of billets for each program element by program element, sponsor, rating and paygrade. Each set of NARM support ratios was matched by program element with a set of quality ratios. The product of these two sets of ratios provided a complete set of ratios distributing the "support-tail" by sponsor, rating, paygrade, and fiscal years.

- Support Billets Generation:

These final ratios were then used to compute the "support tail" for a selected DELTAXX, and the combined result applied to the enlisted requirement BASE. Appendix C contains a detailed discussion of Support generation.

2.3.3 ENLISTED REQUIREMENT Subsystem

The Enlisted Requirement Subsystem accomplishes the following tasks:

- Base Constraints Application
- Enlisted Base Update

See Figure 2.4 for functional flow.

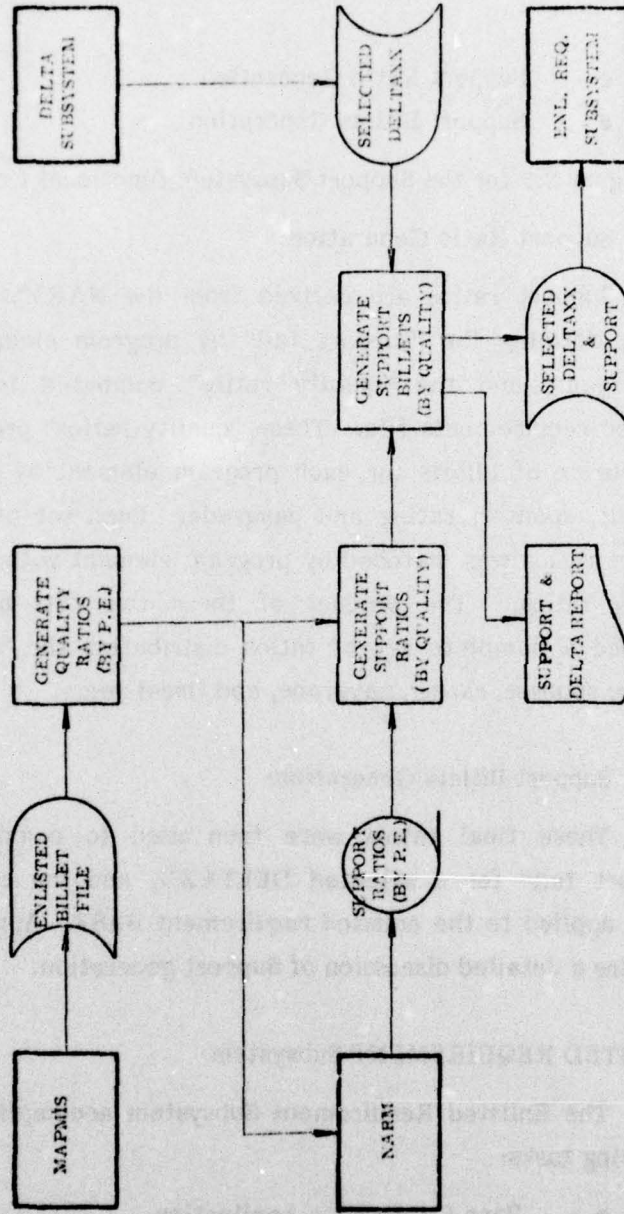


Figure 2.3
 POM-79 MINI-NAMPS SUPPORT SUBSYSTEM - FUNCTIONAL FLOW

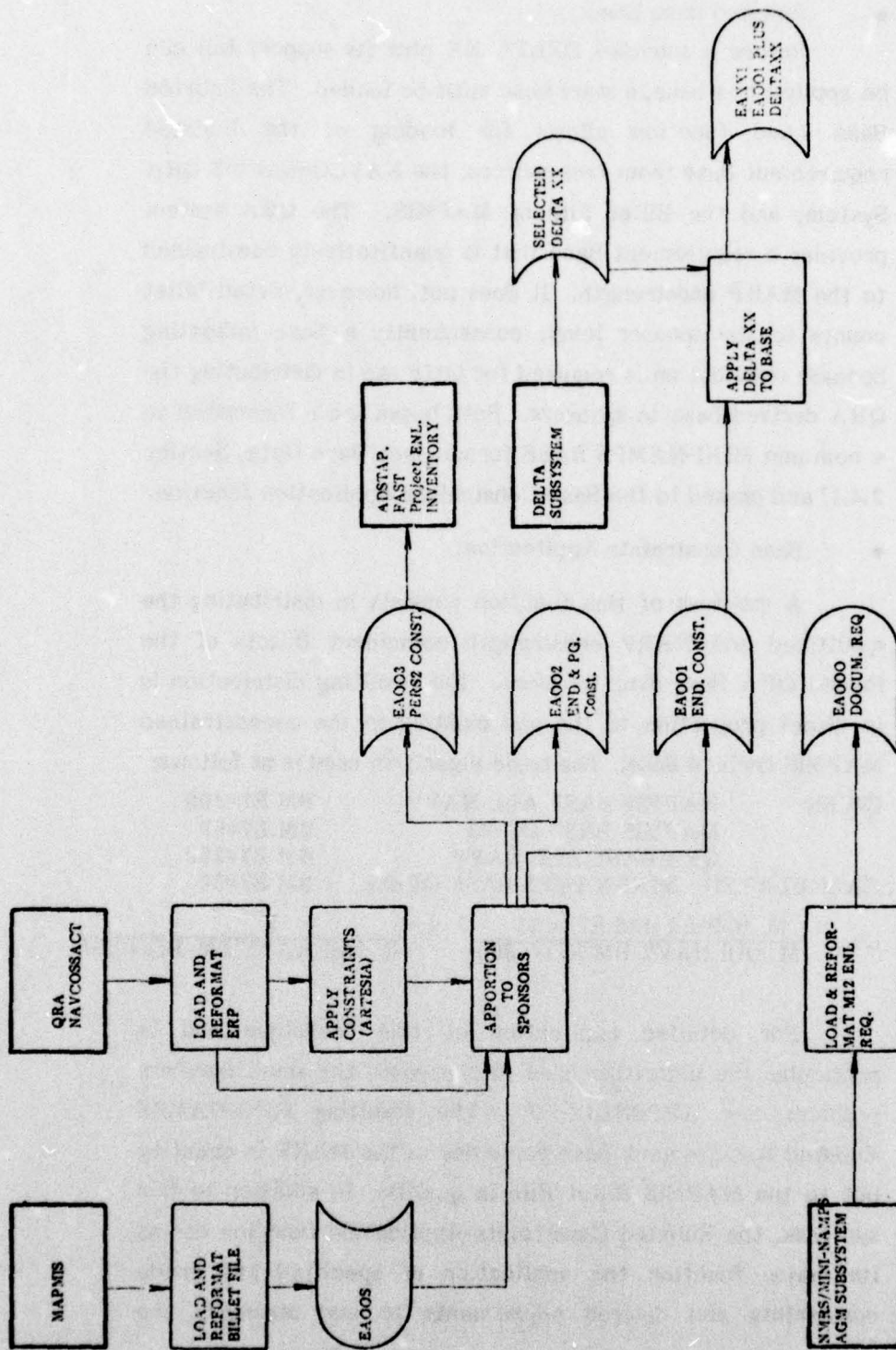


Figure 2.4
 POM-79 MINI-NAMPS ENLISTED REQUIREMENT SUBSYSTEM -
 FUNCTIONAL FLOW

- Enlisted Base Load:

Before a selected DELTA XX plus its support tail can be applied to a base, a start base must be loaded. The Enlisted Base Load function allows for loading of the Enlisted requirement base from two sources, the NAVCOSSACT'S QRA System; and the Billet File of MAPMIS. The QRA system provides a requirement Base that is quantitatively constrained to the MARP endstrength. It does not, however, detail billet counts to the sponsor level; consequently a Base indicating Sponsor distribution is required for later use in distributing the QRA derived base to sponsors. Both bases are reformatted to a common MINI-NAMPS BASE format (see Base Data, Section 2.4.1) and passed to the Base Constraints Application function.

- Base Constraints Application:

A sub-task of this function consists in distributing the qualitized and MARP endstrength coincident Billets of the loaded QRA Base over sponsors. The resulting distribution is in direct proportion to the one existing in the unconstrained MAPMIS derived Base. The basic algorithm used is as follows:

GIVEN:	MAPMIS BASE ALL NAVY	BM E7=300
	MAPMIS BASE OP-03	BM E7=60
	QRA BASE ALL NAVY	BM E7=250
CALCULATED:	MINI-NAMPS BASE OP-03	BM E7=50

$$\text{i.e. } \frac{M (\text{OP-03 BM E7}) = 60}{M (\text{All NAVY BM E7}) = 300} = \frac{X}{Q (\text{All NAVY BM-E7}) = 250}$$

For detailed explication of this technique and in particular the algorithm used to overcome the small numbers problem, see APPENDIX D. The resulting MINI-NAMPS Enlisted Requirement Base coincides to the MARP in quantity but to the MAPMIS Billet File in quality. In addition to this sub-task, the Enlisted Constraints Application function has as its major function the application of specified pay grade constraints and desired adjustments to end strength; the

generation, from a selected base, of copies suitably formatted for input to the ADSTAP.FAST model for Enlisted Inventory projection, and to the STAPLAN system for use in developing an A-School training plan. The specified constraint applications and Base copies to ADSTAP.FAST and STAPLAN can be directed for any of the generated Bases -before or after the Base update process.

- **Enlisted Base Update:**

After a specified DELTAXX has been extracted from DELTA99 and its support tail generated, it is passed to the Enlisted Base Update function for application to a specified Enlisted Requirement Base. The selected increments/decrements comprising the DELTAXX are applied by sponsor, rating, paygrade and fiscal year. The updated base is then passed back through the Enlisted Constraints Application function for application of paygrade constraints, and the resulting base may again be passed to ADSTAP.FAST and STAPLAN for inventory projection and A-School planning. All Bases generated in the Enlisted Requirement Subsystem, whether resulting from updating or constraining, are stored for processing by the Base Report Subsystem.

2.3.4 ENLISTED INVENTORY Subsystem

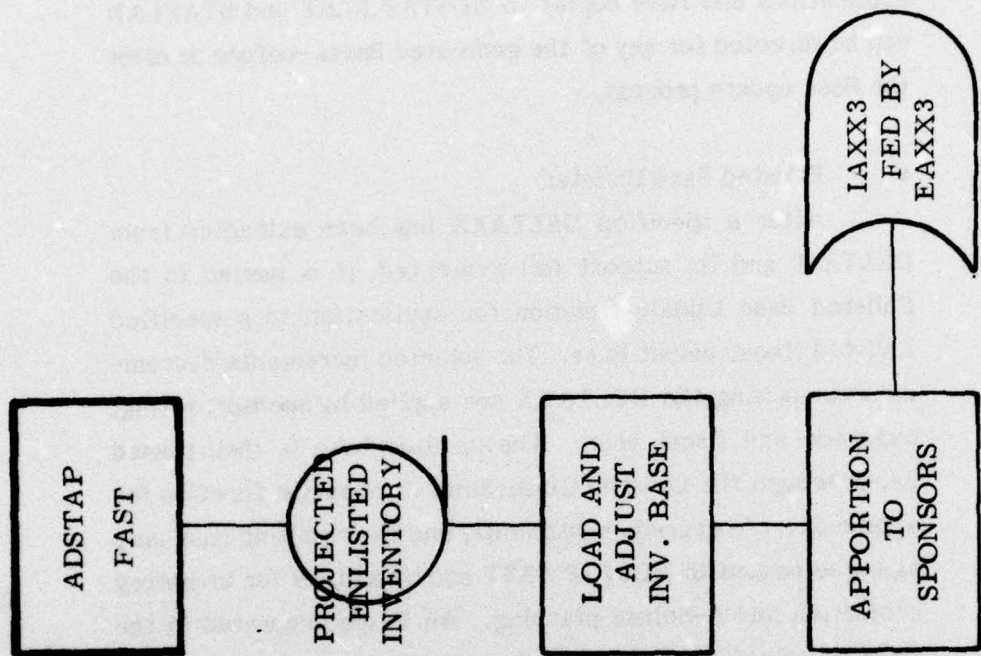
The Enlisted Inventory Subsystem accomplished two major tasks:

- **Inventory Base Load**
- **Sponsor Distribution**

Figure 2.5 shows the functional flow of the subsystem.

- **Inventory Base Load:**

ADSTAP.FAST generates an Enlisted Inventory Projection based on a specified Enlisted Requirement Base.



POM 79 MINI-NAMPS ENLISTED INVENTORY SUBSYSTEM -
FUNCTIONAL FLOW

Figure 2.5

The Inventory Base Load function is used to load this Projected Inventory Base and make adjustments to certain Rating structure differences between existing personnel planning systems and manpower planning systems.

- **Inventory Sponsor Distribution:**

Since ADSTAP.FAST only projects at the All-Navy level, this Inventory base is then distributed over Sponsors and stored in standard MINI-NAMPS Base format for use by the Base Report Subsystem.

2.3.5 OFFICER REQUIREMENT Subsystem

This subsystem comprises the following tasks:

- Officer Base Load
- Officer Base Update

See Figure 2.6 for functional flow.

- **Officer Base Load**

Like the Enlisted Load function, The Officer Base Load function is used to load a QRA generated officer Base which is at the all-Navy Designator/Rank level. A MAPMIS Officer Requirement extract is subsequently used to spread the QRA Base to the Sponsor level as required by the MINI-NAMPS standard Base Format.

- **Officer Base Update:**

After a DELTAXX has been selected and extracted it is applied directly to the start base generated above. Note however that in the case of Officers, no support has been added, since the NARM system provides no Officer support ratios. The new officer base generated by the update process, along with the start base, is stored for processing by the Base Report Subsystem.

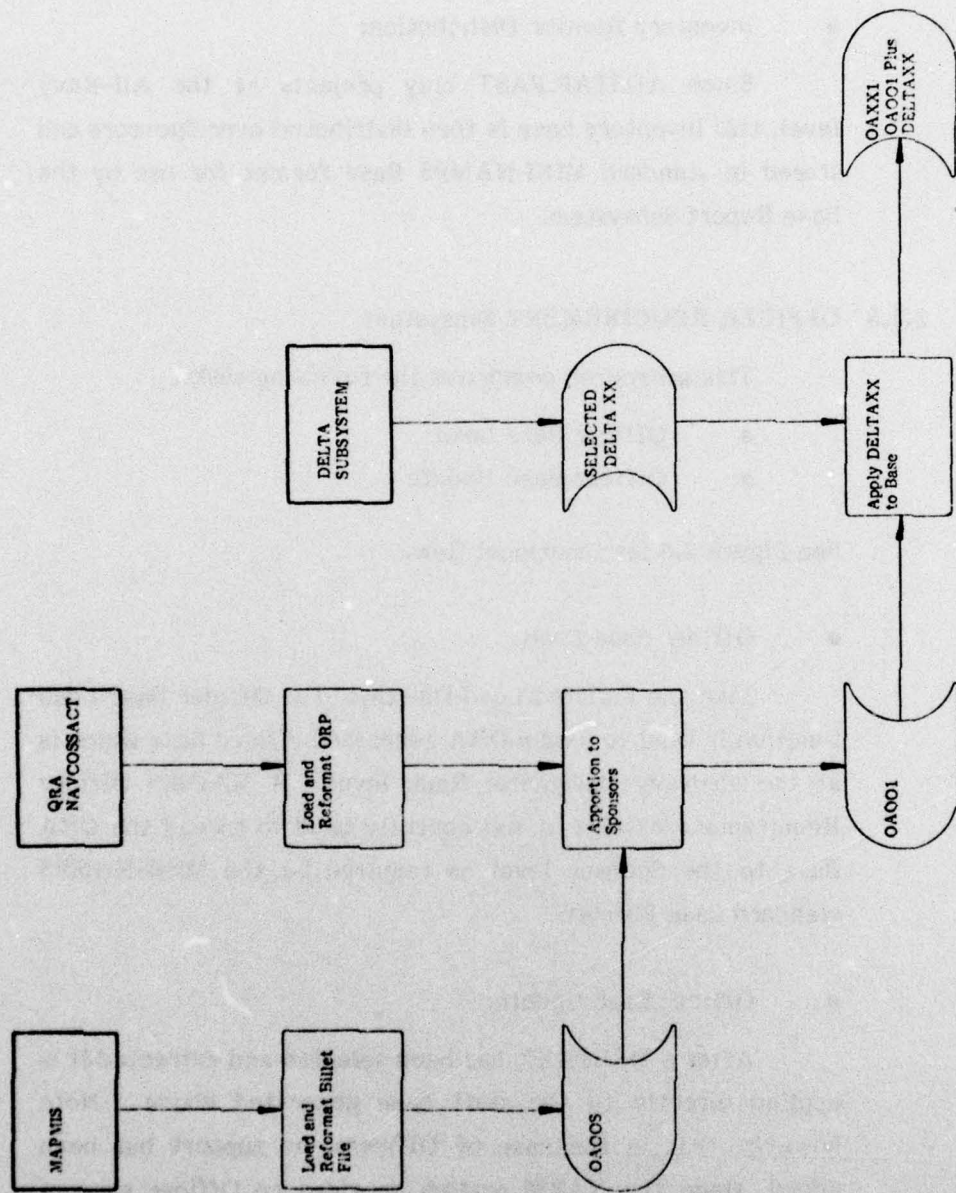


Figure 2.6
 POM-79 MINI-NAMPS OFFICER REQUIREMENT SUBSYSTEM - FUNCTIONAL FLOW

2.3.6 BASE REPORT Subsystem

This subsystem comprises all modules which generate reports related to the three types of BASES defined under MINI-NAMPS Terminology (Page 16). Since each BASE is stored in the standard MINI-NAMPS format, a single module is able to access all three types of bases and thus provide the immediate and selective comparison capability essential to effective POM support. The Report capabilities that comprise the Base Report Subsystem are as follows:

- Batch Plots
- Comparison Report
- ERP
- ORP
- Problem Rating Report

Figure 2.7 illustrates the functional flow of the Base Report Subsystem; and the POM-79 MINI-NAMPS USERS GUIDE (Report # TR-3-232) contains samples of each report described below.

- Batch Plots:

This module allows the user to specify up to 3 Bases (i.e., EA001, EA011, IA012), and various groupings of Ratings/Paygrades for which he desires comparison plots. This allows the user to ascertain for example, whether the Personnel Inventory (IA012) at the rating/paygrade level. Billets are plotted at various levels of aggregation and grouped alphabetically, by DOD defined Rating Areas, or by OP01 defined Rating groups.

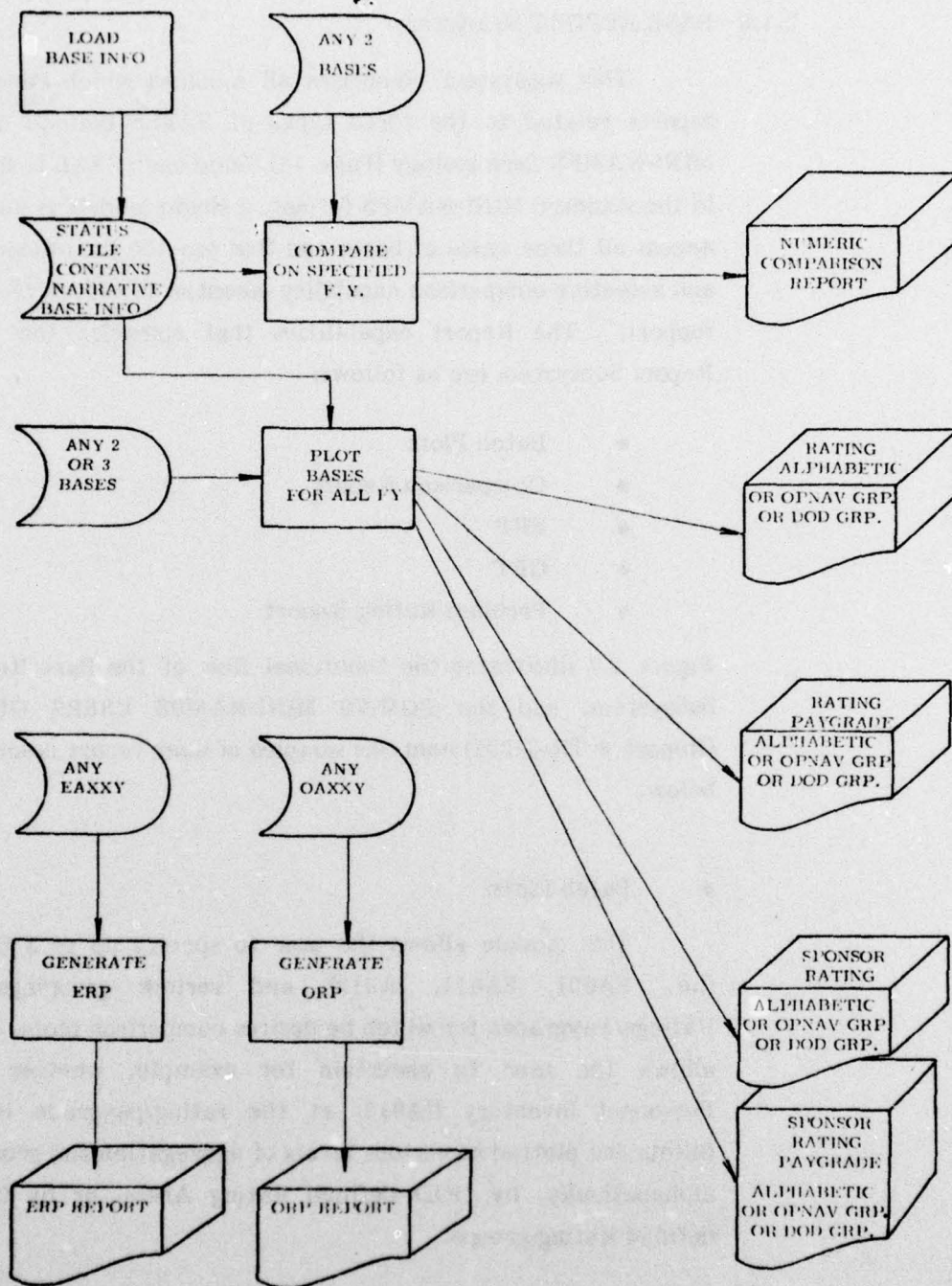


Figure 2.7
POM-79 MINI-NAMPS BASE REPORT SUBSYSTEM - FUNCTIONAL FLOW

- **Comparison Report:**

The above module generates plots that indicate relative relationships between Ratings/Paygrades of various specified BASES. The Comparison Report is generated when exact Billet counts of various Ratings and Paygrades are desired. Billet counts of two selected BASES are shown by Sponsor, Rating, Paygrade for a specified fiscal year.

- **ERP:**

This report is an automated version of the Enlisted Requirements Plan. Any Enlisted Requirement Base stored in MINI-NAMPS can be generated in this format.

- **ORP:**

The ORP module is the automated version of the Officer Requirement Plan and can be generated from any Officer Base stored in MINI-NAMPS.

- **Problem Rating Report**

The purpose of this report is to give the user an indication of those ratings which are likely to cause problems during the POM year or outyears. The user can specify any two Bases, the fiscal year he wishes to examine, and any desired difference ratio; given this input, a report is generated listing all rating/paygrades which violate the specified difference ratio.

2.3.7 NMRS/MAPMIS/AGM INTERFACE Subsystem

The object of this subsystem is to provide a link between the Navy Manpower Requirement System (NMRS) and the Manpower and Personnel Management Information System (MAPMIS) for the primary purpose of Reporting the implications of Billet shortfalls between Documented (unconstrained) Requirements and Authorized (Constrained) Requirements.

The three major functions of the NMRS/MAPMIS/AGM INTERFACE Subsystem are:

- NMRS/MAPMIS Merge
- Shortage Reporting Generation
- Data Extraction

Figure 2.8 shows the functional flow of this subsystem.

- **NMRS/MAPMIS Merge:**

This function uses as input the qualitized Billet counts of those UICs for which NMRS has generated an approved Documented Requirement, and an extract of the MAPMIS Billet file containing both the M+12 Organizational Manning Requirement and the Authorized Requirement. For each UIC present in the NMRS input, only the Authorized Requirement is extracted from the MAPMIS file for each Rating/Paygrade/NEC; for those UICs not present in the NMRS input, both the M+12 and the Authorized Requirement are extracted. In this case the M+12 Requirement is used in lieu of the Documented Requirement. The generated result of this function is a Master File containing the constrained and unconstrained Requirement for each UIC to the Rating/Paygrade/NEC level of detail.

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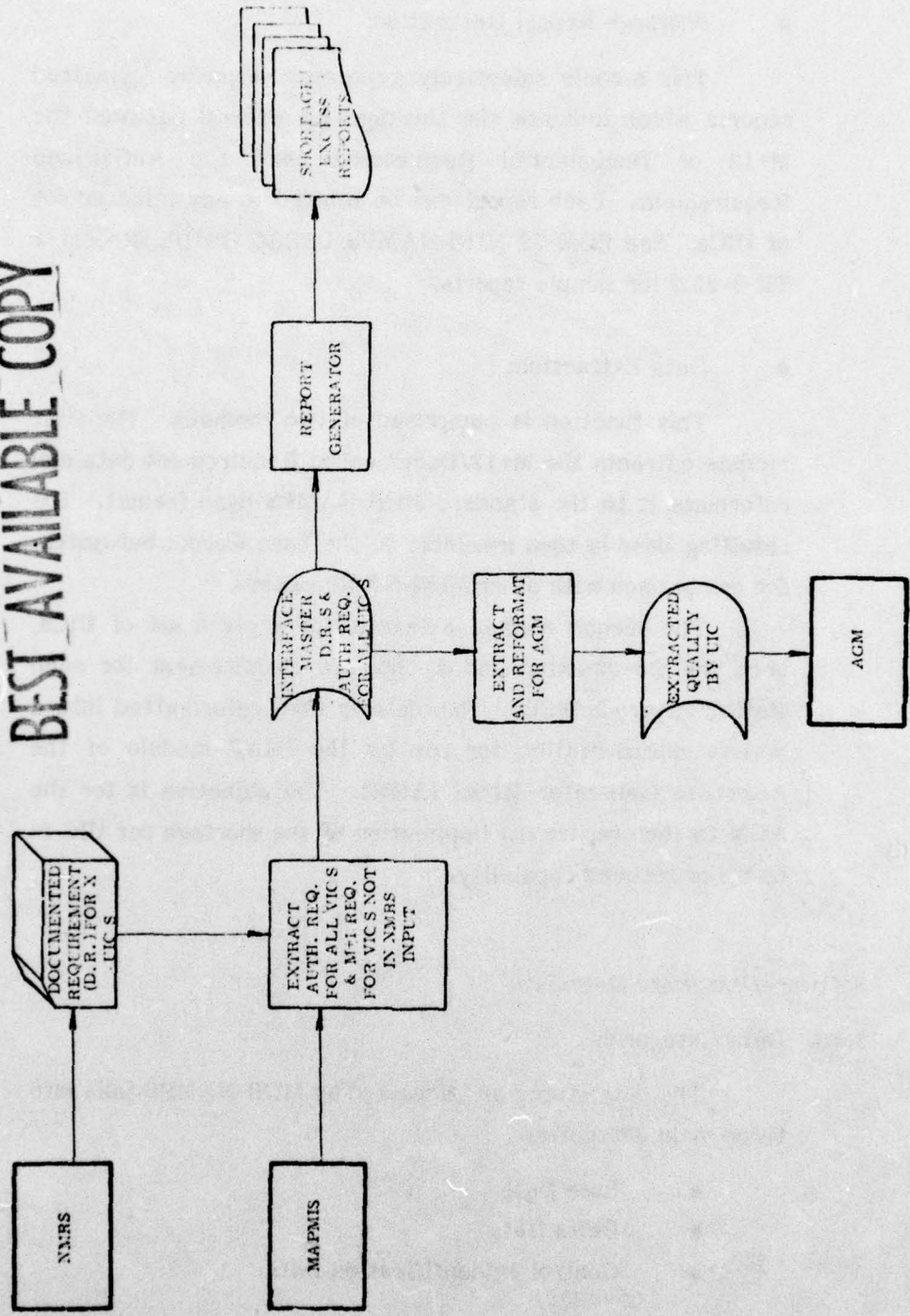


Figure 2.8
POM-79 NMRS/MapMIS /AGM INTERFACE SUBSYSTEM - FUNCTIONAL FLOW

- **Shortage Report Generation:**

This module selectively generates variously formatted reports which indicate the shortage (or excess) between the M+12 or Documented Requirement and the Authorized Requirement. Each report can be limited to any selected set of UICs. See POM-79 MINI-NAMPS USERS GUIDE (Report # TR-3-232) for sample reports.

- **Data Extraction:**

This function is comprised of two modules. The first module extracts the M+12/Documented Requirement data and reformats it to the standard MINI-NAMPS Base format. The resulting Base is then available to the Base Report Subsystem for comparison with other MINI-NAMPS Bases.

The second module extracts, for a given set of UICs, both the Documented and Authorized Requirement for each Rating/Paygrade/NEC. This data is then reformatted into a matrix representation for use by the IMAP module of the Alternate Generator Model (AGM). The objective is for the AGM to then report the implication of the shortage per UIC in terms of reduced capability.

2.4 Software/Hardware Overview

2.4.1 Data Categories

The data stored and accessed by MINI-NAMPS falls into three main categories.

- **Base Data**
- **Delta Data**
- **Control & Identification Data**

- **Base Data:**

After editing, updating and application of various constraints Base data is stored in the MINI-NAMPS Base

format. Each logical record contains Rating or Designator, a Program Element Sponsor code, a 9 by 6 array indicating the paygrade and fiscal year of the Billet count, and the Base identification code. Both Officer and Enlisted Billet counts, and Enlisted Inventory personnel counts are stored in this format. Each logical record can be directly accessed by MINI-NAMPS because its relative position among other logical records corresponds to the relative position of its rating/designator code in an index of ratings/designators. Each BASE defines a separate aggregation of Billet counts, by sponsor, Rating/Designator and Paygrade, and therefore represents a "version" of the Navy's Manpower requirements or Personnel Inventory.

- Delta Data:

Delta data enters MINI-NAMPS by submission of the Manpower Data Collection form. On these forms, Sponsors and Claimants define the quality and quantity of each of their requested manpower increments and decrements. (see Sample Form - Figure 2.2). This data is then edited, reformatted, and loaded to DELTA99. From here the data is used to generate all Delta Reports.

- Control and Identification Data:

Control data used by MINI-NAMPS is in some cases specified at run time and consists of various codes indicating which function is to be performed, what kind of report is to be generated, or what kind of constraints are to be applied. In other cases control data is resident in the system and is commonly accessed by various system modules. Such data includes; the Rating/Paygrade index, which defines all valid Ratings and their associated paygrades; the Designator/Rank index; the Claimant Index; and various other indexes associating a numeric code to its designated meaning.

Identification data is stored in MINI-NAMPS for the purpose of identifying the nature, source and purpose of various data. It includes such things as formal titles used in report generation, and descriptions and definitions of various Bases and selected Deltas.

A more complete conception of these data categories can be gained from the POM-79 MINI-NAMPS SYSTEM FUNCTION AND SPECIFICATION Manual which discusses the technical details of data content and storage techniques.

2.4.2 Software Summary

The major portion of the programs comprising MINI-NAMPS are written in PLI using the IBM PLI Optimizing Compiler; the Support Subsystem and the module generating the ERP report are written in ANSI COBOL IV; and the major constraint application module is written in FORTRAN IV. The complete MINI-NAMPS system comprises over 50 separate programs along with various utility modules. Existing IBM utilities were used whenever possible for such functions as sorting data, loading data, and transferring data to other installations. Job submission and execution is oriented to a batch environment.

2.4.3 Hardware Summary

In FY 79 MINI-NAMPS operated at the BUPERS Computer Facility at the Navy Annex in Arlington, Virginia. The facility employs an IBM 370/165 operating under OS MVT and the HASP II Spooling System.

All Disk storage makes use of the IBM model 3330 Direct Access Storage Facility; Magnetic tape units used for reading and generating tapes are the IBM series 2101-2115. Interface data from other systems can be processed if supplied on 9 track 800 bpi - 3200 bpi tapes, 7 track 200 bpi - 800 bpi tapes, or on IBM punched cards.

3. POM 79 MINI-NAMPS OPERATION

3 POM 79 MINI-NAMPS OPERATION

3.1 Overview

MINI-NAMPS' support of POM 79 was divided into three operational Phases. Each Phase is marked by the time frame in which it operates and by the purpose it serves. During these three successive Phases, MINI-NAMPS functions at various levels of operation and reaches its maximum level during Phase II.

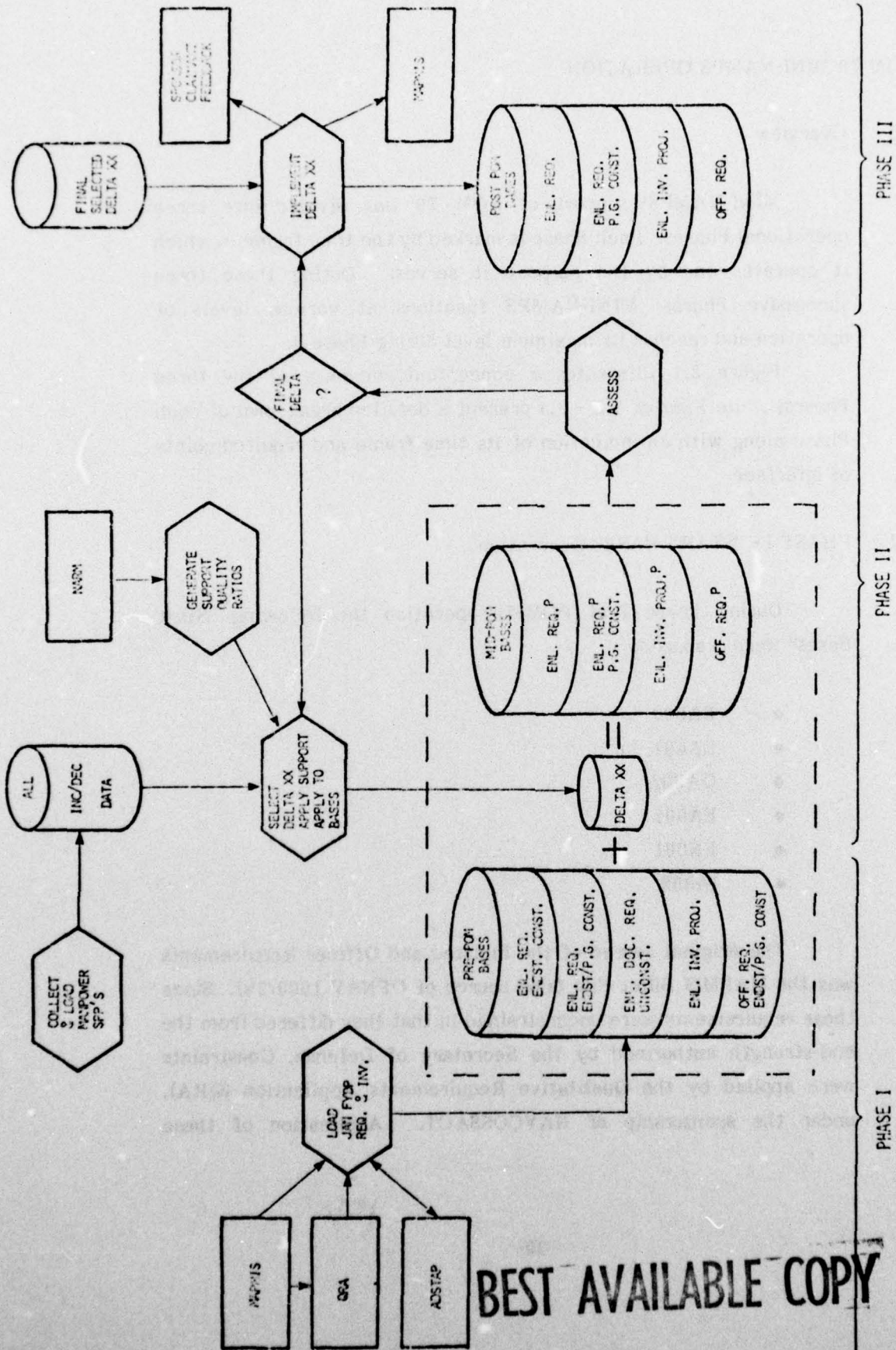
Figure 3.1 illustrates a conceptual summary of the three Phases; while Figures 3.2 - 3.4 present a detailed breakdown of each Phase along with an indication of its time frame and required points of interface.

3.2 PHASE I - "START BASE" Generation

During Phase I of POM-79 operation the following "Start Bases" were prepared:

- EA000
- EA001
- OA002
- EA002
- EN001
- IA002

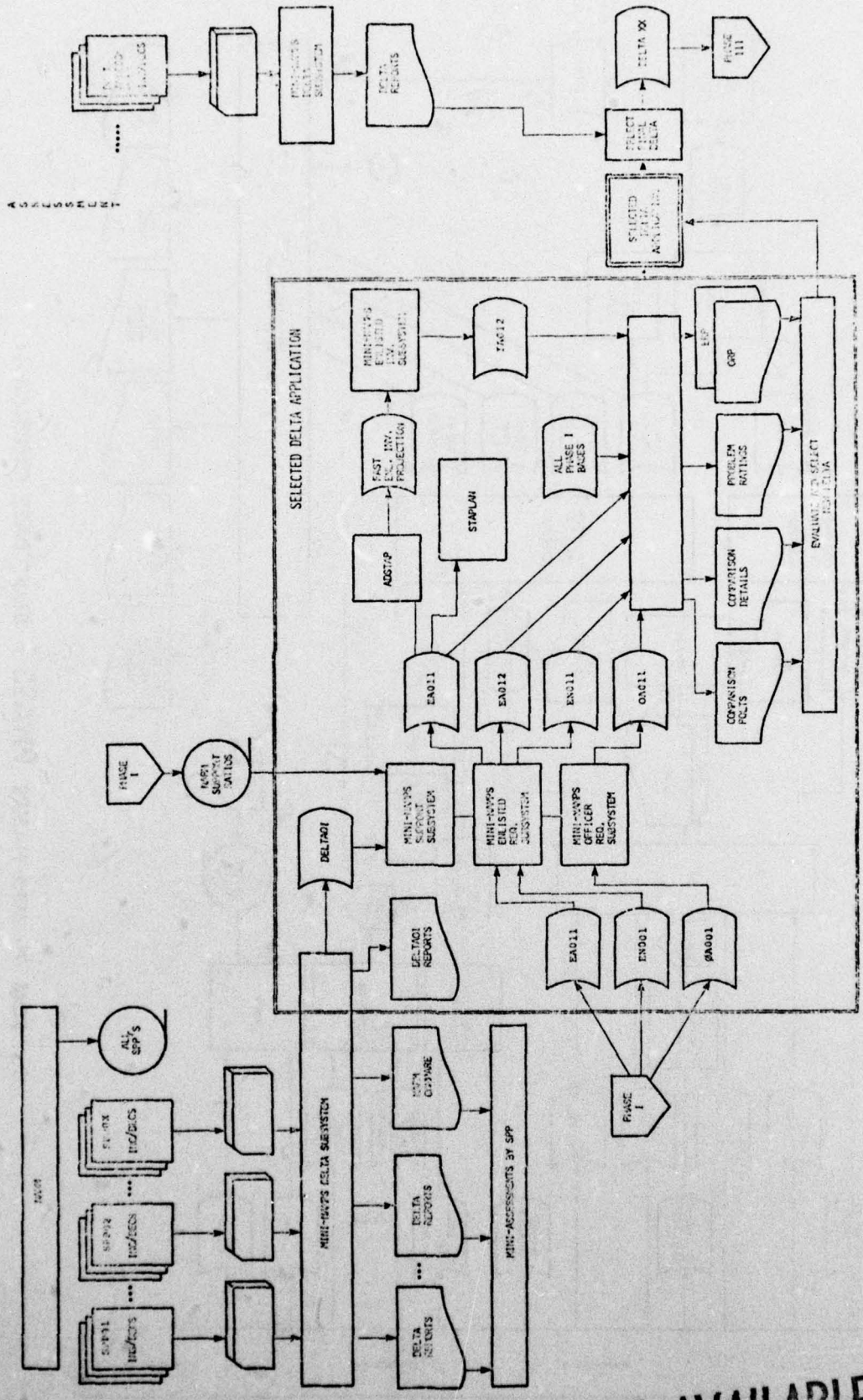
The original source of the Enlisted and Officer Requirements was the MAPMIS Billet File (also source of OPNAV 1000/2's). Since these requirements were unconstrained in that they differed from the end-strength authorized by the Secretary of Defense, Constraints were applied by the Qualitative Requirements Application (QRA), under the sponsorship of NAVCOSSACT. Application of these



MINI-NAMPS OPERATION -- CONCEPTUAL SUMMARY

FIGURE 3.1

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POM 79 MINI-NAMPS PHASE II DELTA FEASIBILITY ASSESSMENT

FIGURE 3.3

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constraints resulted in aggregation of the Requirements data to the All Navy level and in the ERP/ORP format. These Enlisted and Officer Requirement bases then served as input to MINI-NAMPS, were reformatted, spread to sponsors, and identified as Base EA001 and OA002.

Both the Enlisted (EA001) and the Officer (OA002) bases were then further modified until final approval was secured from OP-104. A copy of EA001 was then extracted for use as input to the STAPLAN model for the purpose of establishing a pre-POM A-School training plan.

In addition to DOD endstrength constraints there exists specific Paygrade constraints. These constraints are expressed in terms of a Billet total for each of the Top 5 Paygrades (E5-E9). These totals express the allowable endstrength of each of the 5 paygrades relative to Total Enlisted endstrength. The application of these paygrade constraints by MINI-NAMPS generated the Base EA002 which was identified as the Enlisted Manpower Requirements constrained by Endstrength and Paygrade Ceilings.

The above constrained Base represents the OP-01 version of what the PERS-2 community terms "authorizations". However, before PERS-2's ADSTAP Model can use this base as input for Inventory projection, further modification was necessary in order to account for differences in how Personnel planners distribute the Officer Candidate Billets and how Manpower Planners distribute them. PERS 212 applied these additional modifications and the result served as input to the ADSTAP.FAST. The resulting Enlisted Inventory projection was loaded into MINI-NAMPS and identified as Base IA002 - Enlisted Inventory projection based on Enlisted Manpower Authorizations.

3.3 PHASE II - DELTA Feasibility Assessment

Phase II began with the loading and subsequent assessment of the first Sponsor Program Proposal's (SPP) Manpower changes.

Termed "MINI-Assessment", this loading and assessment process was repeated for each SPP in an average time frame of 5 days. The sum of all the Manpower changes was then loaded to DELTA99 in preparation for reporting, DELTA selection, and Delta application. OP-01 through personnel at OP-121 defined those Increment/Decrements that were to be applied to the Requirement Bases. This set was flagged as DELTA01, subsequently extracted from DELTA99 and applied to EA001 and OA002. The updated Enlisted Requirement base, EA011, was then modified to the DOD specified paygrade constraints generating EA012, and passed to ADSTAP.FAST. The generated Enlisted Inventory projection, IA012, along with all existing bases was stored for comparison display and reporting. The resulting information was made available to the POM assessment process, which subsequently caused further flagging and unflagging of specified Increment/Decrements in DELTA99.

3.4 PHASE III - DELTA Implementation

Phase III began when the selection of the final DELTA50 had been completed, i.e., the set of approved increments/decrements had been selected. At this time it was essential that consistency be established between the manpower change data collected by the Navy Resource Model - NARM and the manpower change data collected by MINI-NAMPS. When this was completed, the final DELTA50 was used to generate the Implementation reports. These were forwarded in a summary format to OP-103 and in a detailed format to OP-100/102 allowing both offices to apply manpower changes to existing data bases in a more timely manner. Additionally, DELTA50 was applied to the Enlisted and Officer Requirement Bases so that Personnel planners could assess the impact of the POM Assessment. And finally, DELTA50 was used to generate Feedback reports, giving Sponsors and Claimants an indication of how the POM assessment affected their individual Manpower Programs.

APPENDICES

BOK

DYNAMICS, INC.
15825 SHADY GROVE ROAD
ROCKVILLE, MARYLAND 20850

APPENDIX A
MANPOWER DATA COLLECTION
SYSTEM

CHIEF OF NAVAL OPERATIONS

POM-79

**MANPOWER DATA
COLLECTION
INSTRUCTIONS**



...

PURPOSE AND GENERAL INSTRUCTIONS

The purpose of this data sheet is to gather the quantity and quality of manpower information relating to POM 79 increments and decrements. Its primary purpose in POM 79 is to assist OP-01 in its manpower assessment during the Navy Program Objectives Memorandum (POM). Upon final assessment, the selected changes will be applied directly to the Navy Billet File. It is therefore essential that all applicable information be correctly identified.

To minimize errors, the OPNAV Form 1000/2 should be consulted where a UIC already exists. In the case of adding a new UIC which is unlike an existing UIC, every effort must be made to identify the proper quality as well as the quantity of the required billets.

It is recognized that the identification of manpower quality and quantity required by this data sheet entails a considerable effort. However, this will relieve sponsors and claimants of additional work at a later date, since the manpower data now collected will eliminate the POST POM collection process. In addition, this work will allow OP-01 to make decisions based on a more complete knowledge of their future manpower implications and to make these decisions at an earlier time in the Programming cycle than has been previously possible.

It is further recognized that the qualitized manpower data collection effort by OP-01 must be integrated and coincident with OP-090's efforts in support of the POM. Although OP-090's NARM system is not concerned with individual billet quality, their aggregate billet counts per increment or decrement must coincide with aggregate billet counts generated by OP-01's MINI-NAMPS system. In view of the time constraints under which this coincidence must be achieved, it is essential that a strong communication link exist among personnel responsible for filling out the OP-01 Manpower Data Collection forms and the NARM Data Collection sheets.

Responsible offices must be familiar with the detailed instructions below and with the examples given on pages 9-14. Changes can be submitted in a variety of ways, therefore an understanding of the instructions and examples will minimize the amount of work necessary to complete these data sheets.

DETAILED INSTRUCTIONS

The form is divided into three major Blocks:

- **BLOCK I** These entries are the responsibility of the sponsor and OP-121 and are always required.
- **BLOCK II** These entries are generally provided by the Claimant and are always required.
- **BLOCK III** These entries are only required for certain change types (see pp. 3).

Each Increment or Decrement is identified by a unique INC/DEC SERIAL # and the required Block I and II entries. In cases where increment/decrement information requires more than one form, it is mandatory that all Block I and II information be duplicated on all subsequent pages.

BLOCK I (required)

1. SPONSOR

Enter code identifying the office designated as the program element sponsor for the affected UIC. (See Tab A, Part 1)

2. REASON

Enter one of the following codes identifying the reason or purpose of this submittal:

- 1 - if Sponsor Program Proposal (SPP)
- 2 - if Program Decision Memorandum (PDM)
- 3 - if Program Budget Decision (PBD)
- 4 - if Other

3. INC/DEC SERIAL #

Enter the NARM serial number as assigned to the INC/DEC on the NARM data sheet.

4. S.P.P.

Number for the SPP as assigned by OP-121.

5. INC/DEC TITLE

Enter NARM title of the increment/decrement.

BLOCK II (required)

6. CLAIMANT

Enter code identifying the command, bureau, or office designated as the military manpower claimant for the affected UIC. (See Tab A, Part 2.) In the case of a new UIC, if a specific claimant has not yet been identified, enter code=99.

7. P.E. # (Program Element)

Enter code which describes the affected UIC's mission and is the basic building block for the Five Year Defense Program (FYDP).

8. CHANGE TYPE

- 1 - Add a new UIC, quality must be given below.
- 2 - Increment or decrement billets within existing (old) UIC, quality must be given below.
- 3 - Delete an existing (old) UIC, military quality will be extracted from the Billet File.
- 4 - Add a new UIC using the quality of an existing UIC, military quality will be extracted from the Billet File. This code

also be used where an existing UIC closely approximates a new UIC with some modification of quantity and quality, in such a case modification may be given below.

9. **AFFECTED UIC 1**

For CHANGE TYPE 2 and 3 enter the 5 digit UIC code which is to be incremented or decremented. (This code appears in block 7 on the Manpower Authorization - OPNAV 1000/2). In the case of a new UIC for which a code has not yet been assigned (CHANGE TYPE 1 or 4) enter the abbreviated official title. EXAMPLE: TRIDA, TRIDB, TRID1, TRID2.

CAUTION: Be certain the UIC specified is one which has manpower associated with it. Some parent UIC's have no manpower suit.

AFFECTED UIC 2-5

Enter those UIC's whose alteration is quantitatively and qualitatively the same as AFFECTED UIC 1 and which are all included under the increment/decrement identified by the NARM INC/DEC serial # entered above.

10. **PAGE of**

This entry is required on all forms. If there are more than 5 total UIC's, quality must be respecified in Block III on a new form beginning with page 01 of XX. If more than one form is necessary for identifying billets associated with a single set of quality, enter the page number for each form along with the total number of pages required, i.e., 01 of 03, 02 of 03, 03 of 03. (See Example 3).

For further clarification of page numbering see Note 1 on page 8.

11. **USING UIC**

For CHANGE TYPE=3 (delete existing UIC) the USING UIC must equal the AFFECTED UIC. It is used for extracting, from the Billet File, the quality of the decrement. For CHANGE TYPE=4, the quality of the USING UIC is extracted from the Billet File for the purpose of defining the quality of the AFFECTED UIC. This block must be empty for CHANGE TYPE 1 and 2.

12. **START YR./STOP YR.**

This entry is required for CHANGE TYPE 3 and 4. It is not required for change types 1 and 2. In the START YR. enter the fiscal year when the manpower change becomes effective; in the STOP YR. enter the last fiscal year effected by the manpower change.

BLOCK III

13. **OEC**

Designate for each line whether the quality indicated applies to Officer, Enlisted, or Civilian using the following codes:

- O - OFFICER
- E - ENLISTED
- C - CIVILIAN

14. **BILLET SEQUENCE NUMBER**

Enter the Billet Sequence number for CHANGE TYPE 2, decrements only, as it appears on the OPNAV 1000/2.

15. **BILLET TITLE**

This entry is required for all increments submitted under CHANGE TYPE 1 and 2.

- for OFFICERS - Enter the exact NOBC short title (maximum of 14 spaces) from the Manual of Navy Officer Manpower and Personnel Classifications, Volume 1, PART A. Add amplifying title if necessary to fully describe the billet. Up to a maximum of 40 spaces may be used. If more than 25 spaces are needed end the first line with a complete or properly hyphenated word. Continue on the next line of the BILLET TITLE field.

- for ENLISTED - Enter billet title from manpower document (SMD/SQMD/SHMD) if available. Otherwise, enter most appropriate title for the majority of duties performed. If more than 25 spaces are needed, end the first line with a complete or properly hyphenated word. A maximum of two lines (50 spaces) may be used.
- for CIVILIAN - Enter appropriate definitive title (if available) - maximum of 50 spaces.

16. QUALITY DESCRIPTION - Left justify this field.

- OFFICER Enter the desired Designator along with the letter designating Grade from TAB B, Part 1 and TAB B, Part 2. (1110J, 1310I, etc.)
- ENLISTED Enter the desired enlisted billet rating from TAB B, Part 3. (GMG3, DP1, AVCM, BMSN, etc.)
- GENERAL SCHEDULE CIVILIANS Enter 'GS' and desired grade level (GS01, GS18, GS09, etc.)
- WAGE BOARD CIVILIAN Enter 2 digit alphabetic code and desired grade level. (WS01, W114, WG10, etc.)
- FOREIGN PAY(FP) SCHEDULE Enter 'FP', and one of the following category identifiers:
 - A. Foreign Direct Hire
 - B. Foreign Indirect Hire (FPA, FPB)

17. PRI.NOBC/NEC SERIES

- OFFICER Enter the 4 digit Navy Officer Billet Classification, left justify. (2153, 9478, see Example 1)
- ENLISTED Enter the 4 digit Navy enlisted classification, left justify. (1400, 0450, see Example 1)
- GS CIVILIAN Enter 4 digit occupational series code, left justify. (2810, 0820, see Example 1)
- WB CIVILIAN Enter the 5 digit occupational series code, left justify. (01560, 12781, see Example 1)
- F.P. CIVILIAN Leave blank.

18. REQUIREMENTS

999 is the maximum Billet Count that may be specified in a single line per FY. Right justify all increment/decrement quantities.

- CHANGE TYPE = 1 - Enter number of billets to be added in the fiscal years affected.
- CHANGE TYPE = 2 - Enter number of billets incremented or decremented in the fiscal years affected; a minus sign must precede each decrement entered. A plus sign may be omitted.
- CHANGE TYPE = 3 - The quality of the specified USING UIC will be retrieved by OP-01 for the fiscal years indicated by the START/STOP years.
- CHANGE TYPE = 4 - The quality of the specified USING UIC will be retrieved by OP-01 for the fiscal years indicated by the START/STOP YEAR entry. Additional quality may be specified which will then be combined with the USING UIC's quality for achieving a closer approximation of the new UIC's manpower suit.

NOTE: If a "-2" appears under FY 79, 2 billets will be deleted for FY 79 only. To delete 2 billets for FY 79 thru FY 82, a "-2" must be entered under each of these fiscal years. To delete 2 billets in FY 79 and 2 additional billets in FY 80, "-2" must be entered in FY 79 and "-4" in FY 80.

NOTE 1: It is extremely important that the proper numbering of pages be strictly adhered to in order to avoid computer rejects.

Case I: INC/DEC change involving 5 or less UIC's and billet quality requires only one form.

In this case the change requires only one form and it should be numbered 01 of 01.

Case II: INC/DEC change involving 5 or less UIC's but billet quality requires more than one form.

In this case each page required will be numbered in sequential order and include total number of pages involved (01 of 02, 02 of 02).

Case III: INC/DEC change involving more than 5 UIC's but billet quality requires only one form.

In this case each page required to include all UIC's must be numbered 01 of 01 with the applicable quality listed on each form.

Case IV: INC/DEC change involving more than 5 UIC's and billet quality requires more than one form.

In this case the numbering system becomes more complex and can best be served by example. Suppose there are 12 UIC's and the quality involved requires 30 lines (2 forms). The INC/DEC change involves a minimum of 3 sets of UIC's (only a maximum of 5 can be listed on any one form) and a minimum of 6 forms * to be completed. Each set must be numbered 01 of 02 and 02 of 02 to include necessary billet quality.

* This example is based on the fact that all the UIC's listed on each form will have the identical applicable quality. If this is not the case, other combinations of number of forms to be submitted will exist.

EXAMPLES

To improve your understanding of the OP-01 Manpower Collection System the following examples are provided. These examples demonstrate the correct way of filling out the form and also some common errors made during this process. To clarify any misunderstanding concerning these examples or the above instructions, please contact OP-121 at commercial # 694-3413 or Autovon # 224-3413.

EXAMPLE 1

Claimant 70 requests the addition of one 1100J, one 1310H, three GS11s, one WG099 and one YN1. The change is to take effect in FY 79. This example will add billets to the existing UIC 09810, as specified by the change type 2 code.

EXAMPLE 1A -CORRECT

This indicates the correct way to submit the above manpower change.

EXAMPLE 1B -WRONG

- *1 The OEC code is not consistent with the type of civilian quality specified.

EXAMPLE 2

Claimant 60 wishes to decrement all Seoc Component identified by UIC 39285. The decrement is to be effective in FY 80.

EXAMPLE 2A - CORRECT

This indicates the correct way to submit the above manpower change.

EXAMPLE 2B - WRONG

- *1 Change type = 3 requires USING UIC entry. Since it was not entered the quality of the decrement will not be retrieved during normal operational process. The correction must be made and the extract process reinitiated.
- *2 Stop Year is not specified and will default to FY 83.
- *3 01 of 01 must be inserted.

EXAMPLE 3

Claimant 70 wishes to add a new activity whose UIC code has not yet been assigned and whose manpower suit will take two forms to specify. The increment is to take effect in FY 80.

EXAMPLE 3A - CORRECT

This indicates the correct way to submit above manpower change.

EXAMPLE 3B - WRONG

- *1 PAGE 01 of 02 specification has been omitted on the first form; forms will be rejected.
- *2 Block I information missing on second page.

MANPOWER DATA COLLECTION FORM

Example 3a

BLOCK I SPONSOR, <input type="text" value="05"/> REASON, <input type="text" value="1"/> INC/DEC SERIAL #, <input type="text" value="1521"/>		PAGE <input type="text" value="01"/> OF <input type="text" value="02"/>	
S.P.P., <input type="text" value="04"/> INC/DEC TITLE, <input type="text" value="A-65 NEW 1"/>		USING UIC, <input type="text"/>	
CLAIMANT, <input type="text" value="30"/> P.E.#, <input type="text" value="24134N"/> CHANGE TYPE, <input type="text" value="1"/>		START STOP YR., 12 YR., <input type="text"/> <input type="text"/>	
BLOCK II AFFECTED UICs: 1 <input type="text" value="A65NI"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
3 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		4 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>			
BLOCK III			
O E C	BILLET TITLE ¹⁵	QUALITY DESCRIPTION ¹⁶	PRI. NOBC NEC SERIES ¹⁷
O O C	ADMIN ASSISTANT WEP MAINT PLAM CRYPTO EQUIP OPS	1100J 1370H 6511	2605 6944 0388
			FY 79 FY 80 FY 81 FY 82 FY 83
			01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

EXAMPLE 4

Claimant 60 requests deletion of 2 AWCS, & 1 TD3 from UIC identifying FASOTRAGRULANT at NORFOLK, VIRGINIA. The change is to take effect in FY 79.

EXAMPLE 4A - CORRECT

This indicates the correct submission including the correctly specified UIC.

EXAMPLE 4B - WRONG

- *₁ Claimant has entered erroneous UIC "0348A" which designates FASOTRAGRULANT in Brunswick, MAIN. UIC 0348A does not include any AWCS billets and specified BILLET SEQUENCE NUMBERS correlate to different ratings. This error would generate wasted manhours for the Claimant and OP-102 in tracing and correcting the error.
- *₂ BILLET SEQUENCE NUMBER has been omitted - it must be specified whenever a decrement is submitted with CHANGE TYPE=2.
- *₃ Invalid Quality Description code, Paygrade indicator is missing - line 03 will be rejected.

MANPOWER DATA COLLECTION FORM

Example 4a

<p>BLOCK I</p> <p>SPONSOR, 05</p> <p>S.P.P., 04</p> <p>CLAIMANT, 60</p>	<p>REASON, 1</p> <p>INC/DEC TITLE, FAS</p> <p>P.E.#, 24262N</p>	<p>INC/DEC SERIAL #, 2578</p> <p>INC/DEC TITLE, NORF</p> <p>CHANGE TYPE, 2</p>	<p>AFFECTED UIC'S</p> <p>1 09810</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p>	<p>PAGE 01 OF 01</p> <p>USING UIC</p> <p>START STOP YR. 12 YR.</p>																																																																																																																																							
<p>BLOCK III</p> <p>BILLET SEQUENCE NUMBER DECREMENTS ONLY¹⁴</p> <p>E05500</p> <p>E05100</p> <p>E04300</p>	<p>BILLET TITLE¹⁵</p>	<p>QUALITY DESCRIPT.¹⁶</p> <p>AWCS</p> <p>AWCS</p> <p>T03</p>	<p>PRI. NOBC NEC SERIES¹⁷</p> <p>7821</p> <p>7821</p> <p>4523</p>	<p>REQUIREMENTS¹⁸</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>FY 79</th> <th>FY 80</th> <th>FY 81</th> <th>FY 82</th> <th>FY 83</th> </tr> <tr> <td>-1</td> <td>-1</td> <td>-1</td> <td>-1</td> <td>-1</td> </tr> <tr> <td>-1</td> <td>-1</td> <td>-1</td> <td>-1</td> <td>-1</td> </tr> <tr> <td>-1</td> <td>-1</td> <td>-1</td> <td>-1</td> <td>-1</td> </tr> <tr> <td>04</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>05</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>06</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>07</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>08</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>09</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>11</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>13</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>14</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>15</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>16</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>17</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>18</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>19</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>20</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>21</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>22</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>23</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>24</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>25</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>26</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	FY 79	FY 80	FY 81	FY 82	FY 83	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	04					05					06					07					08					09					10					11					12					13					14					15					16					17					18					19					20					21					22					23					24					25					26				
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EXAMPLE 5

Claimant 70 wishes to add 4 ET1's to UIC 09739 in FY 80, and additional ET1 in FY 81.

EXAMPLE 5A - CORRECT

This indicates the proper way to submit this above increment.

EXAMPLE 5B - WRONG

- *1 The requirement as specified implies that an increase of ET's over present level is desired in FY 80, but only 1 ET over present level is desired for FY 81 thru 83. The Claimant actually wants an increase of 4 in FY 80 over present level and an increase of 5 in FY 81-83 over present level.
- *2 The **BILLET TITLE** is omitted. For an increment each billet specified must include a **BILLET TITLE**.

PROGRAM ELEMENT SPONSORS

The program element sponsor is the Deputy Chief of Naval Operations (DCNO) or Director of a Major Staff Office who is responsible for force composition, funding support, and programmed manpower for a specific program element. He is responsible for objectives and planned programs for the out-years, as well as for the development of Program Change Requests (PCRs).

<u>SPONSOR CODE</u>	<u>CODE</u>
01	Op-01 DCNO (Manpower)
02	Op-02 DCNO (Submarine Warfare)
03	Op-03 DCNO (Surface Warfare)
04	Op-04 DCNO (Logistics)
05	Op-05 DCNO (Air Warfare)
06	Op-06 DCNO (Plans, Policy, & Operations)
10	Op-09B AVCNO/Director, Naval Administration
11	Op-09R Director, Naval Reserve
12	Op-91 Director, Information Systems Division
13	Op-090 Director, Navy Program Planning
14	Op-094 Director, Command & Control & Communications Program
16	Op-095 Director, Antisubmarine Warfare and Ocean Surveillance Programs
17	Op-96 Director, Systems Analysis Division
18	Op-098 Director, Research, Development, Test and Evaluation
20	Op-099 Director, Naval Education & Training
21	Op-009 Director Naval Intelligence/COMNAVINTCOM
22	Commandant of the Marine Corps
23	Op-007 Chief of Information
26	Comptroller of the Navy/ASN (FM)

MILITARY MANPOWER CLAIMANTS

For the purpose of this instruction, the military manpower claimant is the command, bureau, or office in the administrative chain of command assigned responsibility by the Chief of Naval Operations for management of military manpower requirements of assigned activities. The designated military manpower claimants are:

<u>Claimant Code</u>	<u>Title</u>
02	Central Operating Activity (COA)(PERS-313)
11	Chief of Naval Operations (OP-09BF)
12	Deputy Comptroller of the Navy (NCD)
14	Chief of Naval Research
15	Commander, Naval Intelligence Command
18	Chief, Bureau of Medicine and Surgery
19	Commander, Naval Air Systems Command
21	U. S. Army
22	Chief of Naval Personnel
23	Commander, Naval Supply Systems Command
24	Commander, Naval Sea Systems Command
25	Commander, Naval Facilities Engineering Command
27	Commandant of the Marine Corps
29	Secretary of Defense/Chairman, Joint Chiefs of Staff/Uniformed Services University of Health Sciences
30	Director, Strategic Systems Project Office
33	Commander, Military Sealift Command
37	Chief of Naval Material
39	Commander, Naval Electronic Systems Command
42	Director, Defense Nuclear Agency
43	Director, Defense Communication Agency

TAB A, Part 2

44	Director, Defense Intelligence Agency
45	Director, National Security Agency
48	Director, Defense Mapping Agency
49	Director, Defense Investigative Service
51	Director, Defense Supply Agency
57	U. S. Air Force
60	Commander in Chief, U.S. Atlantic Fleet
61	Commander in Chief, U.S. Naval Forces, Europe
62	Chief of Naval Education & Training
63	Commander, Naval Telecommunications Command
64	Commander, Naval Weather Service Command
65	Oceanographer of the Navy
69	Commander, Naval Security Group Command
70	Commander in Chief, U.S. Pacific Fleet
72	Chief of Naval Reserve
78	Director of Naval Laboratories
86	Reimbursable
99	Specific claimant not yet identified

OFFICER DESIGNATORS

Tab B, Part 1

a. Unrestricted Line

<u>Billet Code</u>	<u>Billet Description</u>
1000	Unrestricted Line officer billet which may be filled by any appropriately skilled and experienced officer
1050	Unrestricted Line officer billet requiring an officer qualified in any one of the warfare specialties (LT and above)
1110	Unrestricted Line officer billet requiring Surface Warfare qualification or afloat billets leading to such qualification
1120	Unrestricted Line officer billet requiring Submarine Warfare qualification or afloat billets leading to such qualification
1130	Unrestricted Line officer billet requiring Special Warfare (UDT/SEAL) qualification
1160	Unrestricted Line officer billet for a student in training for Surface Warfare qualification
1170	Unrestricted Line officer billet for a student in training for Submarine Warfare qualification
1180	Unrestricted Line officer billet for a student in training for Special Warfare qualification
*1300	Unrestricted Line officer billet, Code 0 - Other Than Operational Flying, requiring Air Warfare specialty of a pilot or NFO (LT and above)

*1301	Unrestricted Line officer billet, Code 1 - Operational Flying, requiring Air Warfare specialty of a pilot or NFO (LT and above)
*1302	Unrestricted Line officer billet, Code 2 - Operational Flying, requiring Air Warfare specialty of a pilot or NFO (LT and above)
*1310	Unrestricted Line officer billet, Code 0 - Other Than Operational Flying, requiring Aviation Warfare specialty of a pilot
*1311	Unrestricted Line officer billet, Code 1 - Operational Flying, requiring Aviation Warfare specialty of a pilot
*1312	Unrestricted Line officer billet, Code 2 - Operational Flying, requiring Aviation Warfare specialty of a pilot
*1320	Unrestricted Line officer billet, Code 0 - Other Than Operational Flying, requiring Aviation Warfare specialty of a Naval Flight Officer
1372	Unrestricted Line officer billet, Code 2 - Operational Flying, for a student in training for Aviation Warfare (NFO) qualification
1392	Unrestricted Line officer billet, Code 2 - Operational Flying, for a student in training for Aviation Warfare (pilot) qualification.
*1321	Unrestricted Line officer billet, Code 1 - Operational Flying, requiring Aviation Warfare specialty of a Naval Flight Officer
*1322	Unrestricted Line officer billet, Code 2 - Operational Flying, requiring Aviation Warfare specialty of a Naval Flight Officer

b. Restricted Line

1410	Engineering Duty officer billet requiring Ship Engineering, Ordnance Engineering or Explosive Ordnance Disposal specialties
1500	Aeronautical Engineering Duty officer billet requiring Aeronautical Engineering (AED) or Aeronautical Maintenance (AMD) specialties (CAPT and above)
1510	Aeronautical Engineering Duty officer billet requiring Aeronautical Engineering (AED) specialty
*1511	Aeronautical Engineering Duty officer billet, Code 1 - Operational Flying, requiring the specialty of an Aeronautical Engineering Duty (AED) officer who is a designated Pilot or Naval Flight Officer
*1512	Aeronautical Engineering Duty officer billet, Code 2 - Operational Flying, requiring the specialty of an Aeronautical Engineering Duty (AED) officer who is a designated Pilot or Naval Flight Officer
1520	Aeronautical Engineering Duty officer billet requiring Aeronautical Maintenance (AMD) specialty
1610	Special Duty officer billet requiring Cryptology specialty
1630	Special Duty officer billet requiring Intelligence specialty

1650	Special Duty officer billet requiring Public Affairs specialty
*1800	Special Duty officer billet requiring Geophysics (Meteorology, Oceanography, and/or Hydrography) specialty

Tab B, Part 1

c. Unrestricted Line - Prospective Staff Corps

1900	Unrestricted Line officer student billet for a prospective Nurse Corps officer
1910	Unrestricted Line officer student billet for a prospective Medical Corps officer (Senior Medical Student Program)
1920	Unrestricted Line officer student billet for a prospective Dental Corps officer
1930	Unrestricted Line officer student billet for a prospective Medical Service Corps officer (Optometry)
1960	Unrestricted Line officer student billet for a prospective Medical Corps officer (Medical/Osteopathic Scholarship Program)

d. Staff Corps

2100	Staff Corps officer billet requiring Medical specialty
*2102	Staff Corps officer billet, Code 2 - Operational Flying, requiring Medical specialty of a qualified Flight Surgeon
2200	Staff Corps officer billet requiring Dental specialty
2300	Staff Corps officer billet requiring Medical Service (Health Care Administration, Medical Allied Science, Optometry, Pharmacy, or Medical Specialist) specialty
*2302	Staff Corps officer billet, Code 2 - Operational Flying, requiring specialty of a qualified Aviation Physiologist or Aviation Experimental Psychologist
2500	Staff Corps officer billet requiring Law specialty
2900	Staff Corps officer billet requiring Nursing specialty
3100	Staff Corps officer billet requiring Supply specialty
4100	Staff Corps officer billet requiring Chaplain specialty
5100	Staff Corps officer billet requiring Civil Engineering specialty

e. Limited Duty Officer - Line (Surface)

6110	Limited Duty officer (line) billet requiring management in Deck specialty (Surface)
6120	Limited Duty officer (line) billet requiring management in Operations specialty (Surface)
6130	Limited Duty officer (line) billet requiring management in Engineering/Repair specialty (Surface)
6150	Limited Duty officer (line) billet requiring management in Nuclear Power specialty (Surface)
6160	Limited Duty officer (line) billet requiring management in Ordnance specialty (Surface)
6180	Limited Duty officer (line) billet requiring management in Electronics specialty (Surface)

f. Limited Duty Officer - Line (Submarine)

6210	Limited Duty officer (line) billet requiring management in Deck specialty (Submarine)
6220	Limited Duty officer (line) billet requiring management in Operations specialty (Submarine)
6230	Limited Duty officer (line) billet requiring management in Engineering/Repair specialty (Submarine)
6250	Limited Duty officer (line) billet requiring management in Nuclear Power specialty (Submarine)
6260	Limited Duty officer (line) billet requiring management in Ordnance specialty (Submarine)
6280	Limited Duty officer (line) billet requiring management in Electronics specialty (Submarine)

g. Limited Duty Officer - Line (Aviation)

6310	Limited Duty officer (line) billet requiring management in Aviation Deck specialty
6320	Limited Duty officer (line) billet requiring management in Aviation Operations specialty
6330	Limited Duty officer (line) billet requiring management in Aviation Maintenance specialty
6360	Limited Duty officer (line) billet requiring management in Aviation Ordnance specialty
6380	Limited Duty officer (line) billet requiring management in Avionics specialty

h. Limited Duty Officer - Line (General)

6410	Limited Duty officer (line) billet requiring management in Administration specialty
6420	Limited Duty officer (line) billet requiring management in Data Processing specialty
6430	Limited Duty officer (line) billet requiring Bandmaster specialty
6440	Limited Duty officer (line) billet requiring management in Cryptology specialty
6450	Limited Duty officer (line) billet requiring management in Intelligence specialty
6460	Limited Duty officer (line) billet requiring management in Meteorology specialty
6470	Limited Duty officer (line) billet requiring management in Photography specialty
6480	Limited Duty officer (line) billet requiring management in Explosive Ordnance Disposal specialty

i. Limited Duty Officer - Staff Corps

6510	Staff Corps Limited Duty officer billet requiring Supply specialty
6520	Staff Corps Limited Duty officer billet requiring Mess Management specialty
6530	Staff Corps Limited Duty officer billet requiring Civil Engineering specialty

j. Warrant Officer - Line (Surface)

7110	Warrant Officer (line) billet requiring supervision in Boatswain specialty (Surface)
7120	Warrant Officer (line) billet requiring supervision in Operations Technician specialty (Surface)
7130	Warrant Officer (line) billet requiring supervision in Engineering specialty (Surface)
7140	Warrant Officer (line) billet requiring supervision in Repair Technician specialty (Surface)
7150	Warrant Officer (line) billet requiring supervision in Nuclear Power Technician specialty (Surface)
7160	Warrant Officer (line) billet requiring supervision in Ordnance Technician specialty (Surface)
7170	Warrant Officer (line) billet requiring supervision in Underwater Ordnance Technician specialty (Surface)
7180	Warrant Officer (line) billet requiring supervision in Electronics Technician specialty (Surface)

k. Warrant Officer - Line (Submarine)

7210	Warrant Officer (line) billet requiring supervision in Boatswain specialty (Submarine)
7220	Warrant Officer (line) billet requiring supervision in Operations (Submarine)
7230	Warrant Officer (line) billet requiring supervision in Engineering specialty (Submarine)
7240	Warrant Officer (line) billet requiring supervision in Repair Technician specialty (Submarine)
7250	Warrant Officer (line) billet requiring supervision in Nuclear Power Technician specialty (Submarine)
7260	Warrant Officer (line) billet requiring supervision in Ordnance Technician specialty (Submarine)
7270	Warrant Officer (line) billet requiring supervision in Underwater Ordnance Technician specialty (Submarine)
7280	Warrant Officer (line) billet requiring supervision in Electronics Technician specialty (Submarine)

l. Warrant Officer - Line (Aviation)

7310	Warrant Officer (line) billet requiring supervision in Aviation Boatswain specialty
7320	Warrant Officer (line) billet requiring supervision in Aviation Operations Technician specialty
7340	Warrant Officer (line) billet requiring supervision in Aviation Maintenance Technician specialty
7360	Warrant Officer (line) billet requiring supervision in Aviation Ordnance Technician specialty
7380	Warrant Officer (line) billet requiring supervision in Aviation Electronics Technician specialty

m. Warrant Officer - Line (General)

7410	Warrant Officer (line) billet requiring supervision in Ship's Clerk specialty
7420	Warrant Officer (line) billet requiring supervision in Data Processing Technician specialty
7430	Warrant Officer (line) billet requiring supervision in Bandmaster specialty
7440	Warrant Officer (line) billet requiring supervision in Communications Technician specialty
7450	Warrant Officer (line) billet requiring supervision in Intelligence Technician specialty
7460	Warrant Officer (line) billet requiring supervision in Aerographer specialty
7470	Warrant Officer (line) billet requiring supervision in Photographer specialty
7480	Warrant Officer (line) billet requiring supervision in Explosive Ordnance Disposal Technician specialty

n. Warrant Officer - Staff Corps

7510	Warrant Officer (Staff Corps) billet requiring supervision in Supply Corps specialty
7520	Warrant Officer (Staff Corps) billet requiring supervision in Food Service specialty
7530	Warrant Officer (Staff Corps) billet requiring supervision in Civil Engineer specialty
7540	Warrant Officer (Staff Corps) billet requiring Physician's Assistant specialty

OFFICER GRADE CODES

In personnel and manpower automated files and in documents produced from those files, the grades of officers and the officer grades allowed in billets are identified by a one-letter code or by an abbreviation. The codes and abbreviations and the officer grades they identify are listed below.

<u>Code</u>	<u>Grade</u>	<u>Abbr.</u>		<u>Code</u>	<u>Grade</u>	<u>Abbr.</u>
A*	Fleet Admiral	FADM	4	I	Lieutenant Commander	LCDR
B	Admiral	ADM	3	J	Lieutenant	LT
C	Vice Admiral	VADM	2	K	Lieutenant (junior grade)	LTJG
D	Rear Admiral (Upper Half)	RDMU	1	L	Ensign	ENS
E*	Rear Admiral (Lower Half)	RDML		M	Chief Warrant Officer-4	CWO4
F*	Commodore	COMO		N	Chief Warrant Officer-3	CWO3
G	Captain	CAPT		O	Chief Warrant Officer-2	CWO2
H	Commander	CDR		P	Warrant Officer-1	WO1

* Codes A, E, & F are not used currently on manpower authorizations.

RATING TITLES AND STANDARD ABBREVIATIONS

RATING TITLE	STRIKER	E-4	E-5	E-6	E-7	E-8	E-9
<u>GROUP I - DECK</u>							
BOATSWAIN'S MATE	BMSN	BM3	BM2	BM1	BMC	BMCS	BMCM
MASTER-AT-ARMS				MA1	MAC	MACS	MACM
QUARTERMASTER	QMSN	QM3	QM2	QM1	QMC	QMCS	QMCM
SIGNALMAN	SMSN	SM3	SM2	SM1	SMC	SMCS	SMCM
OPERATIONS SPECIALIST	OSSN	OS3	OS2	OS1	OSC	OSCS	OSCM
ELECTRONICS WARFARE TECHNICIAN	EWSN	EW3	EW2	EW1	EWC	EWCS	EWCM
SONAR TECHNICIAN							STCM
SURFACE	STGSN	STG3	STG2	STG1	STGC	STGCS	
SUBMARINE	STSSN	STS3	STS2	STS1	STSC	STSCS	
OCEAN SYSTEMS TECHNICIAN	OTSN	OT3	OT2	OT1	OTC	OTCS	OTCM
<u>GROUP II - ORDNANCE</u>							
TORPEDOMAN'S MATE	TMSN	TM3	TM2	TM1	TMC	TMCS	TMCM
GUNNER'S MATE						GMCS	GMCM
GUNS	GMGSN	GMG3	GMG2	GMG1	GMGC		
MISSILES	GMSN	GMM3	GMM2	GMM1	GMMC		
TECHNICIAN	GMTSN	GMT3	GMT2	GMT1	GMTC	GMTCS	GMTCM
FIRE CONTROL TECHNICIAN						FTCS	FTCM
GUNS	FTGSN	FTG3	FTG2	FTG1	FTGC		
SURFACE MISSILE	FTMSN	FTM3	FTM2	FTM1	FTMC		
BALLISTIC MISSILE	FTBSN	FTB3	FTB2	FTB1	FTBC		
MISSILE TECHNICIAN	MTSN	MT3	MT2	MT1	MTC		
MINEMAN	MNSN	MN3	MN2	MN1	MNC	MNCS	MNCM
<u>GROUP III - ELECTRONICS</u>							
ELECTRONICS TECHNICIAN				ET1	ETC	ETCS	ETCM
COMMUNICATIONS	ETNSN	ETN3	ETN2				
RADAR	ETRSN	ETR3	ETR2				
DATA SYSTEMS TECHNICIAN	DSSN	DS3	DS2	DS1	DSC	DSCS	DSCM
<u>GROUP IV - PRECISION EQUIPMENT</u>							
PRECISION INSTRUMENTMAN							PICM
INSTRUMENTMAN	IMSN	IM3	IM2	IM1	IMC	IMCS	
OPTICALMAN	OMSN	OM3	OM2	OM1	OMC	OMCS	
<u>GROUP V - ADMINISTRATIVE AND CLERICAL</u>							
CRYPTOLOGIC TECHNICIAN							
ADMINISTRATIVE	CTASN	CTA3	CTA2	CTA1	CTAC	CTACS	CTACM
COLLECTION	CTRSN	CTR3	CTR2	CTR1	CTRC	CTRCs	CTRCM
COMMUNICATIONS	CTOSN	CTO3	CTO2	CTO1	CTOC	CTOCS	CTOCM
INTERPRETATIVE	CTISN	CTI3	CTI2	CTI1	CTIC	CTICS	CTICM
MAINTENANCE	CTMSN	CTM3	CTM2	CTM1	CTMC	CTMCS	CTMCM
TECHNICAL	CTTSN	CTT3	CTT2	CTT1	CTTC	CTTCS	CTTCM

Tab B, Part 3

RATING TITLE	STRIKER	E-4	E-5	E-6	E-7	E-8	E-9
GROUP V - ADMINISTRATIVE AND CLERICAL (cont'd)							
DATA PROCESSING TECHNICIAN	DPSN	DP3	DP2	DP1	DPC	DPCS	DPCM
DISBURSING CLERK	DKSN	DK3	DK2	DK1	DKC	DKCS	DKCM
INTELLIGENCE SPECIALIST	ISSN	IS3	IS2	IS1	ISC	ISCS	ISCM
JOURNALIST	JOSN	JO3	JO2	JO1	JOC	JOCS	JOCM
LEGALMAN			LN2	LN1	LNC	LNCS	LNCM
MESS MANAGEMENT SPECIALIST	MSSN	MS3	MS2	MS1	M3C	M3CS	M3CM
NAVY COUNSELOR				NC1	NCC	NCCS	NCCM
POSTAL CLERK	PCSN	PC3	PC2	PC1	PCC	PCCS	PCCM
PERSONNELMAN	PNSN	PN3	PN2	PN1	PNC	PNCS	PNCM
RADIOMAN	RMSN	RM3	RM2	RM1	RMC	RMCS	RMCM
SHIP'S SERVICEMAN	SHSN	SH3	SH2	SH1	SHC	SHCS	SHCM
STOREKEEPER	SKSN	SK3	SK2	SK1	SKC	SKCS	SKCM
YEOMAN	YNSN	YN3	YN2	YN1	YNC	YNCS	YNCM
GROUP VI - MISCELLANEOUS							
ILLUSTRATOR DRAFTSMAN	DMSN	DM3	DM2	DM1	DMC	DMCS	DMCM
LITHOGRAPHER	LISN	LI3	LI2	LI1	LIC	LICS	LICM
MUSICIAN	MUSN	MU3	MU2	MU1	MUC	MUCS	MUSM
GROUP VII - ENGINEERING AND HULL							
BOILER TECHNICIAN	BTFN	BT3	BT2	BT1	BTC	BTCS	BTM
ELECTRICIAN'S MATE	EMFN	EM3	EM2	EM1	EMC	EMCS	EMCM
ENGINEMAN	ENFN	EN3	EN2	EN1	ENC	ENCS	ENCM
HULL MAINTENANCE TECH	HTFN	HT3	HT2	HT1	HTC	HTCS	HTCM
INTERIOR COMMUNICATIONS ELECTRICIAN	ICFN	IC3	IC2	IC1	ICC	ICCS	
MACHINERY REPAIRMAN	MRFN	MR3	MR2	MR1	MRC	MRC3	MRCM
MACHINIST'S MATE	MMFN	MM3	MM2	MM1	MMC	MMCS	MMCM
MOLDER	MLFN	ML3	ML2	ML1	MLC	MLCS	MLCM
PATTERNMAKER	PMFN	PM3	PM2	PM1	PMC		
GROUP VIII - CONSTRUCTION							
CONSTRUCTION MAN							CUCM
ENGINEERING AIDE	EACN	EA3	EA2	EA1	EAC	EACS	
CONSTRUCTION ELECTRICIAN	CECN	CE3	CE2	CE1	CEC	CECS	
EQUIPMENTMAN							EQCM
BUILDER	BCN	BU3	BU2	BU1	BC	BCS	
CONSTRUCTION MECHANIC	CMCN	CM3	CM2	CM1	CMC	CMCS	
EQUIPMENT OPERATOR	EOCN	EO3	EO2	EO1	EOC	EOCS	
STEELWORKER	SWCN	SW3	SW2	SW1	SWC	SWCS	
UTILITIES MAN	UTCN	UT3	UT2	UT1	UTC	UTCS	UTCM

RATING TITLE	STRIKER	E-4	E-5	E-6	E-7	E-8	E-9
GROUP IX - AVIATION							
AEROGRAPHER'S MATE	AGAN	AG3	AG2	AG1	AGC	AGCS	AGCM
AIR CONTROLMAN	ACAN	AC3	AC2	AC1	ACC	ACCS	ACCM
AIRCREW SURVIVAL EQUIP- MENTMAN	PRAN	PR3	PR2	PR1	PRC	PRCS	PRCM
AVIATION ASW OPERATOR	AWAN	AW3	AW2	AW1	AWC	AWCS	AWCM
AVIATION ASW TECHNICIAN	AXAN	AX3	AX2	AX1	AXC	AXCS	AVCM
AVIATION BOATSWAIN'S MATE						ABCS	ABCM
LAUNCH AND RECOV. FUEL HANDLING	ABEAN	ABE3	ABE2	ABE1	ABEC		
AIRCRAFT HANDLNG.	ABFAN	ABF3	ABF2	ABF1	ABFC		
AVIATION ELECTRICIAN'S MATE	ABHAN	ABH3	ABH2	ABH1	ABHC		
AV. ELECTRONICS TECHNICIAN	AEAN	AE3	AE2	AE1	AFC	AECS	AVCM
AV. FIRE CONTROL TECH	ATAN	AT3	AT2	AT1	ATC	ATCS	AVCM
AV. MACHINIST'S MATE	AQAN	AQ3	AQ2	AQ1	AQC	AQCS	AVCM
	ADAN	AD3	AD2	AD1	ADC	ADCS	AFCM
AV. MAINTENANCE ADMIN.	AZAN	AZ3	AZ2	AZ1	AZC	AZCS	AZCM
AVIATION ORDNANCEMAN	AOAN	AO3	AO2	AO1	AOC	AOCS	AOCM
AVIATION STOREKEEPER	AKAN	AK3	AK2	AK1	AKC	AKCS	AKCM
AV. STRUCTURAL MECHANIC						AMCS	AFCM
SAFETY EQUIPMENT	AMEAN	AME3	AME2	AME1	AMEC		
HYDRAULICS	AMHAN	AMH3	AMH2	AMH1	AMHC		
STRUCTURES	AMSAN	AMS3	AMS2	AMS1	AMSC		
AV. SUPPORT EQUIPMENT TECH				AS1	ASC	ASCS	ASCM
ELECTRONICS	ASEAN	ASE3	ASE2				
HYDRAULIC/STRUCT.	ASHAN	ASH3	ASH2				
MECHANICAL	ASMAN	ASM3	ASM2				
PHOTOGRAPHER'S MATE	PHAN	PH3	PH2	PH1	PHC	PHCS	PHCM
TRADESMAN	TDAN	TD3	TD2	TD1	TDC	TDCS	TDCM
GROUP X - MEDICAL							
HOSPITAL CORPSMAN	HN	HM3	HM2	HM1	HMC	HMCS	HMCM
GROUP XI - DENTAL							
DENTAL TECHNICIAN	DN	DT3	DT2	DT1	DTC	DTCS	DTCM
APPRENTICESHIPS							
AIRMAN	AR	AA	AN				
CONSTRUCTIONMAN	CR	CA	CN				
FIREMAN	FR	FA	FN				
SEAMAN	SR	SA	SN				

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B-K DYNAMICS INC ROCKVILLE MD
POM 79 MINI-NAMPS - CONCEPT AND OPERATION (U)
JUL 77 C L LAKE
BKD-TR-3-232

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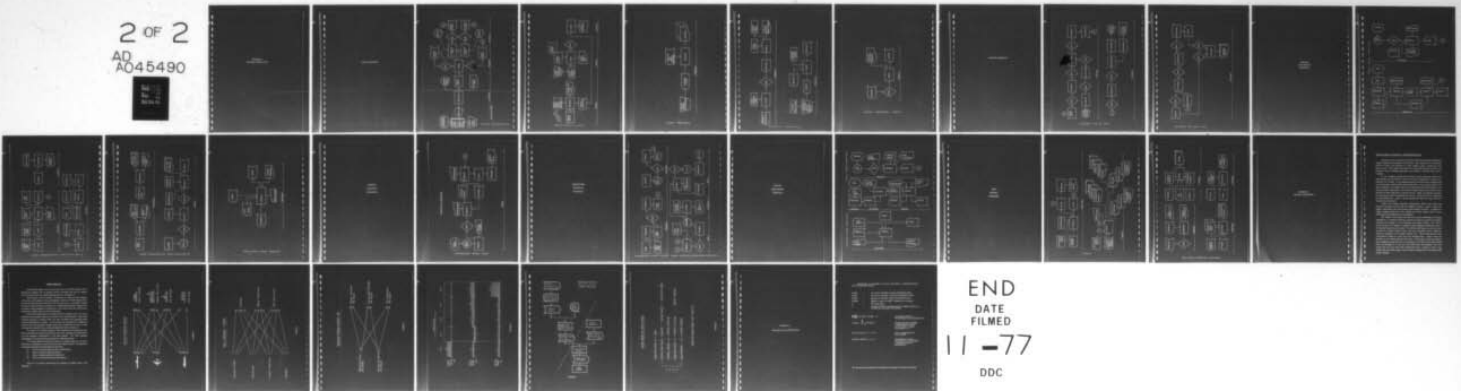
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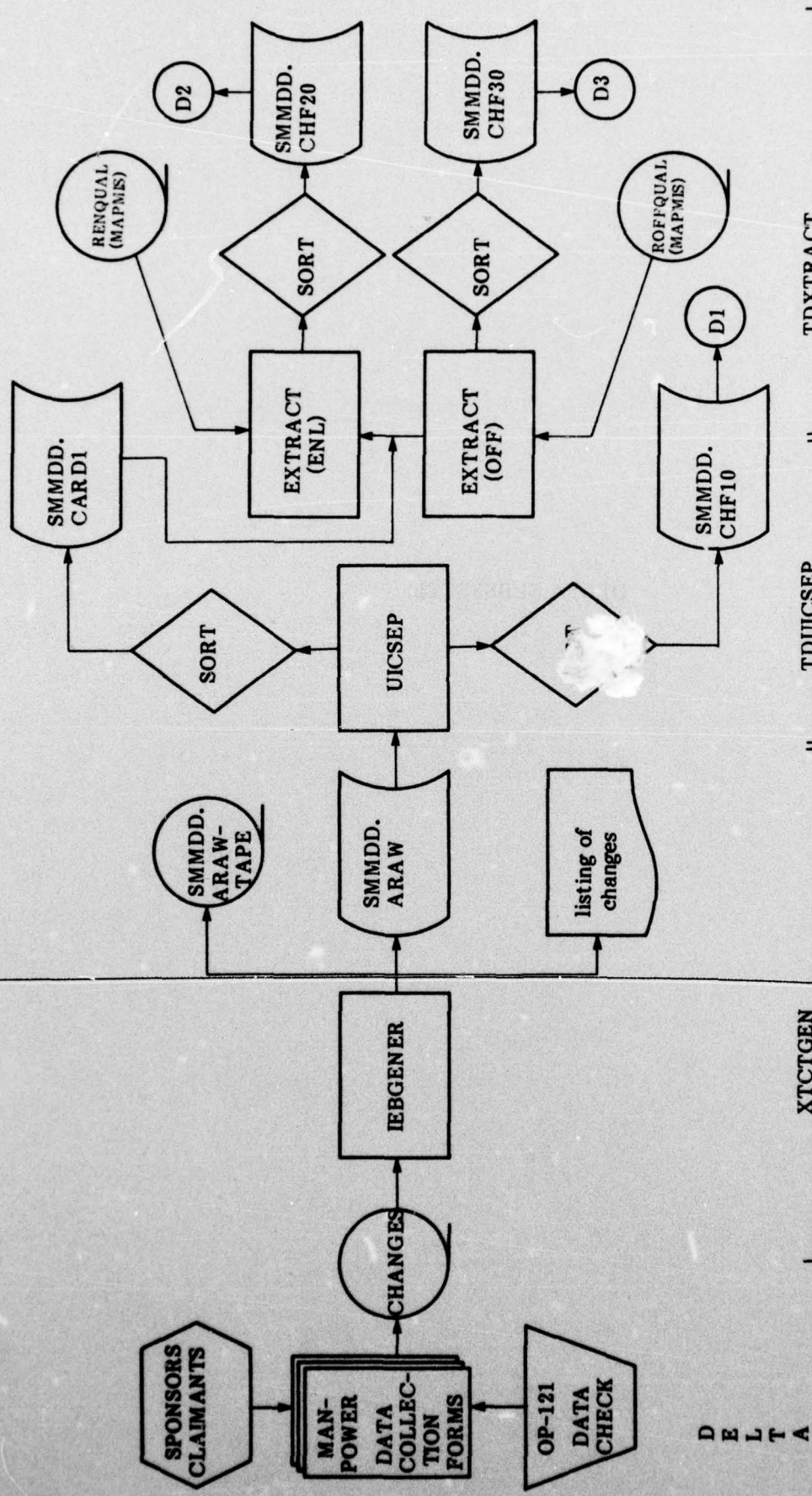
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APPENDIX B
DETAILED SYSTEM FLOW

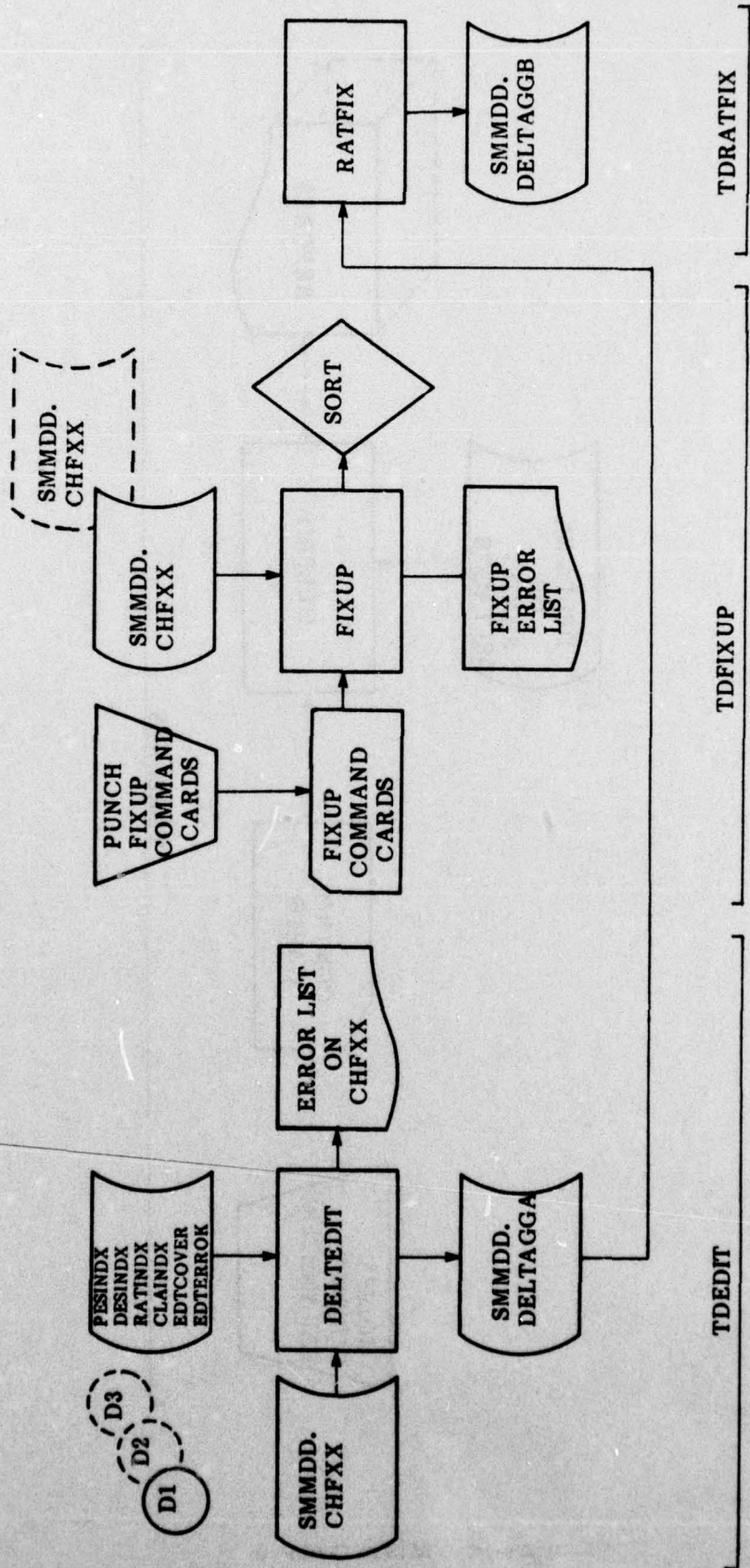
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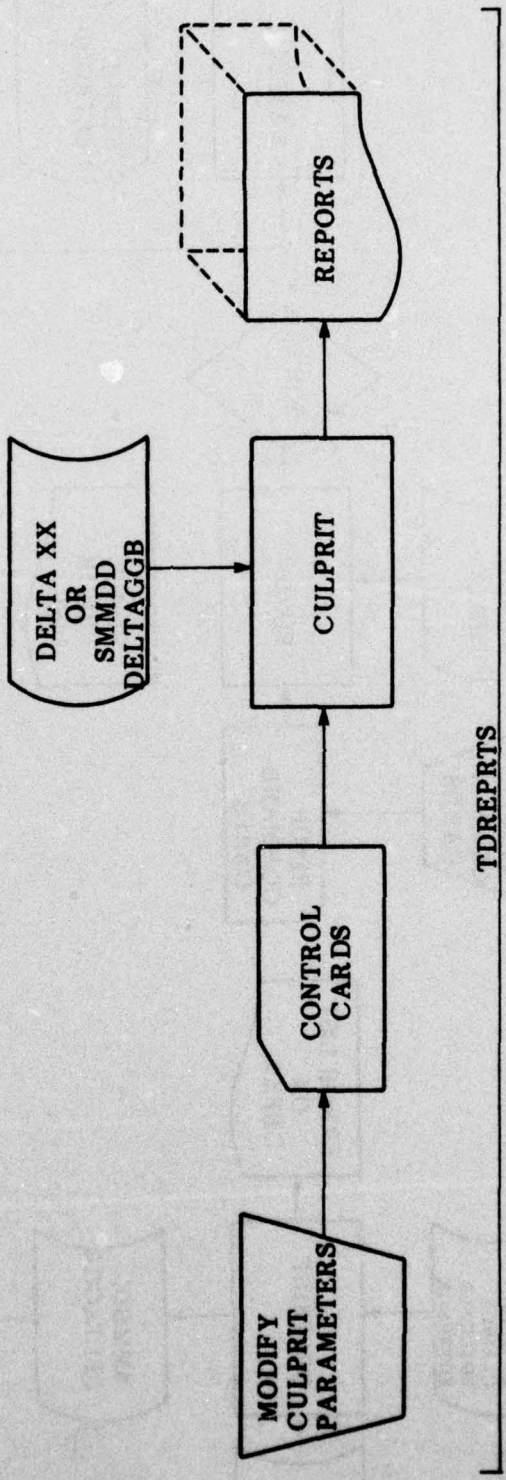
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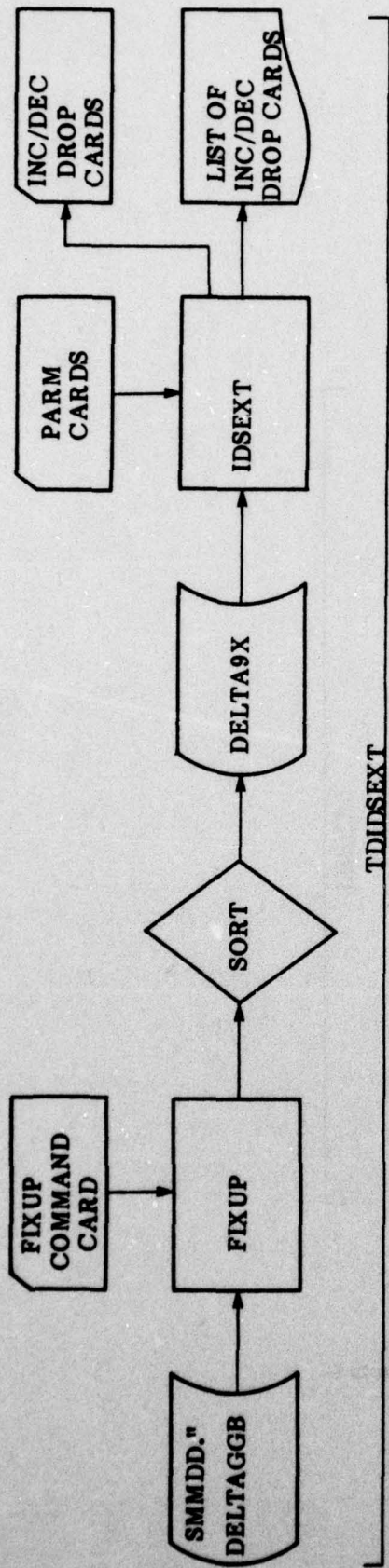
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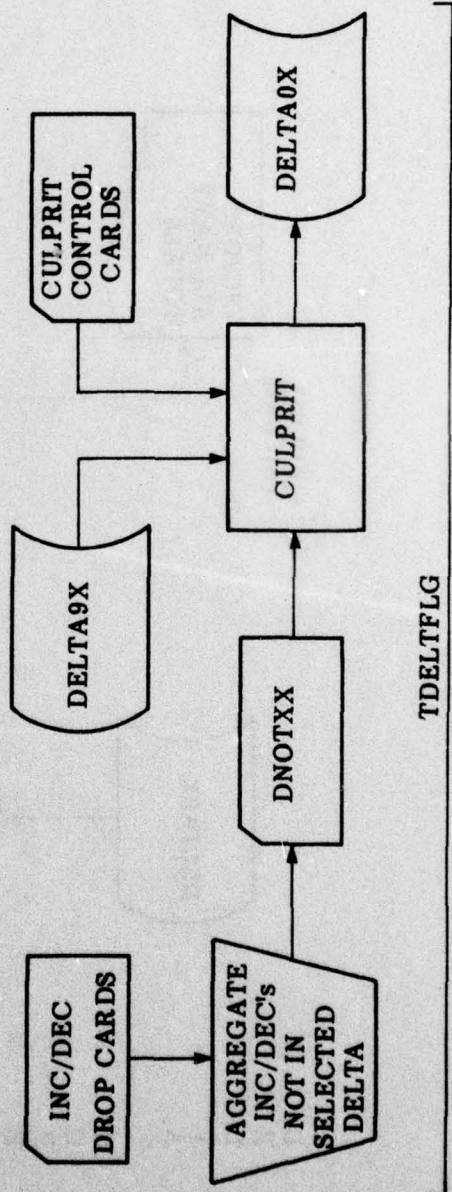
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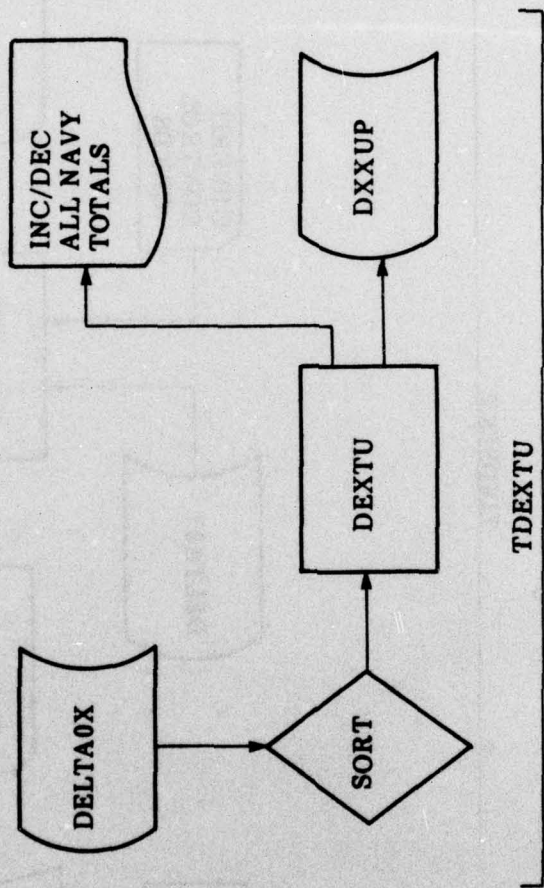
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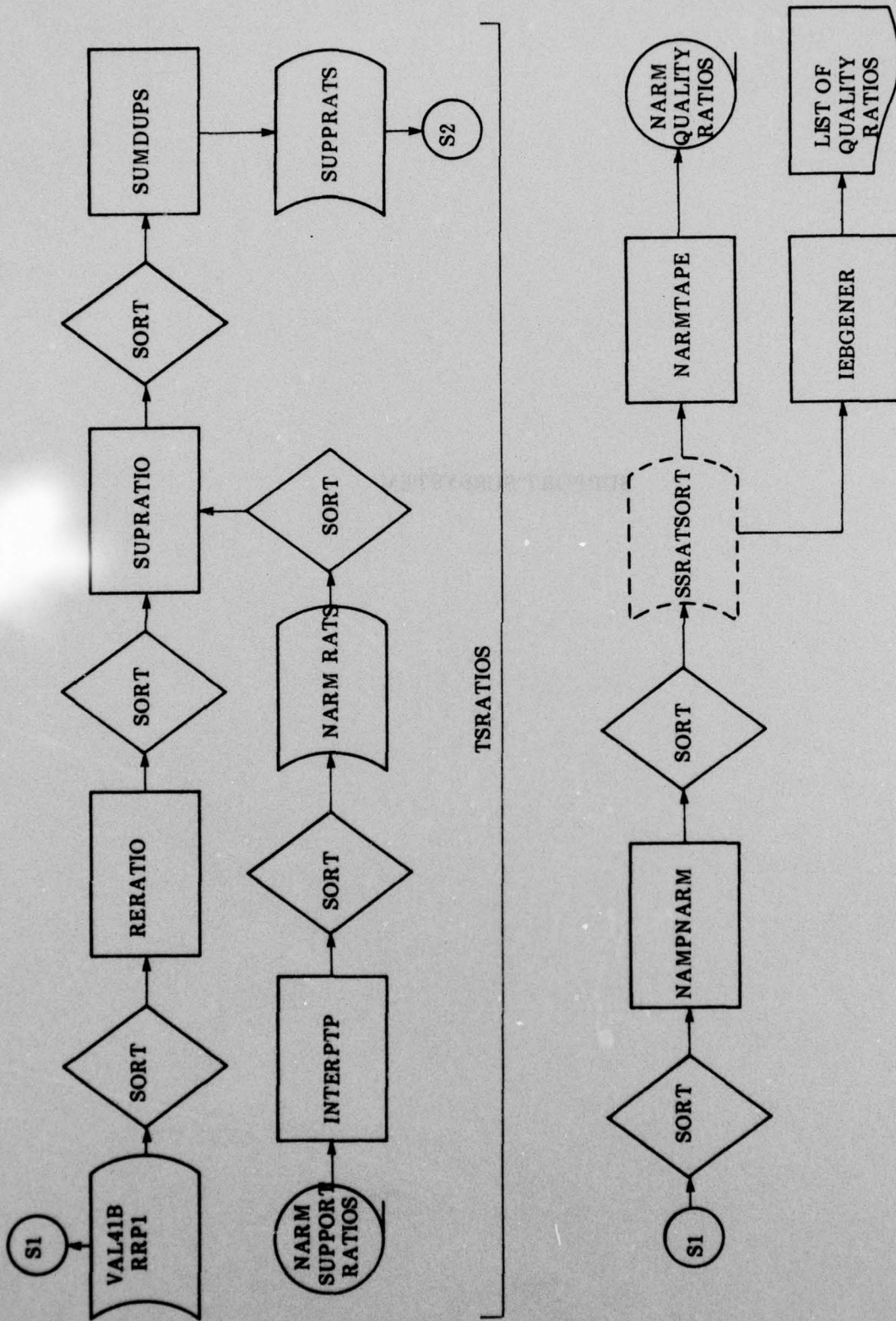
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DELTA SUPPORT INPUT



SUPPORT SUBSYSTEM



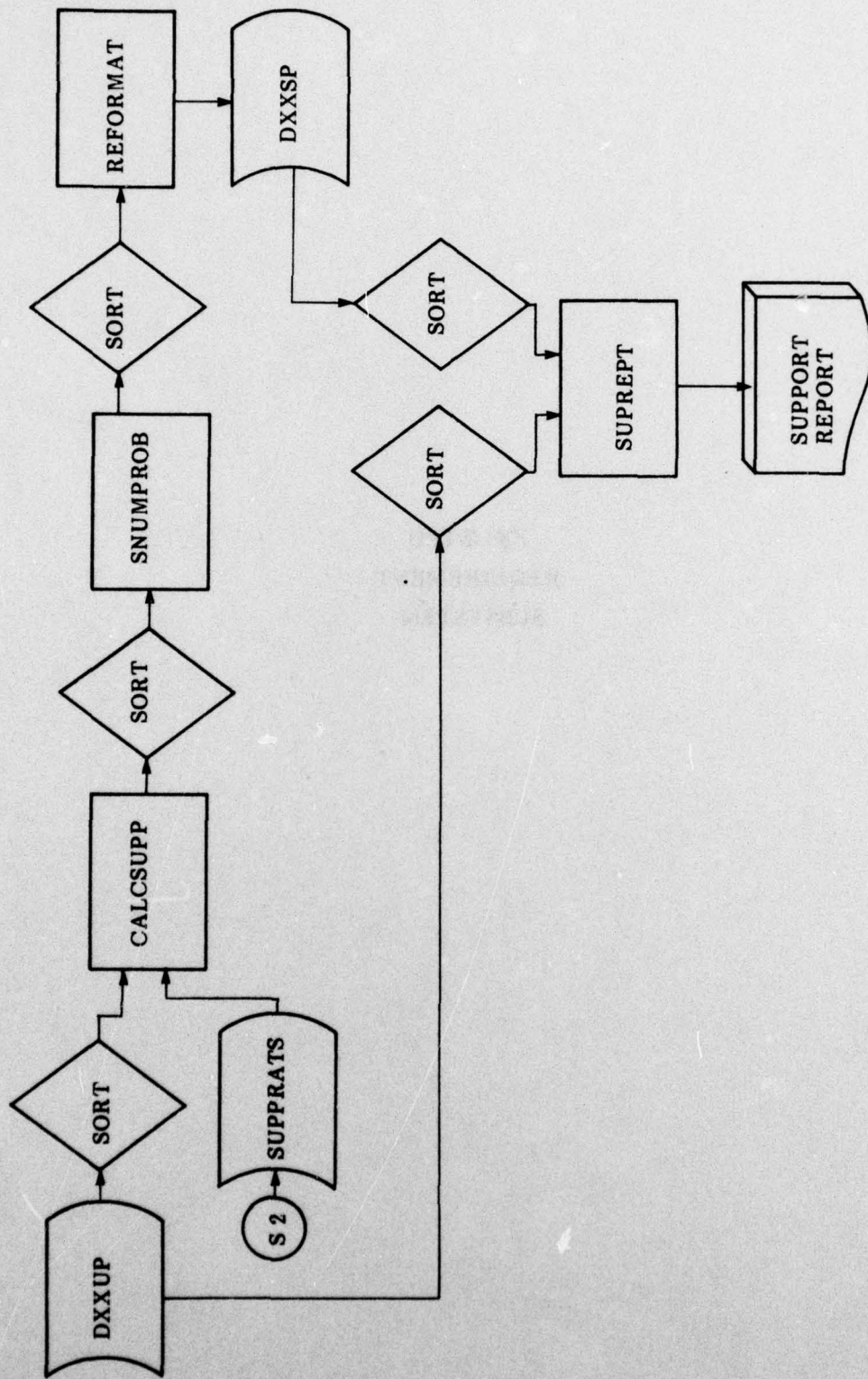


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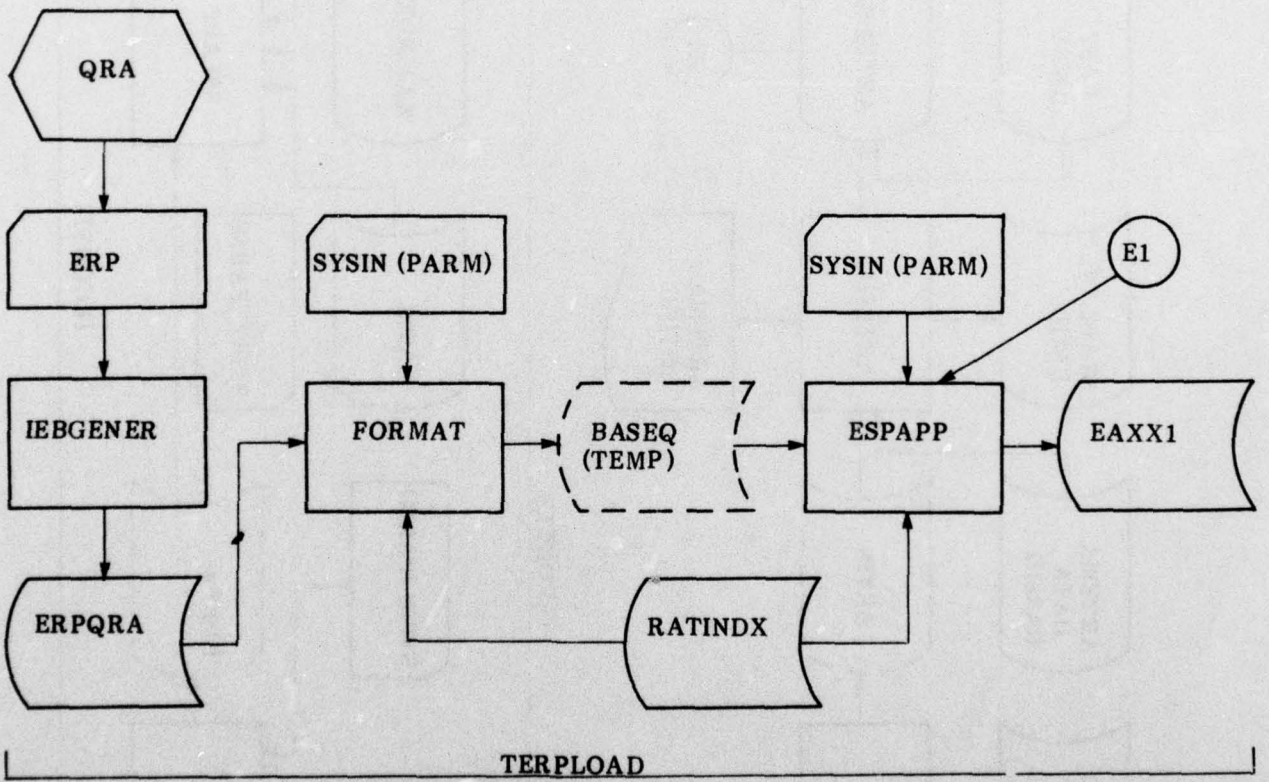
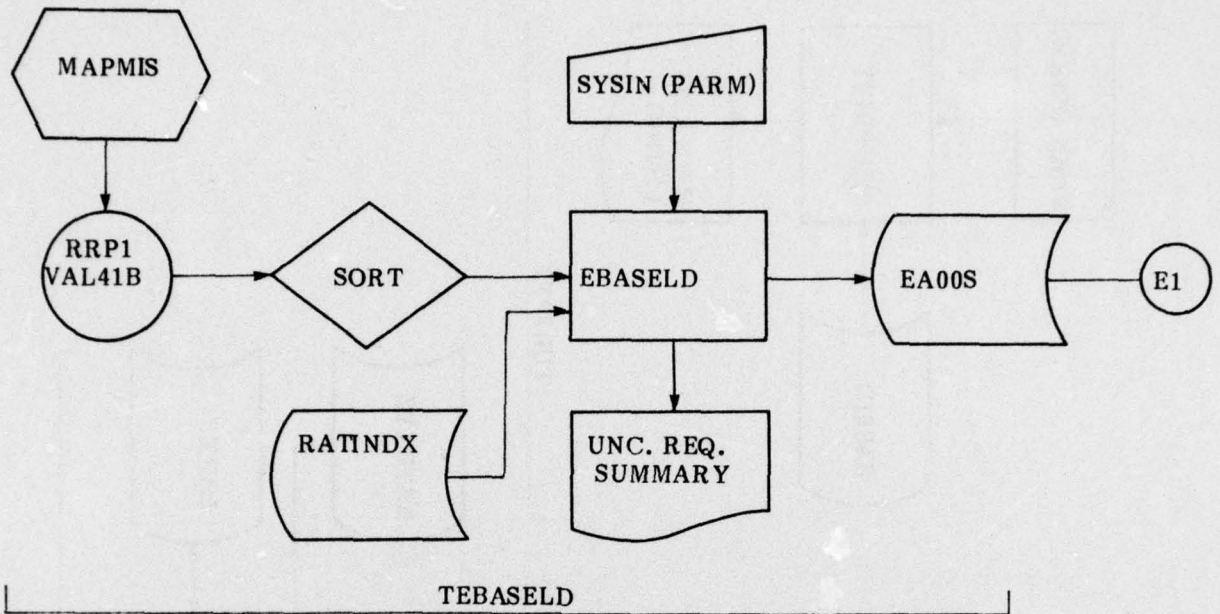
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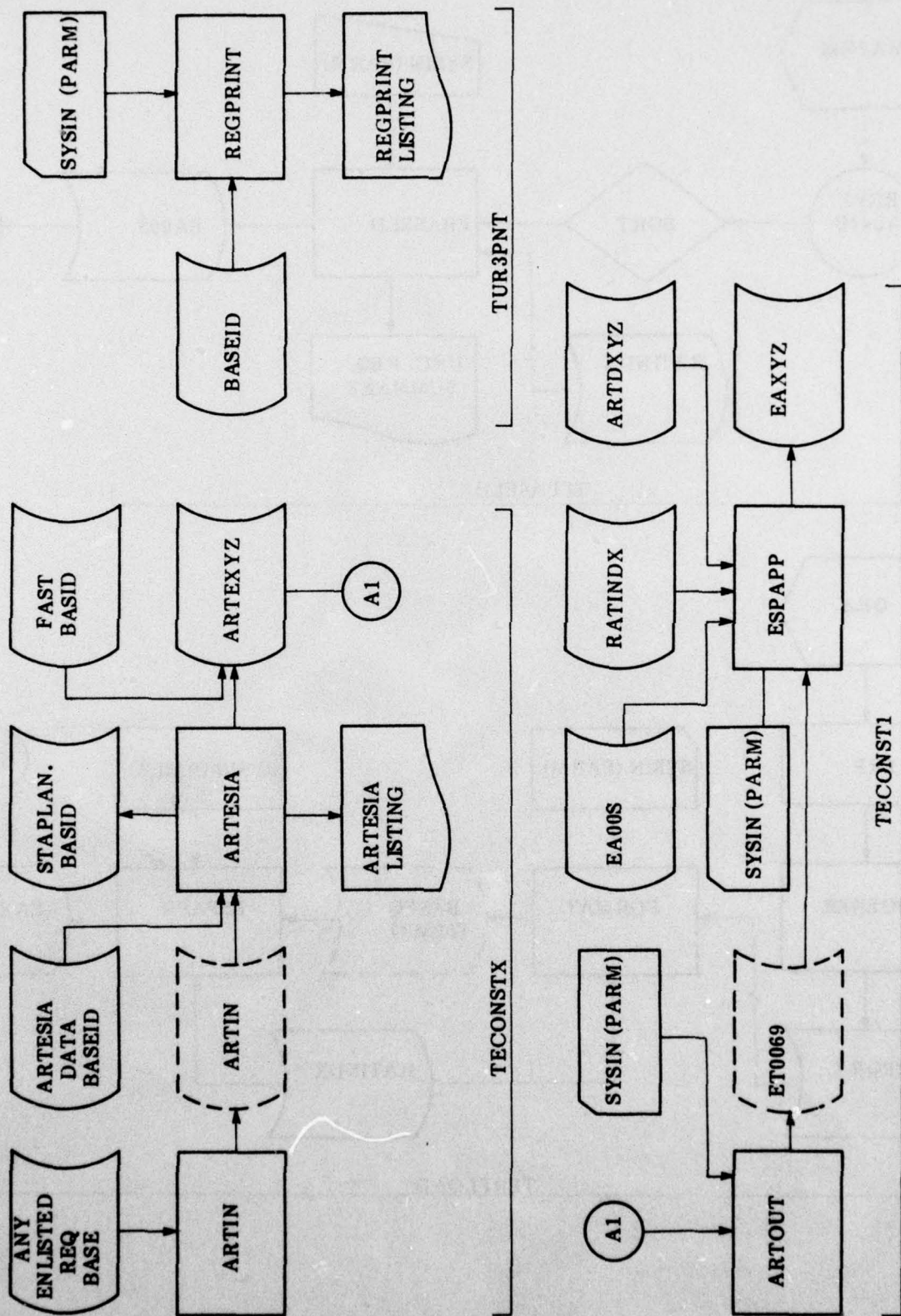
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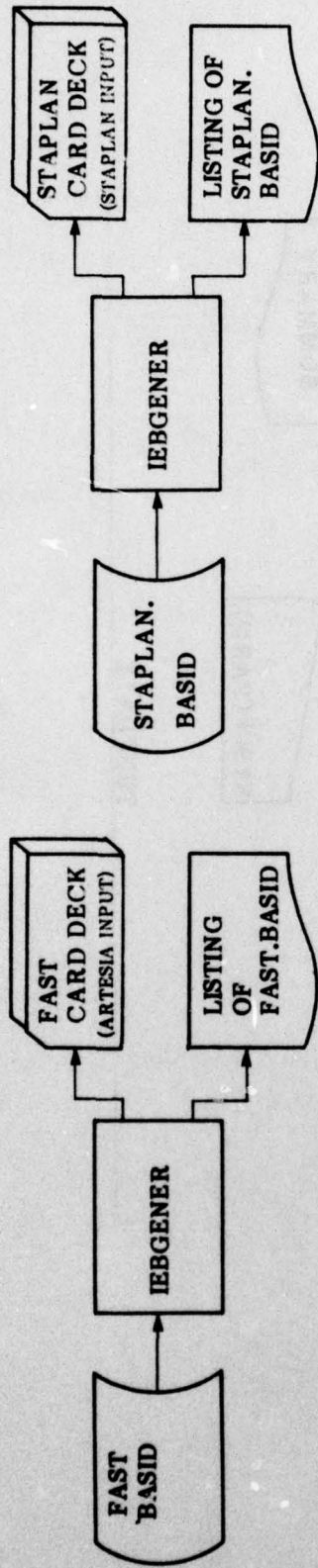
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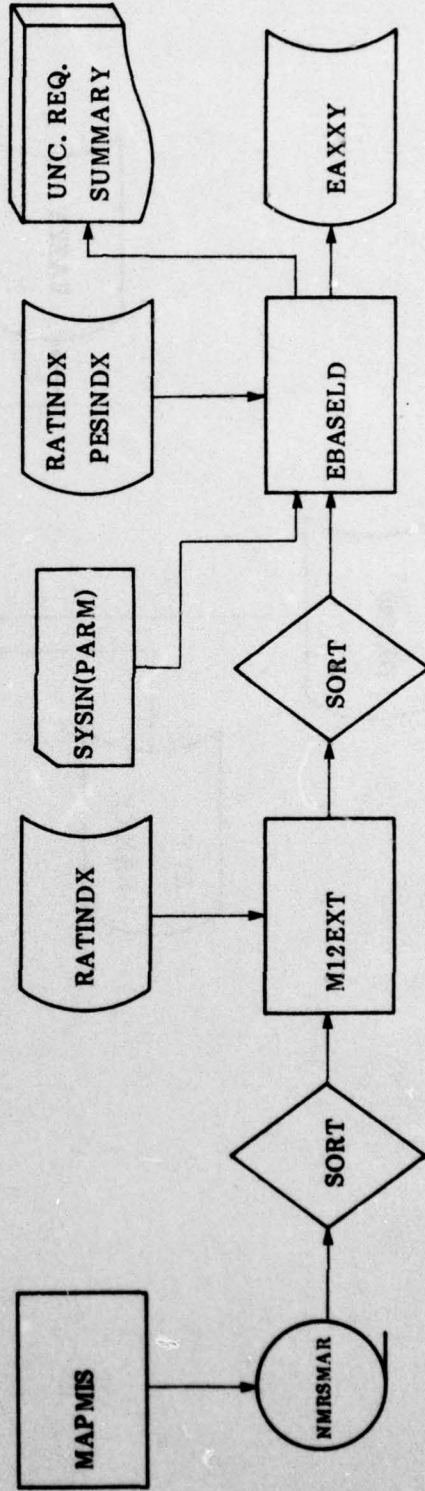
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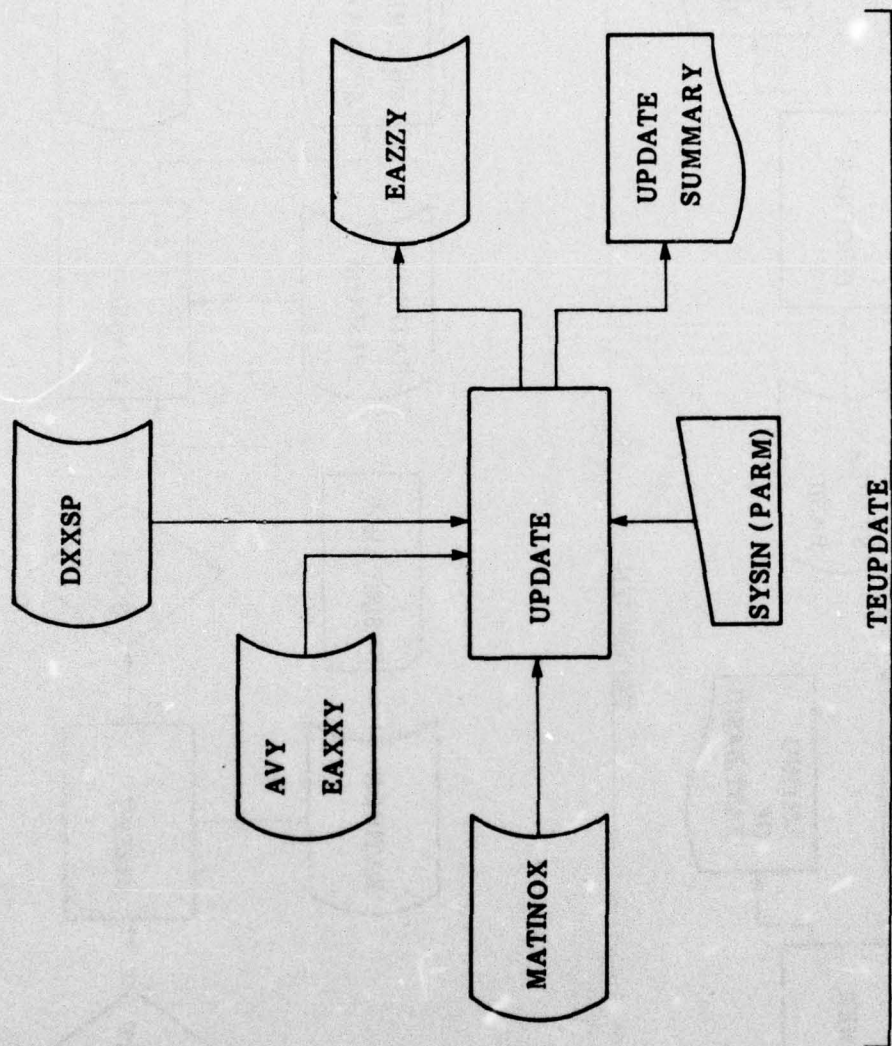


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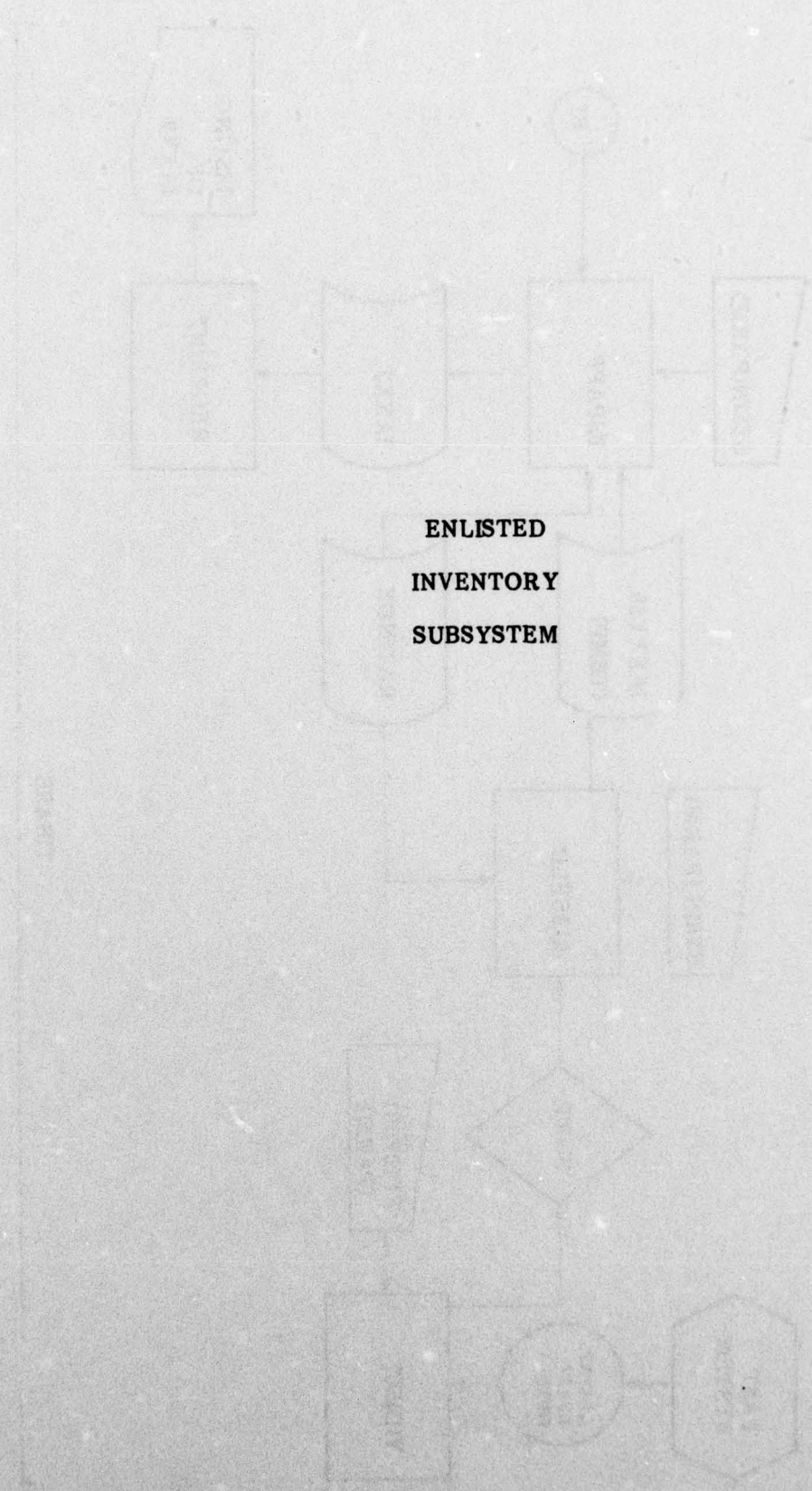


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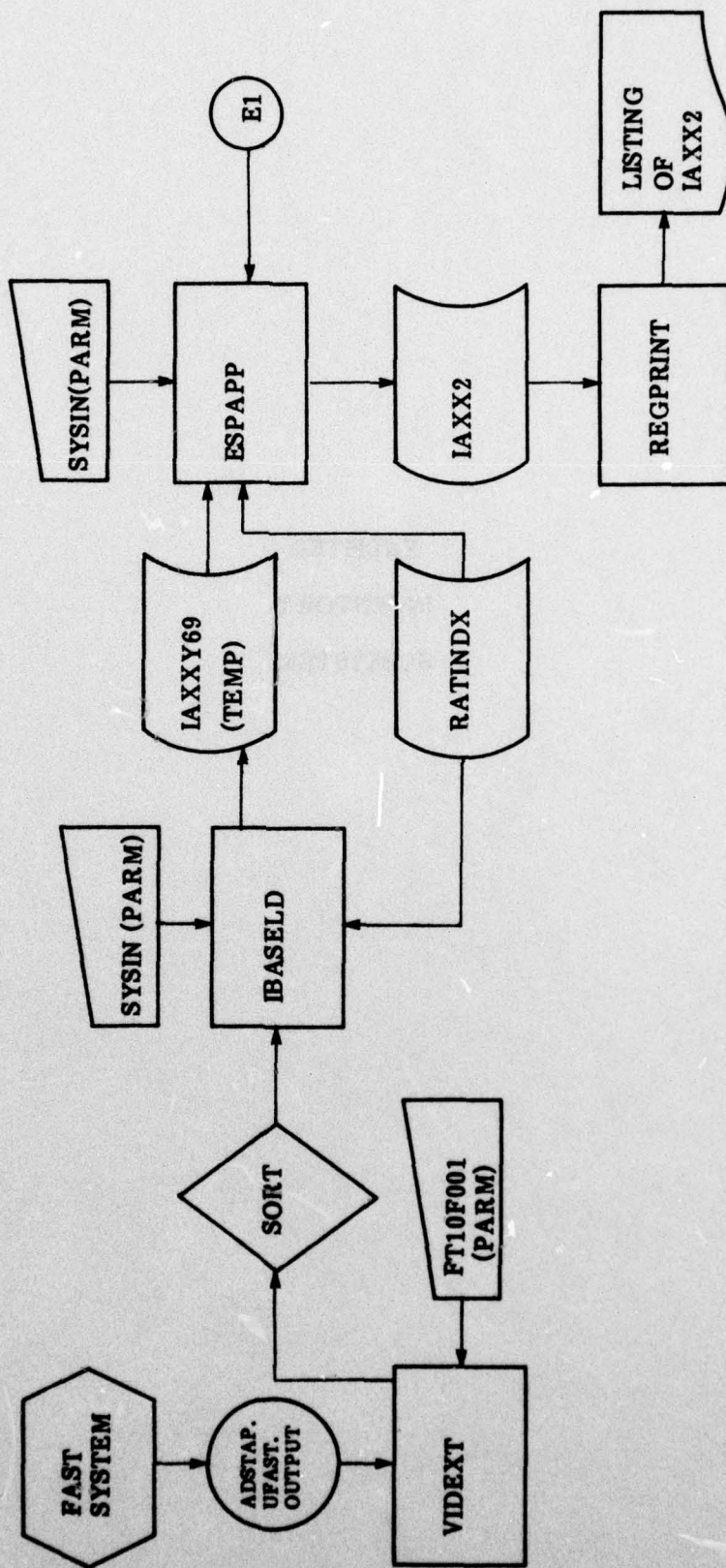
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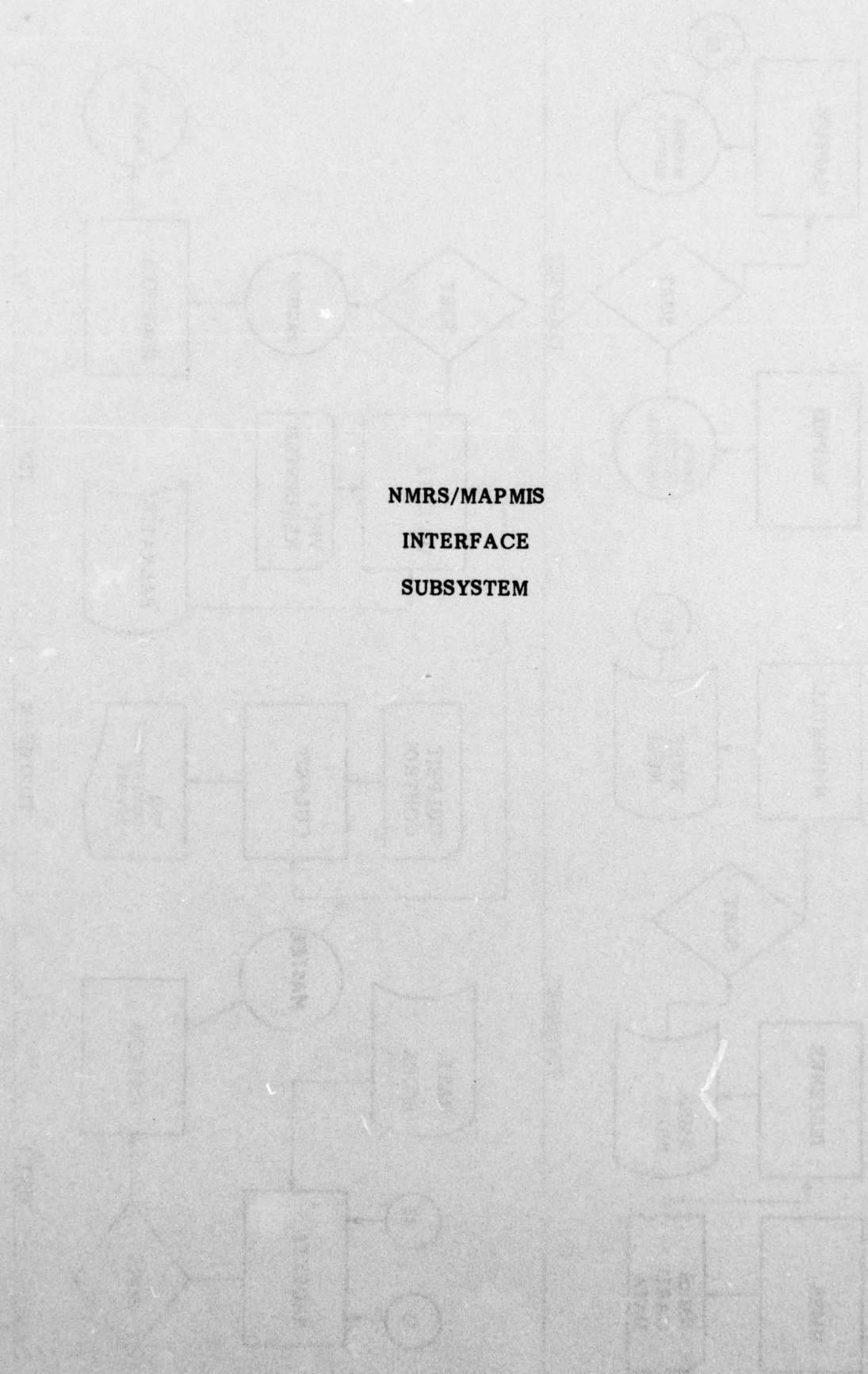
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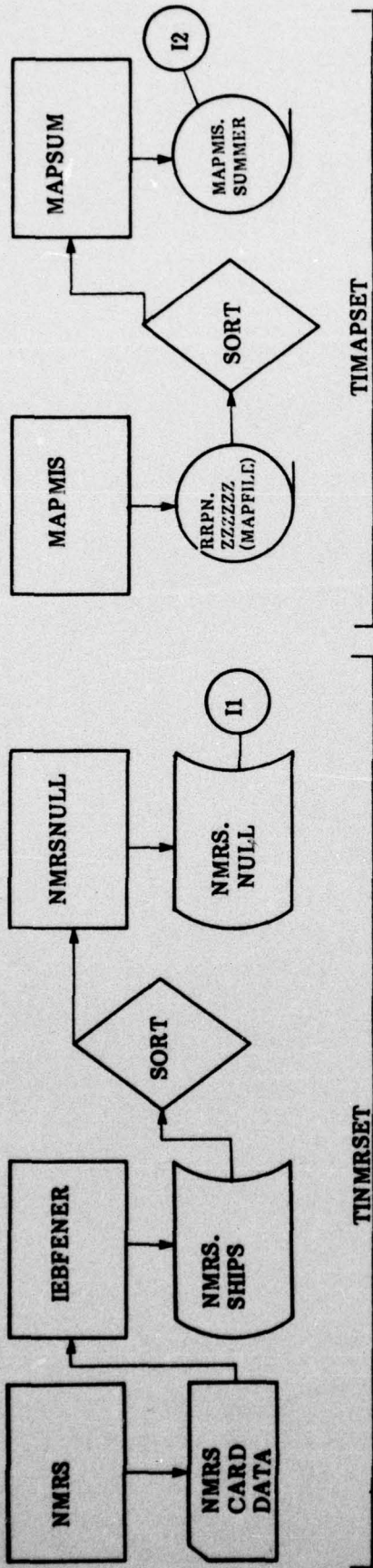
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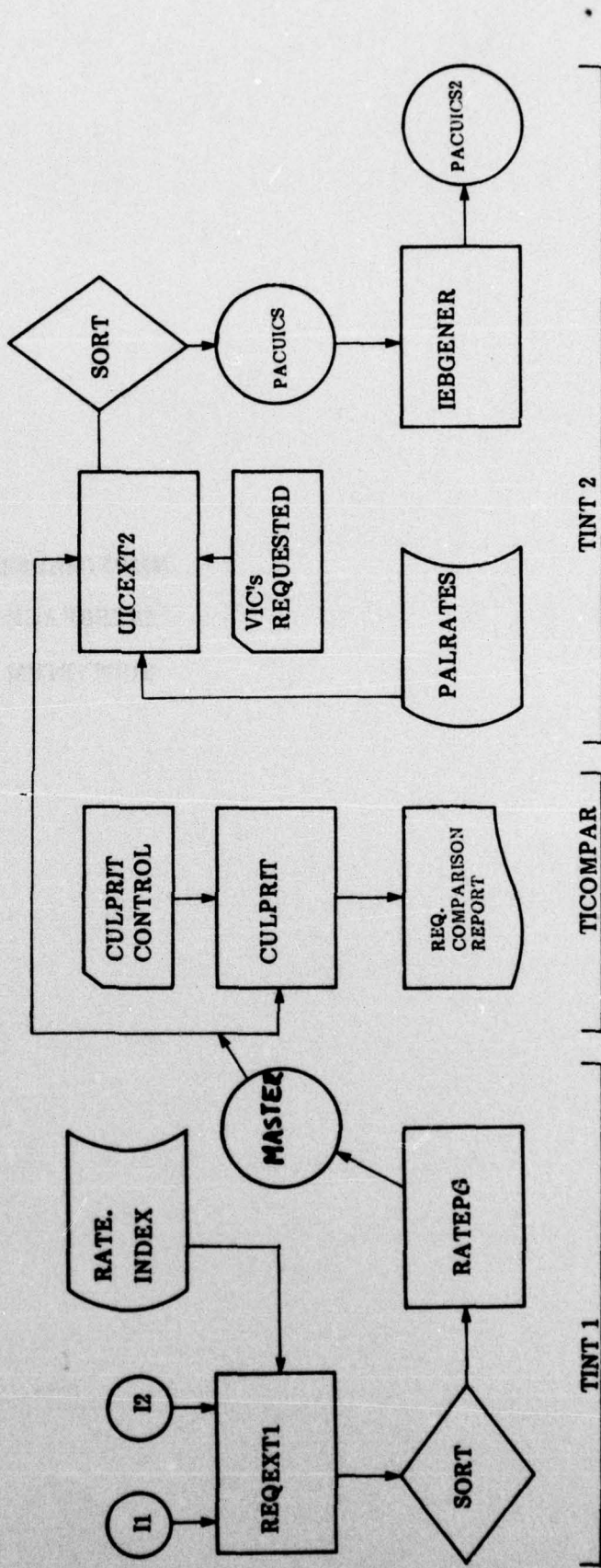


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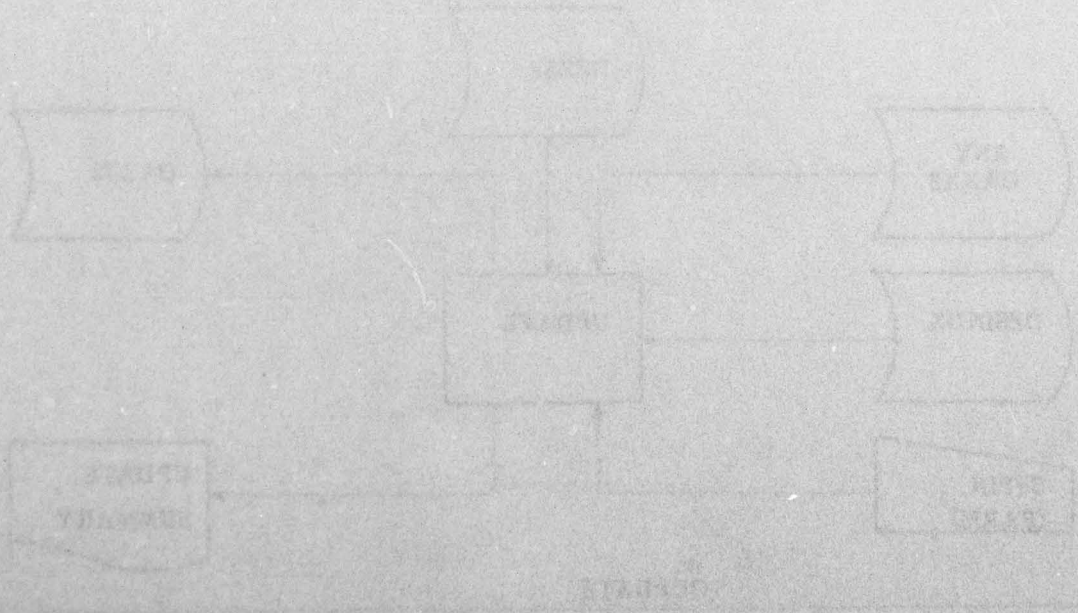
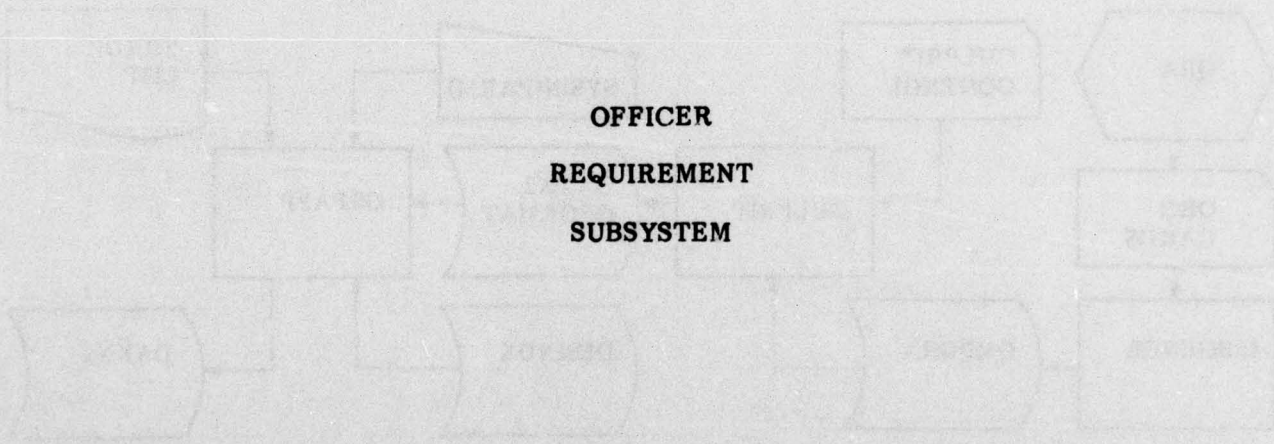
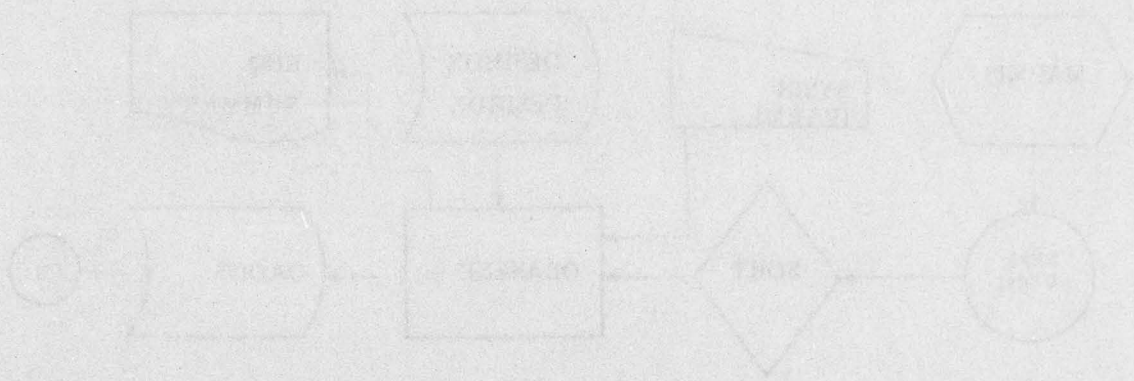
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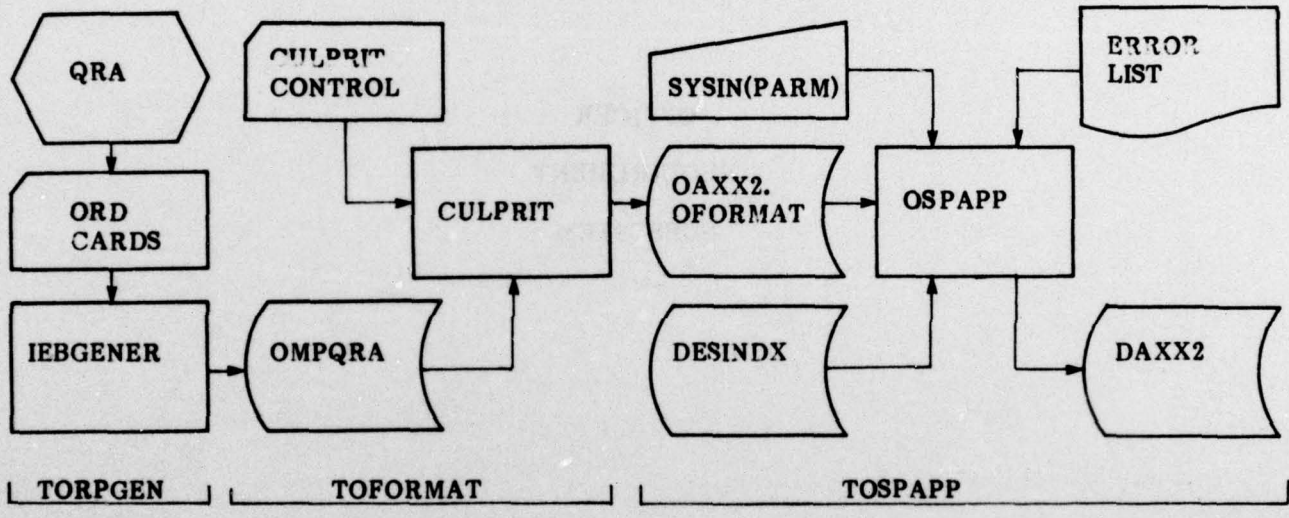
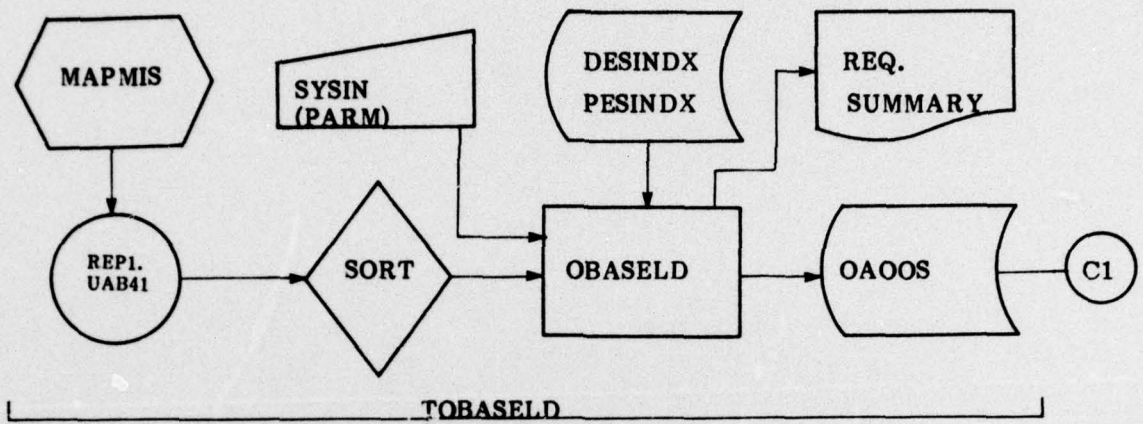
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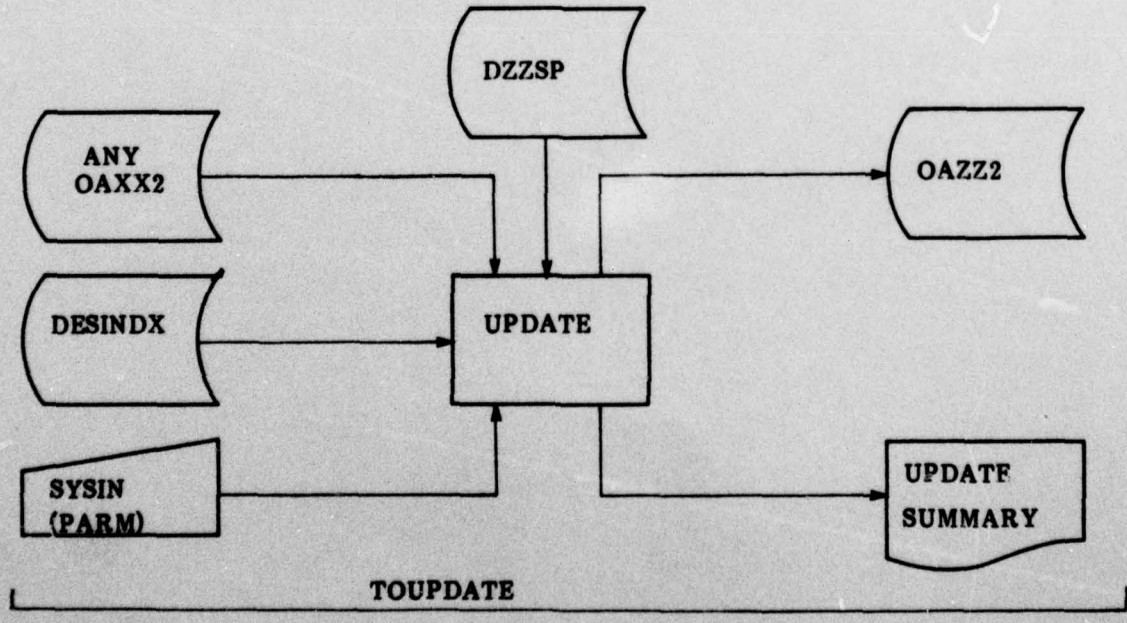
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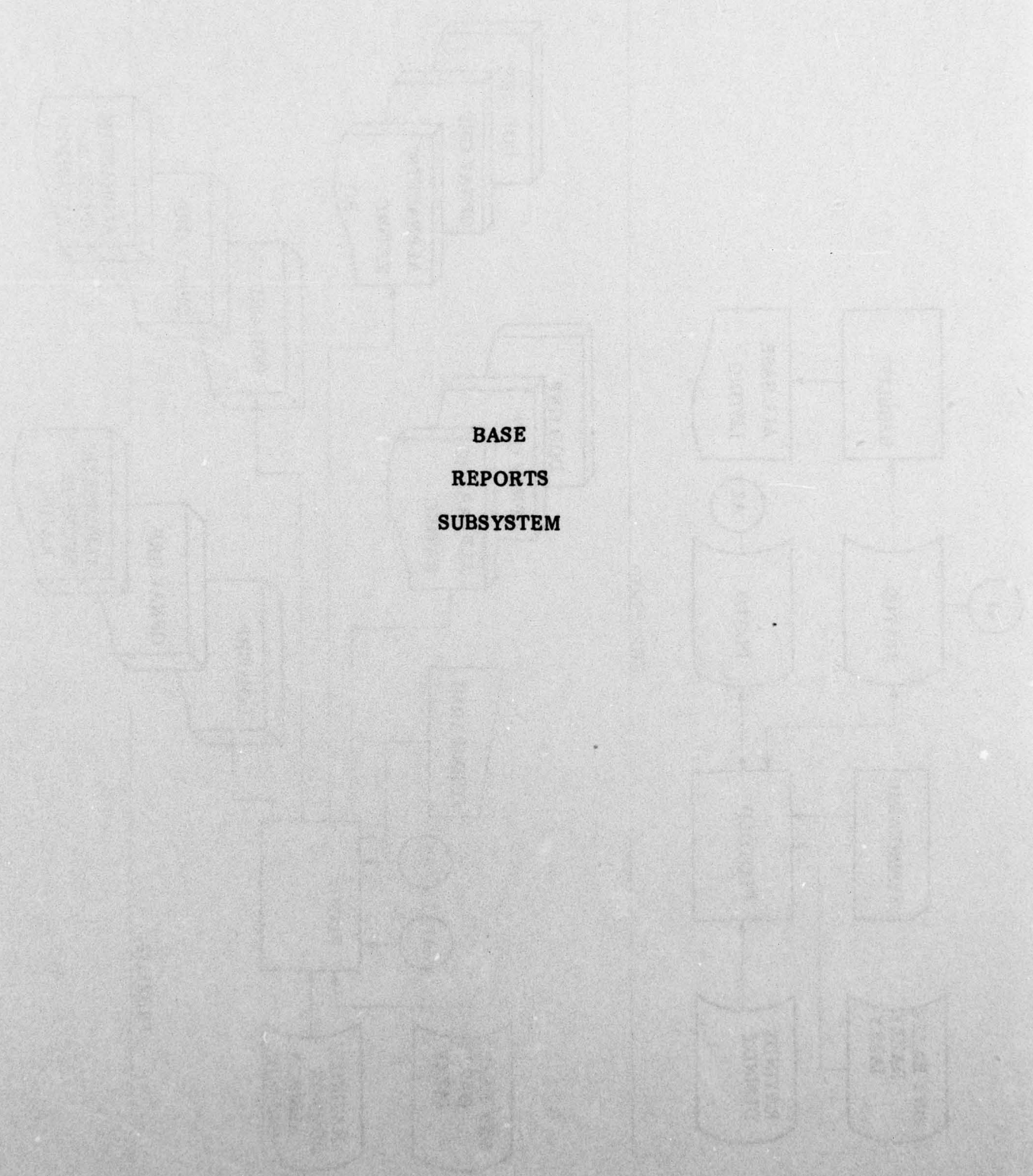
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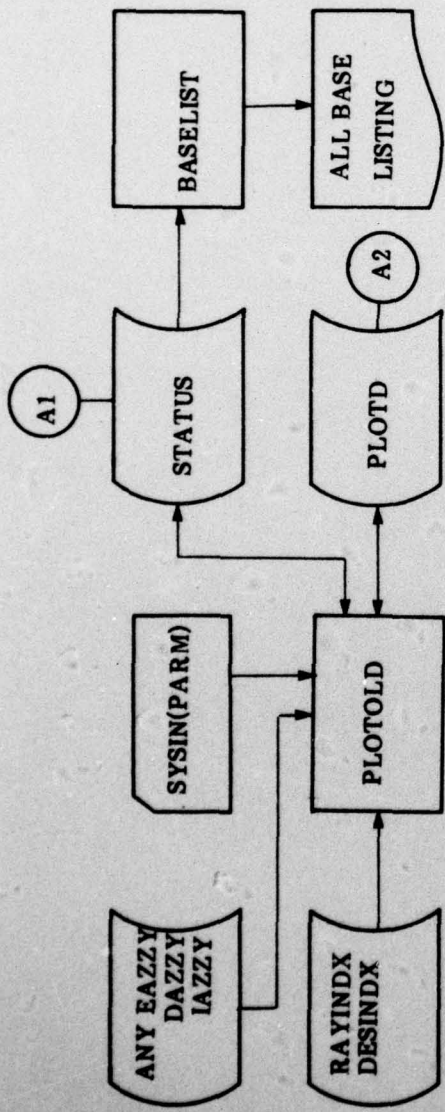
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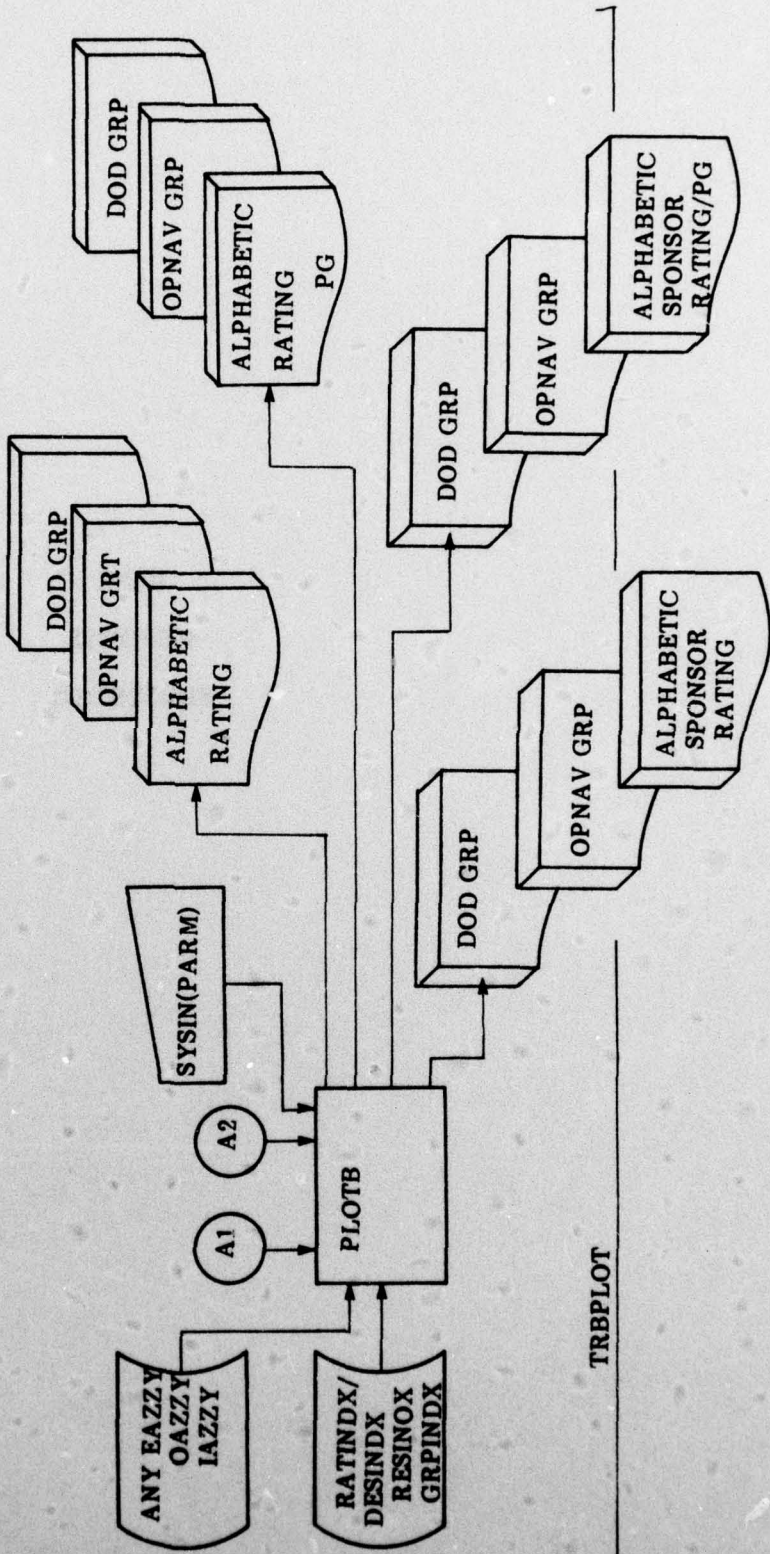
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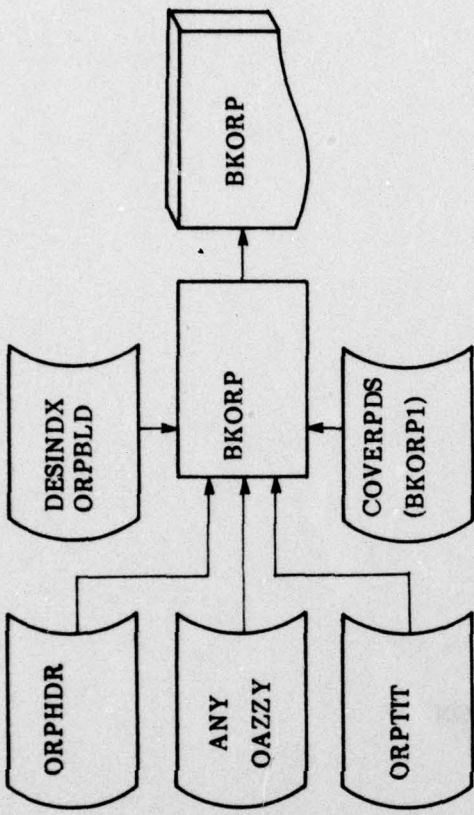


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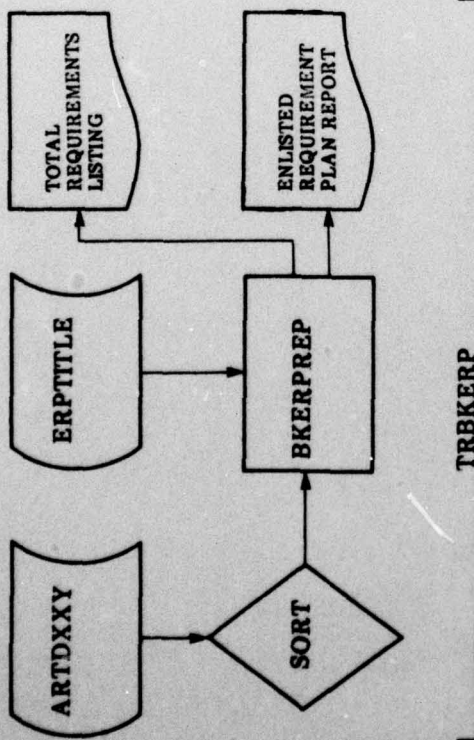
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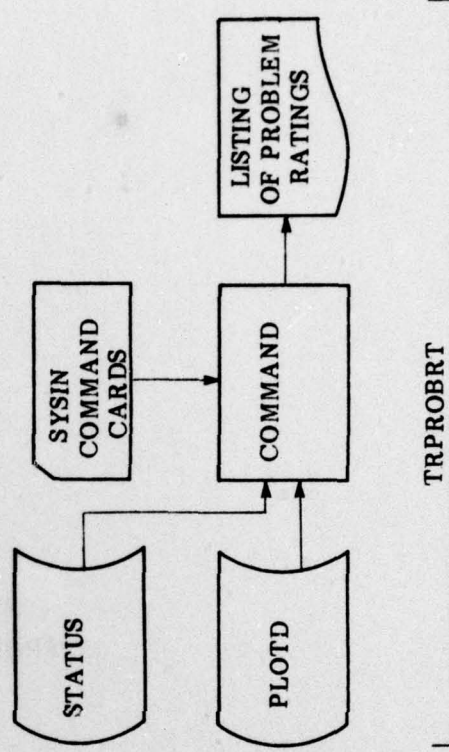
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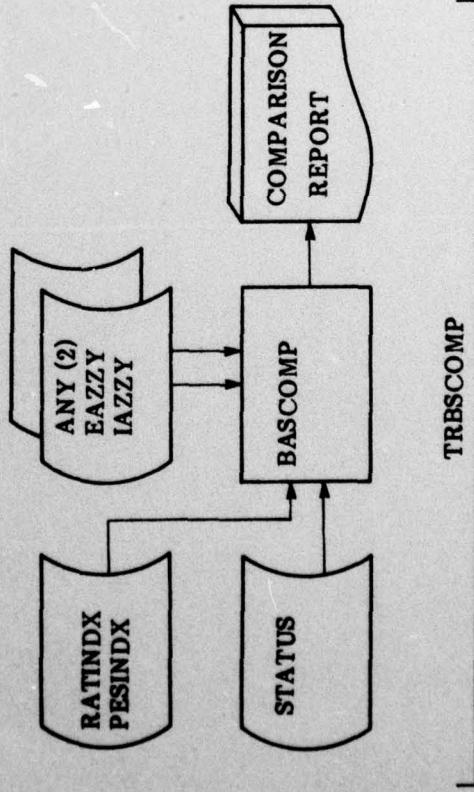
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TRBKERP



TRPROBT



TRBSCOMP

ERP / ORP / COMPARE REPORTS

Manpower Support Computations - MINI-NAMPS (POM 79)

Annually, the Navy reassesses its enlisted manpower requirements during the Program Objectives Memorandum or POM cycle. The requirements are individually defined as billets, each identified by a skill category, called a rating, and a pay grade or rank. These requirements describe a fully operational Navy; however, the authorized level of funding during peace time dictates a somewhat lower level of manning.

As the manpower reassessment proceeds, several alternative mixtures of requirements are considered, in search of the best combination of billets to be authorized for funding. As the sponsors generate alternative billet configurations by incrementing or decrementing billet requirements, a set of support billets must also be adjusted. This "support tail" can be effected by the various changes in the mission oriented requirements. The number of support billets in any activity can be effected by billet adjustments in another activity. Figure 1 graphically represents how complicated these relationships can become. Billets can also be categorized by skill requirements. Figure 2 shows relationships which may occur when skill requirements are altered.

During the Program Objectives Memorandum (POM) cycle, billets are grouped by program element (PE) for budgetary analysis. Figure 3 shows how support relationships may exist between these program elements. In addition to support changes across PE's, these changes also effect support billets in years following the initial adjustments, (see Figure 4).

The NARM is the primary tool used by the Navy's Budgeting and Planning organizations to reallocate resources, measured in terms of manpower and dollars, resulting from changes to force structures and support policies. The NARM's various outputs show changes in manpower and/or budgetary distributions only at the Program Element level of detail. The MINI-NAMPS system, on the other hand, excludes the Program Element level, and carries qualitized billets, defined by rating and paygrade, at the mission sponsor level. Both models perform their computations through the entire five year planning period. Support ratios are generated by the NARM using historical data. These support ratios give "support across budgetary categories" only. It is essential to the POM that the MINI-NAMPS billet end-strengths be in line with the NARM billet end-strengths, since both models start with the same billet requirements base. Because of this, it was decided that the NARM's support factors would be integrated into the MINI-NAMPS Support Modules.

Support Algorithm

MINI-NAMPS support ratios were derived from the NARM's support ratios, defining the "support tail" by program element and fiscal year, and the "quality ratios" computed from the enlisted requirements file, (see Figure 5).

These "quality ratios" provided a distribution of billets for each program element by mission sponsor, rating and paygrade. Each set of NARM support ratios was matched by program element with a set of quality ratios. The product of these two sets of ratios provided a complete set of ratios distributing the "support-tail" by sponsor, rating, paygrade, and fiscal year. These final ratios were then used to compute the "support tail", OF ANY GIVEN Delta.

Final billet requirements are normally stated in integer values. The ratios generated by the support subsystem can become very small fractions. These small fractions presented a problem when they were multiplied with relatively small increment/decrements of billets. As the product was rounded-off, a significant number of the total manpower support values were rounded down to zero. In order to reduce the round-off errors, we used the algorithm shown in Figure 6).

The "loop" is an indexing procedure which sequenced all computations such that the round-off-error being carried over to the next computation would result in the best equitable redistribution of the billet quality. The "best equitable redistribution" was determined by answering the following question:

"If a mission sponsor was given a fraction of a support billet (i.e. the round-off-error), to redistribute, where would he be most likely to add it?" The answer to this question produced the following list of priorities:

- a) Add it to the next higher pay grade requirements
- b) Add it to another rating requirement
- c) Add it to another sponsor's requirements.
- d) Add it to the next fiscal year requirements.

This list of priorities determined the sequence of indicies used in the algorithm.

ACTIVITY ORIENTED SUPPORT

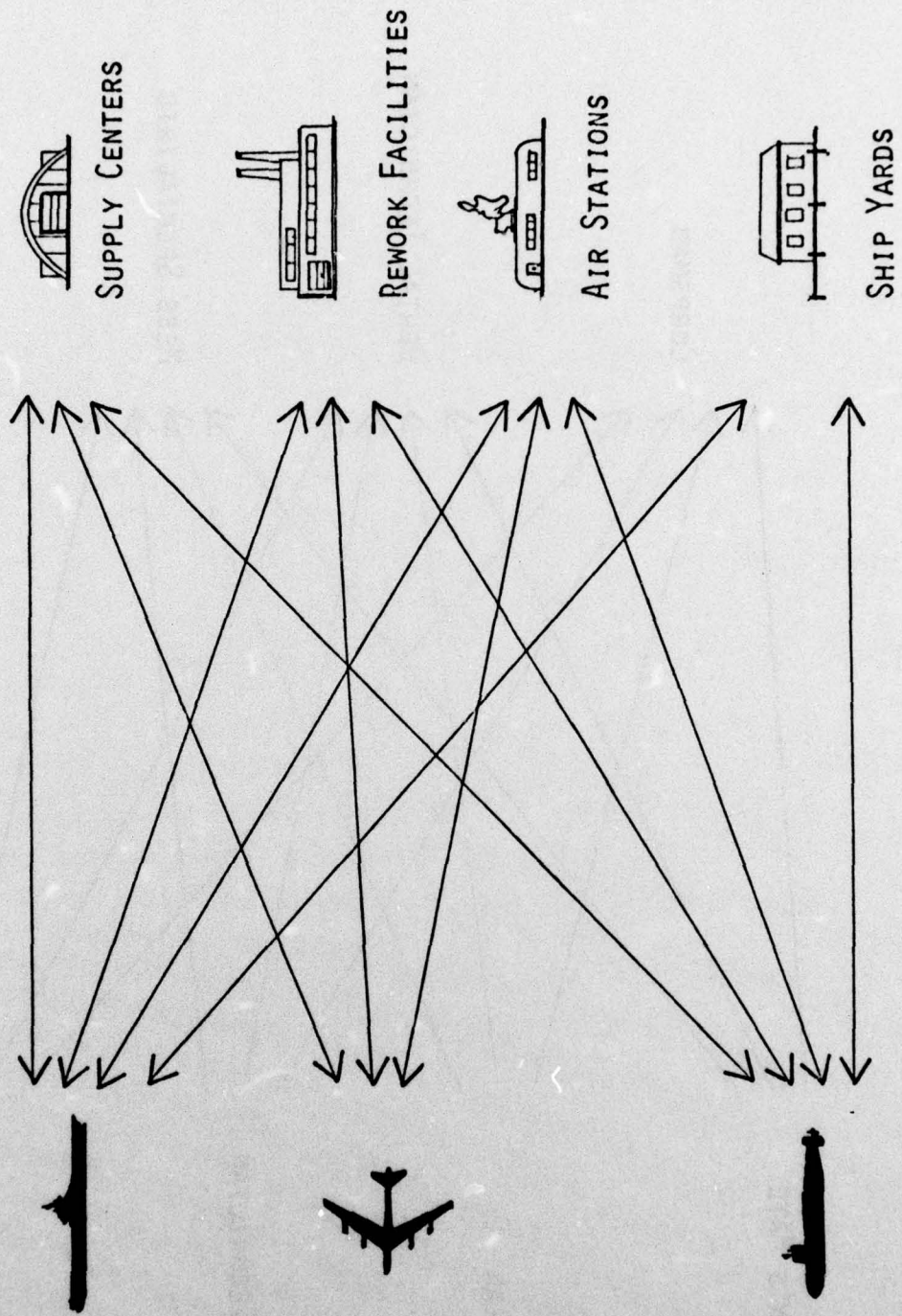


FIGURE 1

SKILL CATEGORIES - SUPPORT

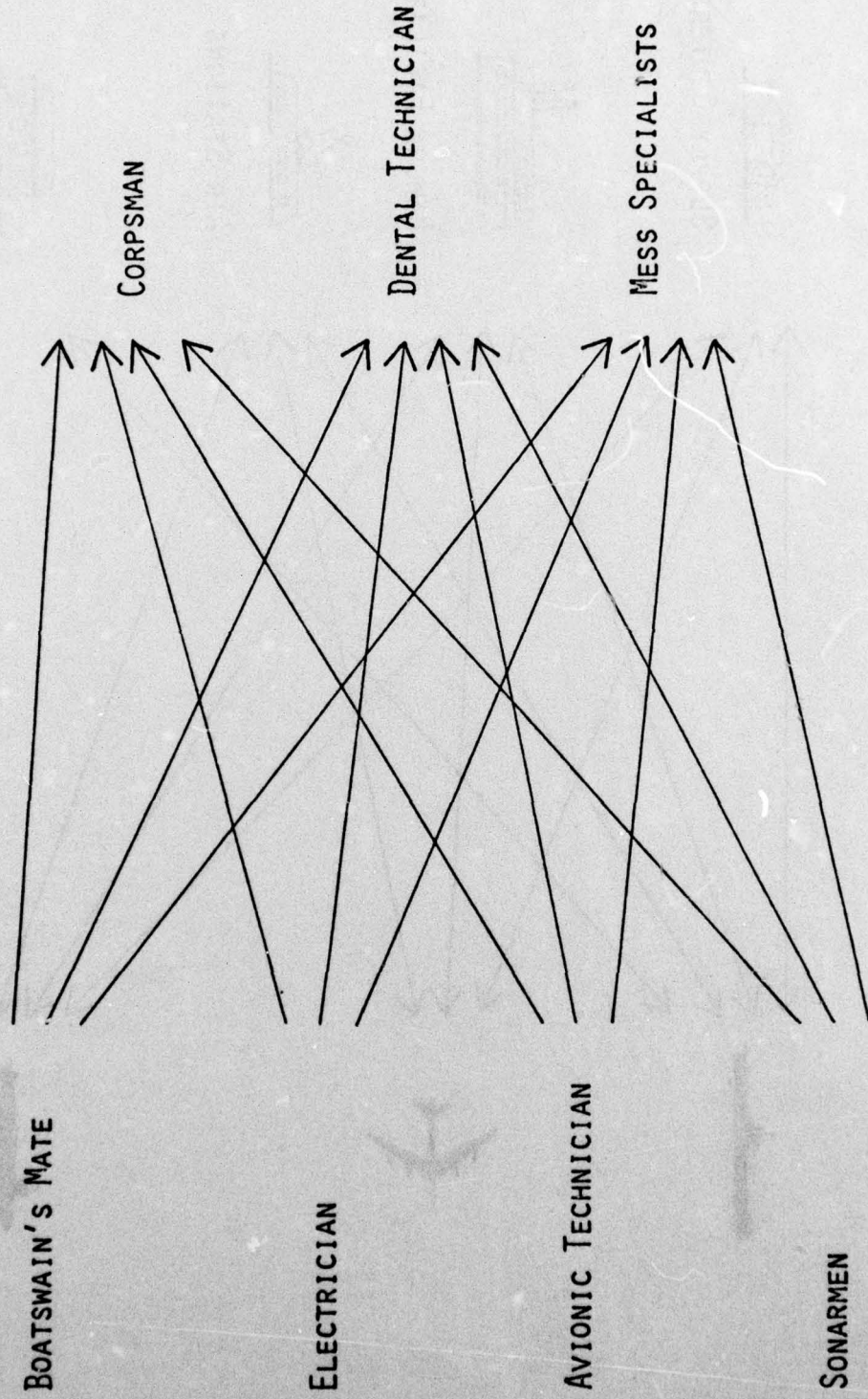


FIGURE 2

BUDGETARY PROGRAM ELEMENTS (PE)

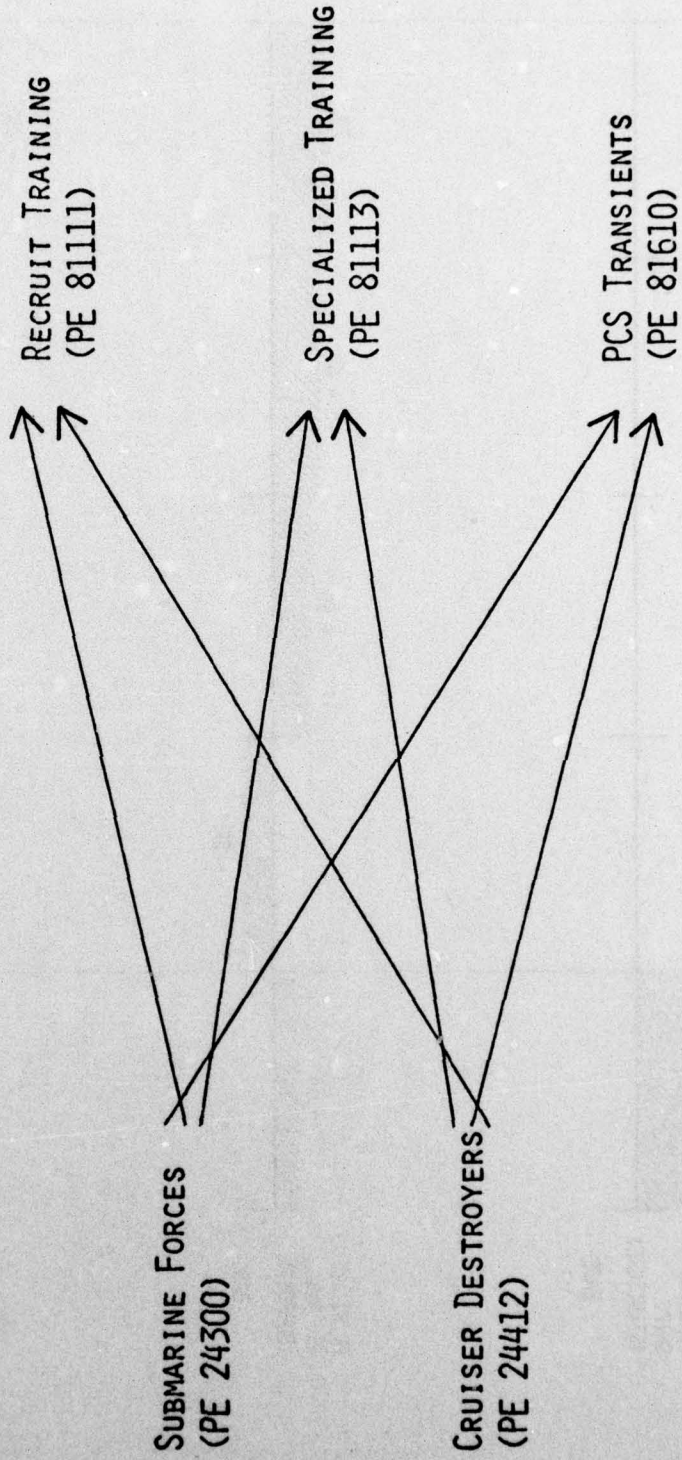


FIGURE 3

SUPPORT ALGORITHM

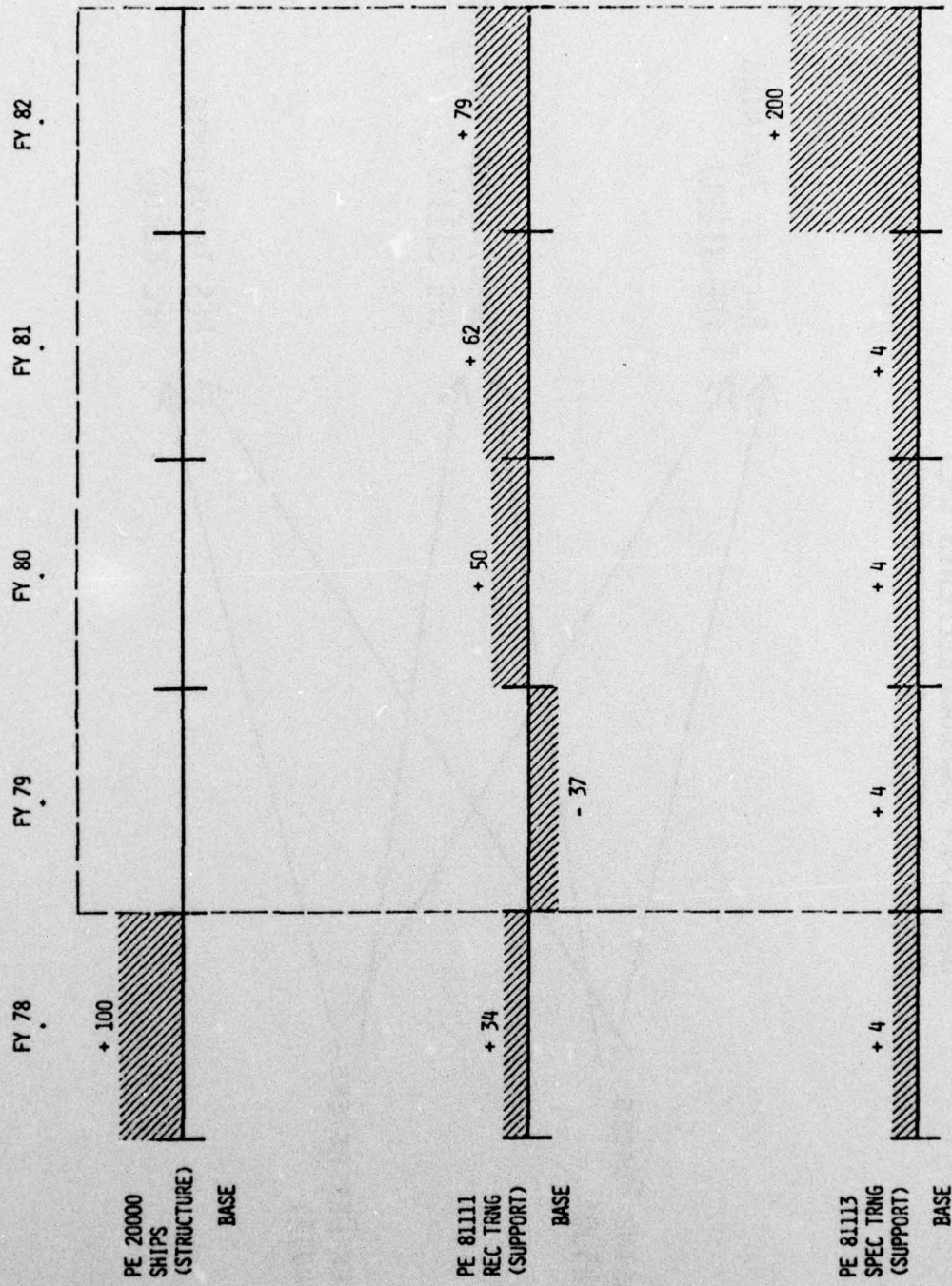
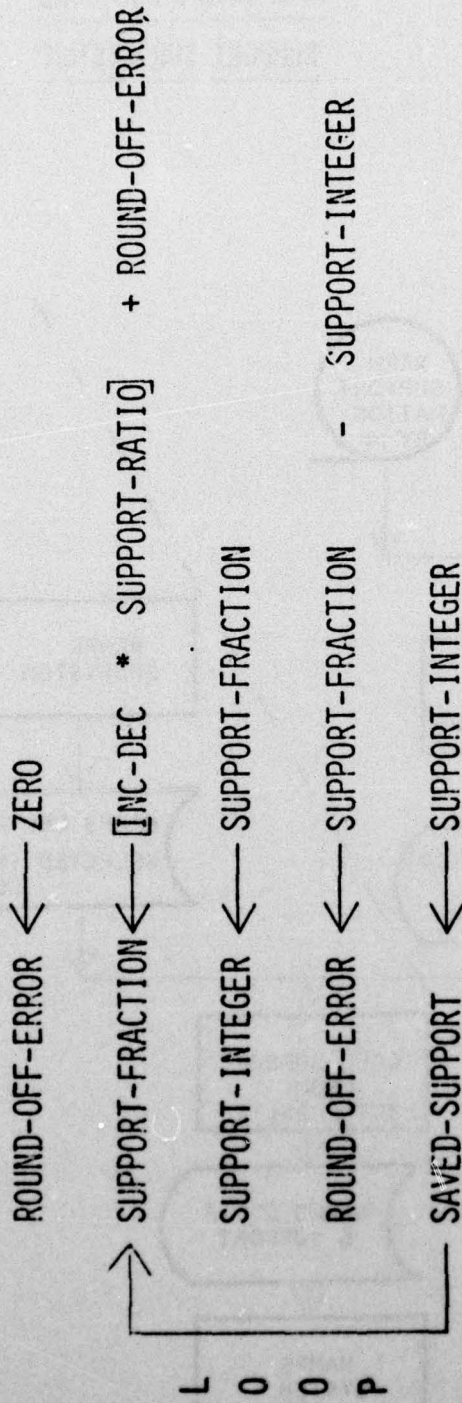


FIGURE 4

SAVING ROUND-OFF-ERROR LOSSES



ROUND-OFF-ERROR ALWAYS LESS THAN 1/2

FIGURE 6

APPENDIX D

SPONSOR BILLET DISTRIBUTION

Methodology for spreading ALL NAVY level QRP to individual Sponsors given MAPMIS distribution.*

- N (BM) = ALL NAVY total BM's - Source MAPMIS Billet file.
 N'(BM) = ALL NAVY total BM's - Source NAVCOSSACT's QRP.
 Si (BM) = Sponsor i's total BM's - Source MAPMIS Billet file.
 S'i (BM) = Sponsor i's share of N'(BM) - Variable to be computed.
 F = Fractional Billet
 X = Numbers of Billets remaining after all integral solutions of S'i (BM) were subtracted from N'(BM).

$$\frac{S_i(BM)}{N'(BM)} (N'(BM) = S'_i(BM) + F_i)$$

(An integer solution for S'i (BM) along with its associated Fi.)

$$N'(BM) - \sum_{i=1, 26} S'_i(BM) = X$$

(Integer solution for S'i (BM) is subtracted from N'(BM) for all S'i (BM) - leaving a remainder of X.)

Def Fj: $F_j \geq F_{j+1}, j = 1, 25$

(Fi's are sequenced from MAX to MIN)

$$S'_j(BM) = S'_j(BM) + i, j = 1, X$$

(Remainder of X billets are distributed over S'i (BM)'s according to size of its associated Fi.)

*In this example, pay grade has been ignored for the sake of brevity and clarity.