A
TECHNICAL PROPOSAL
TO THE
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC

18 April 1988

TO PROVIDE
ITS END USER
SUPPORT SERVICES

Proposal valid thru 18 July 1988
Period: 90 days

TABLE OF CONTENTS

SECTION 1 - TECHNICAL APPROACH

1.0 UNDERSTANDING THE PROBLEM

The United States Nuclear Regulatory Commission's headquarters are located in several buildings located in the Metropolitan D.C. area. Automated Data Processing functions occur at all of the locations of NRC. To provide support to the various ADP users, NRC established an Information Technical Center.

The objective of the Information Technical Center is to provide an integrated, automated support center to aid the users in mainframe and personal computer support. This center not only supports the end-users, but also serves the needs of the NRC decision makers and action officers. The basic objective of the ITC can be summarized as follows:

o the ITC can furnish rapid and accurate collection, processing, transmission, storage, retrieval and disposal of a large volume of information in a timely and efficient manner

o supply compatible, efficient and highly effective inter and intra management communication links within NRC

o reduce the amount of action officer and support staff time expended to handle current and future workloads

AMCI will support the ITC by providing on-site assistance to the users at NRC. The staff will operate a Resource Center "Hot-Line" to answer questions germane to both software and hardware problems.

The staff will be responsible for:

- assisting users with application design considerations
- rectifying faulty design structures
- requirements analysis
- conceptual design
- functional designs
- troubleshooting hardware and software problems
- provide guidance in selecting alternatives in hardware and software

The following sections describe the specific tasks AMCI will perform to assist NRC.

1.1 TECHNICAL ASSISTANCE

AMCI will provide on-site support at the Information Technical Support Centers located at both the Phillips Building in Bethesda and One White Flint North in Rockville, Monday thru Friday from 7:30 - 4:15. The staff will provide continuous coverage, even during the lunch period, by scheduling a staggered lunch hour, to be covered by an additional staff member.

The staff will provide both telephone and walk-in support to NRC users. A telephone answering machine will be provided to answer calls when AMCI staff members all not available. The answering machine will also be used after hours, so that if a user is having problems while working late, a message can be left stating the problem. When the AMCI staff opens the ITC the next day, the end-user can be contacted, and the problem can be solved.

The resource center staff, at the approval of the project officer, may also provide on-site support at other NRC locations. If this occurs, a substitute from our pool of resources will be sent to the ITC to provide continuous support.

To ensure that the ITC is staffed at all times, the Project Director will develop a monthly schedule for the ITC. The personnel assigned to the center will be cited. Vacations, and any other known absences will be noted, and a replacement will be named. AMCI will ensure that the key personnel will be available 95% of the time. This will ensure that the user can obtain assistance from the same staff member over a span of several days.

AMCI will also be responsible for providing coverage when a key personnel staff member is sick. The AMCI project officer will ensure that a suitable replacement is found.

The ITC staff will be responsible for maintaining a log of all problems that are received by the center. This log will be maintained for problems received by phone, or walk-in. The staff will also log all problems encountered when sent to other sites of NRC.

The log will consist of the following information:

- data
- user
- organization code

- problem
- solution
- IRC staff member

The staff will also be responsible for following-up on each problem that is solved. The staff will ask each user to fill out an evaluation form, rating the service that was obtained from the ITC.

1.2 INFORMATIONAL MATERIALS

Besides providing troubleshooting support, the AMCI staff will be responsible for providing NRC with materials that will aid the user in ADP processing.

At the request of the NRC project officer, the IRC staff will provide the users with written instructions for the use of:

- computer tutorials
- audio-visual tutorials
- new software packages
- hardware

The staff will also be responsible for:

- providing information for the NRC ADP users guide
- articles for the NRC ITC Newsletter
- demonstration material for software packages
- demonstration material for hardware capabilities
- written evaluation of hardware and software capabilities
- updates to the NRC ADP Services Guide

It may also be necessary for the AMCI to make formal presentations to users on various capabilities of hardware and/or software. The staff will be totally responsible for arranging the demonstrations, providing the necessary materials, presenting the seminar and providing follow-up support.

1.3 EVALUATING RESOURCES

The AMCI staff will also be responsible for evaluating resources that will be used by NRC. The staff will be responsible for evaluating:

- software packages
- hardware
- peripherals
- training materials
- books
- special supplies

The staff will determine the criteria that will be used for each category. The criteria will be approved by the NRC project director before use.

Each piece of material will be evaluated by two staff members. This will ensure that an un-biased critique is achieved. The AMCI project director will then review the evaluations and prepare a summary critique of the product.

1.4 PROGRAMMING SUPPORT

AMCI will also provide programming support on both the main-frame and micro processors used by the NRC organizations.

The programming support will include:

- PC/DOS, MS/DOS command files   - programming support
- configuration files   - Wylbur command files
- batch files   - the use of action files

As with the user support, the staff will also log all programming support. Follow-up evaluations will also be conducted.

1.5 REPORTS

AMCI will deliver a status report on the first and fifteenth of the month to the NRC project officer. The status report will contain the following items:

- detailed accomplishments of the month
- plans for next period
- problems that may occur
- proposed solutions

The staff will also provide statistics on the ITC with the status report. This will include:

- number of calls and/or visits
- average times to handle problem
- number of calls by software package
- ITC utilization statistics

Besides providing the status report, the staff will supply the NRC project officer with a printout of the automated log. This log will be delivered every Monday.

1 - 4

SECTION 2 - FACILITIES

2.0 INTRODUCTION

This section of the proposal contains a description of the facilities located at AMCI's corporate headquarters.

2.1 AMCI'S FACILITIES AND EQUIPMENT

This section explains the types of computer equipment and facilities AMCI has available for use at our corporate facilities.

2.1.1 Resident Computing Facilities

AMCI utilizes micro computers, located at its main offices, for applications development and documentation. In addition to word processing and software development, the micros handle most standard protocols and can be used to communicate with any other computer through a telephone interface. AMCI has used its computers to implement software and to interface operational systems data bases on the following mainframes and minis:

- o the IBM complex at NIH
- o the IBM complex at JHU
- o the IBM at Argonne Labs
- o the AMDAHL at University of Michigan
- o the Defense Manpower Data Center in Monterray
- o the Harris 800 at OP-01/NMPC
- o the Harris at NPRDC

The micro computers on-site at AMCI that can be used are as follows:

- o IBM PC AT
- o IBM PC XT
- o Various IBM Compatibles
  - Leading Edge
  - Columbia Data Products
  - Mugen
  - Kaypro
  - Intelligent Data Systems
  - Data General Portable

- o Various 8 BIT Processors
  - Osborne
  - MRI 800
  - IMSAI

Printers include:

- o Seikosha 300
- o Mannesman Tally
- o Cannon
- o Qume
- o IBM Quietwriter
- o IDS Paper Tiger

Terminals include:

- o Liberty 100
- o Hazeltine 1400
- o Esprit III
- o Decwriter 10

Modems used for teleprocessing include:

- o Hayes 1200
- o Zoom PC
- o Multitec

2.1.1.1 Computer Hardware Experience

The staff of AMCI has extensive experience in design, development and operation of the full range of computer micro-processors, mini-computers, and large-scale main computers. The staff has had hands on experience in system integration and software development with the following processors:

- o IBM 360/370, 33XX, 43XX
- o IBM 3083
- o IBM 4341
- o IBM PC and PC compatible
- o HARRIS-800
- o WANG Series
- o ZENITH 100 and 248 Series

- o Z80, 8080, 8088 micro computers
- o HP-3000 Series
- o HP 150 Micro Series
- o DEC/VAX
- o AMDAHL
- o CDC-3000, 6000 Series

2.1.1.2 Software Package Experience

The staff at AMCI has extensive experience in the design and development of micro-applications systems utilizing various off-the-shelf software packages.

The following packages are available for use at AMCI:

o Micro DBMS
 - dBASE II, III, III+
 - Condor
 - Selector
 - MDBS
 - Reflex
 - Quicksilver

o Spreadsheets
 - Lotus 1-2-3
 - Peachcalc
 - Supercalc 3
 - Multiplan

o Word Processing
 - Wordstar
 - Peachtext
 - Multimate
 - Micro soft word
 - Displaywrite

o Integrated Packages
 - Symphony
 - Framework
 - Enable
 - Super Project Plus

o Graphics
 - Freelance
 - Energraphics
 - PC Draw
 - Signmaster
 - Chartmaster

o Stat Packages
 - SAS
 - SPSS
 - Gauss
 - Systat
 - PC-SAS

o Communications
 - Kermit
 - XModem
 - Smartcom
 - PC Talk
 - Displaycom

o Languages
 - BASIC
 - COBOL
 - FORTRAN
 - PASCAL
 - C

2.1.2 Automated Graphics Interface

On-line managers and planners use computers to manage information ranging from industrial engineering studies and training projections to personnel production statistical comparisons and organizational structures. Once the user has the computerized information he needs to review it, present it, discuss it and decide how to act on it. One of the fastest and most efficient mediums for sharing information is a graphics presentation with charts and diagrams. Recent studies indicate that the human brain absorbs information 60,000 times faster in graphic form than in written form.

AMCI can support NRC with interactive graphics thru input and output compatibility. AMCI owns and operates hardware and software systems which are compatible with the systems located within NRC. AMCI can therefore take data from contributing organizations and quickly mold it into one document using our IBM PC, Xerox 820, IMS-8000, Zenith 100, Zenith 151, Columbia 1600 and Leading Edge PC, all of which are interfaced. Data prepared in text, numeric and financial tables within the organization can be used to produce graphics on AMCI compatible hardware and software systems and be in the users hands within the hour.

At AMCI we use IBM PC micro processors incorporating color graphics monitors to display, review and modify presentations. The resultant graphics displays are then captured on hard copy in two possible formats; color graphics plotted on bond paper or overhead transparency, and 35mm color slides or prints. These graphics images are produced using commercially available Hewlett-Packard and Polaroid instruments integrated with the micro processors.

2.1.3 Report Production Equipment

AMCI maintains a complete, large volume reproduction facility. The equipment consists of two single sheet feed or open faced text page copiers for up to 15 copies, and a multi-page, multi-copy Xerox capable of automatically feeding up to 200 pages of source document and providing 25 collated copies per run.

Reports of less than two inches thickness can be bound using our GBC Binding Machine which prepares reports bound in the same manner as this proposal. Larger reports should be 3-hole drilled by our drill-press and presented in 3-ring binders.

2.1.4 Data Gathering Techniques

At some point during the contract, reference data germane to NRC must be made machine readable. A variety of source media are likely, ranging from hard copy files to machine readable data files. AMCI will use the following methods to build machine readable data files.

If the source data is in micro processor machine readable form, then the AMCI technical research staff will translate the data file to a standard PC format. At AMCI we have the capability to translate data files produced on a variety of micro-processor systems, to a standard PC format.

If the source data is resident on a main-frame, two approaches can be used. If the large scale system has a time sharing capability, the AMCI staff will utilize our micro-processor's communications protocol to access the main-frame. The data will then be down loaded to a standard PC format. A second approach is to produce a 1600 bpi, 9 track density tape containing the applicable data. This data tape can then be mounted on a micro-processor tape drive and downloaded to PC format.

A bulk of the data that will be needed to support NRC will be in hard copy files. This data source will be of two types, data that can be copied and removed from the source, and data that can not for some reason be copied. AMCI has techniques to handle both data types.

The AMCI research staff will utilize the OMNI-READER to read and input printed material into our micro-processors. OMNI-READER, developed by OBERON International will transfer existing documents thru its optical character reader to machine readable form, by utilizing the RS232C interface. This data will then be reformatted to be PC compatible.

Over the years AMCI has tried various methods of capturing data that can not be copied. One method that has proven successful is the use of dictation tape recorders and carefully worked out oral formats. The format indicates the sequence in which numbers will be dictated onto the tape. This format also specifies rules for pronunciation of the digits; the way in which a break is signified; and the shift to a new record. The researcher goes to the source and finds the necessary information and enters it into the dictation file. This method has proven to be faster and more accurate than hand written or key entry. It also allows the researcher to minimize the amount of on-site time, and provides a faster interface. This dictated file will then be entered into a PC data file.

2.1.5 Security Provisions

The Defense Contract Administration Services, Region (DCASR) has recently conducted a site inspection of AMCI. Our corporate facilities have received an Industrial Clearance to handle SECRET material. Because of our work load with various Department of Defense organizations, all of our professional staff have current security clearances. Our Security Procedures Manual contains step-by-step instructions for the handling of classified material.

SECTION 3 - PERSONNEL QUALIFICATIONS

3.0 INTRODUCTION

The AMCI Project staff is a fully qualified group of professionals, available for assignment and ready to initiate work on the project. As a result of the staff's previous experience with the operation and management of various Information Technology Centers, extensive phase-in and familiarization activities will be totally unnecessary.

AMCI contemplates no delay in establishing a capability of assuming complete responsibility for furnishing all services to be accomplished under the proposed contract. The proposed staff will provide support to the Nuclear Regulatory Commission on a full-time basis.

The AMCI proposed staff is structured to guarantee the availability of personnel. Three full-time staff members are proposed to operate and manage the Information Technology Centers.

If requirements change, AMCI can supply additional personnel from our staff to provide high-quality on-site support. The qualifications for the AMCI staff is illustrated in Section 5 of this proposal. A contingency plan for staffing the ITC is supplied in Section 4.

The staff is familiar with working together and coordinate their efforts effectively. We are convinced that the proposed staff has the skills to provide the support NRC requires, because of their special training experience and qualifications, and will positively contribute to this project.

3.1 PERSONNEL REQUIREMENTS

The AMCI project staff is a balanced group of seasoned professionals. AMCI initially selected individuals whose capabilities and experience exceed the explicitly stated requirements, and the implicit factors dictated by the nature of the ITC environment.

The proposed staff for the Training Laboratory is:

Project Manager   Derrick Schreiner
Technical Assistants   Richard Joseph
                         Teri McAfee

3 - 1

The above key personnel will be available on a full-time basis for this project, beginning 1 May 1988. The key personnel are not currently committed to any other project beyond the specified date.

AMCI proposes that Mr. Richard Joseph will be on-site at the ITS Support Center located at:

> Phillips Building Complex
> 7920 Norfolk Avenue
> Room 808
> Bethesda, Maryland

Ms. Teri McAfee will be on-site at the ITS Support Center located at:

> One White Flint North
> 11555 Rockville Pike
> Room 3C12
> Rockville, Maryland

The project manager, Mr. Derrick Schreiner, will spend most of his time at the One White Flint North ITS Support Center. He will also fill in at the Phillips Building to cover lunch breaks when needed.

AMCI believes that the proposed staff is capable, experienced and totally able to meet the projected requirements.

3.2 SKILLS MATRIX

The following chart illustrates the qualifications of the proposed staff in the software cited in table 2 and 3 of the solicitation.

SOFTWARE EXPERIENCE

YEARS OF EXPERIENCE

Schreiner   Joseph   McAfee

TABLE 2

IBM PC/DOS
MS/DOS
IBM BASIC INTERPRETER
LOTUS
dBASE III/II
CROSSTALK XVI
IBM DISPLAYWRITE 2/3/4
IBM 5520 ATTACHMENT PROGRAM
SUPER PROJECT PLUS
SMARTERM 400
CHARTMASTER
SIGNMASTER
SIDEKICK
DISPLAYCOM
AST RESEARCH
BASIC COMPILER
FORTRAN COMPILER

TABLE 3

OS/MVS/XA
TSO
WILBUR
RAMIS
IDMS/R
IBM/TSO KERMIT
VS FORTRAN
DISSPLA
TELL-A-GRAF
MARK W
IMSL
SYSTEM 2000

3.3 RESUMES

This section contains full resumes for the key personnel proposed for this project.

SECTION 4 - PROJECT ORGANIZATION

4.0 MANAGEMENT PLAN

AMCI is structured and operates on a project basis. Each project is provided the autonomy required for flexible efficient response to client requirements.

Projects are the responsibility of a corporate division whose market segment and technical expertise are within the required objectives of the customer. The Division also coordinates any required corporate support to the project including such elements as computer usage, word processing, security and personnel administration support. Each Division operates with basically two functional levels: corporate management and the project management/technical staff.

We plan to demonstrate that our management plan is flexible, responsive, and has the required internal and external interfaces and controls necessary for managing a project of this nature and magnitude. Our management plan is the methodology through which our personnel use the organization structure and the management tools provided to maintain project progress with policy, schedule, and resource constraints.

4.1 PROJECT MANAGEMENT ORGANIZATION

AMCI is organized to meet client requirements and to remain flexible in staffing. This results in an overlap between the project-related responsibilities of the corporate and project management levels. This mix of responsibilities can be categorized into two basic groups: those involving direct monitoring of project status and progress and those involving provision of required resources to support the project. The key element of our approach is that corporate management monitors the project but does not intervene unless an unfavorable trend or incident occurs; thus providing Quality Assurance by a Corporate Officer and Quality Control by a Project Manager. The project personnel are responsible for completing their assigned tasks on schedule and observing all constraints whether internal or contractual.

In practice, this approach functions well because channels of communication are always maintained. Both levels have access to our management control system and regular status briefings are conducted. Through the free

interchange of information high visibility in project task and status is achieved and a supportive environment is maintained. The client's interests and requirements are always the primary consideration.

AMCI's project organization is exhibited in Figure 4.1. It illustrates our internal chain of command and our relationships with the Nuclear Regulatory Commission and the Information Technology Services Branch. The organization depicted is relatively simple yet reflects project requirements and several levels of management and responsibilities. These include:

o ITS COTR - monitoring and direction of all non-contractual matters related to the project for the Government;

o NRC Contracting Officer - control of all contract compliance and monitoring and support of project technical work;

o AMCI Corporate Officer - control of all contract compliance and monitoring and support of project technical work;

o AMCI Project Manager - compliance with contractual matters; compliance with schedules and deliverables; supervision and execution of all tasks described in the contract and delivery orders; interprets delivery orders, plans, analyzes, and monitors work performance.

He also has control of resources; leadership of technical effort; management of all subcontractor personnel activities; plans, analyzes, evaluates, and manages the project.

o AMCI Technical Staff - responsible for design and development of system, and compliance with standards and schedules in the specific designated task areas.
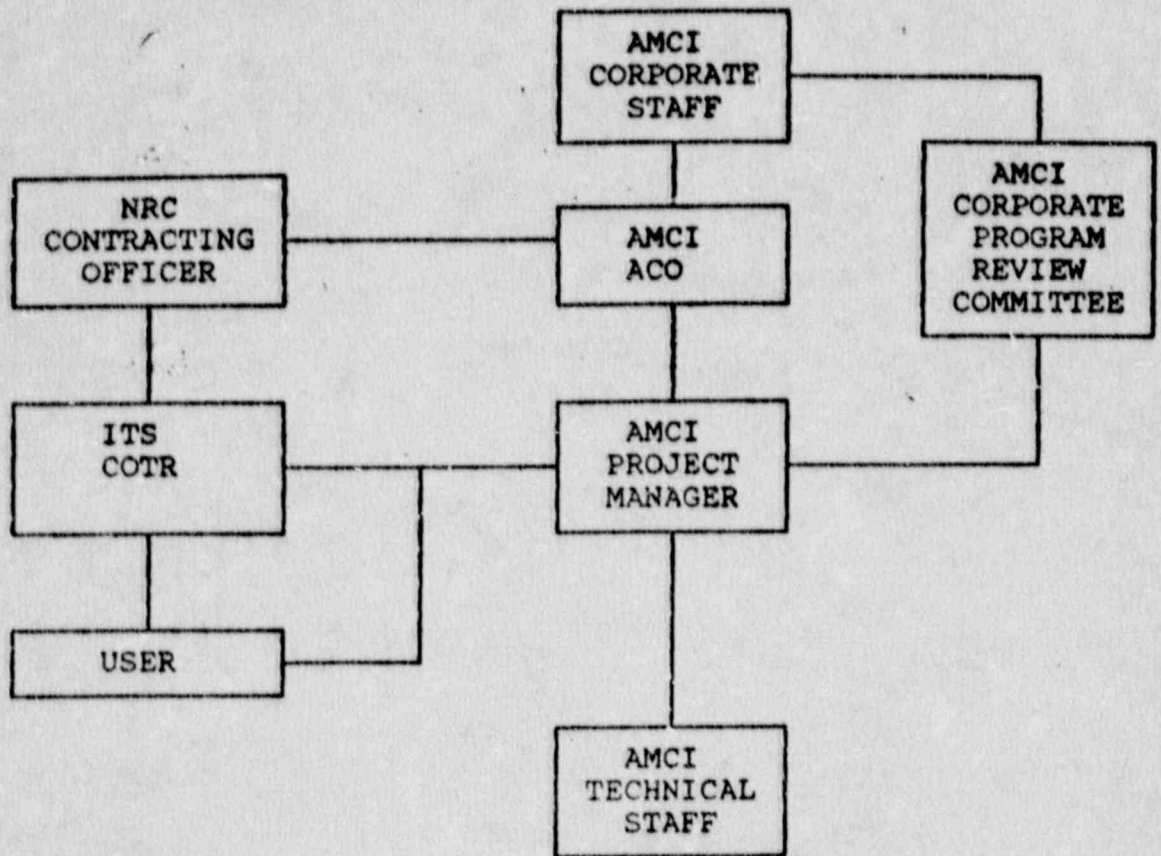
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                                              │    AMCI      │
                                              │  CORPORATE   │
                                              │    STAFF     │
                                              └──────────────┘
                                                     │        └──────────┐
                                                     │                   │
┌──────────────┐              ┌──────────────┐       │          ┌──────────────┐
│    NRC       │              │              │       │          │    AMCI      │
│ CONTRACTING  │──────────────│    AMCI      │       │          │  CORPORATE   │
│  OFFICER     │              │    ACO       │──────────────────│   PROGRAM    │
└──────────────┘              └──────────────┘                  │   REVIEW     │
       │                             │                          │  COMMITTEE   │
       │                             │                          └──────────────┘
┌──────────────┐              ┌──────────────┐                         │
│    ITS       │              │    AMCI      │                         │
│    COTR      │──────────────│   PROJECT    │─────────────────────────┘
│              │              │   MANAGER    │
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       │             │               │
┌──────────────┐     │               │
│    USER      │─────┘        ┌──────────────┐
└──────────────┘              │    AMCI      │
                              │  TECHNICAL   │
                              │    STAFF     │
                              └──────────────┘
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FIGURE 4.1   PROJECT ORGANIZATION

4.2 CORPORATE SUPPORT

Corporate management is deeply involved with every project but, except for contractual matters, the support provided is not one of direct management of the project. The AMCI project manager, by his day-to-day project involvement, is uniquely qualified to actually manage technical progress and to provide quality control. The corporate monitoring and support function is, however, extensive.

There are two significant components in our corporate management structure that support and monitor all projects. The components are: the Corporate Project Review Committee; and the Assigned Corporate Officer (ACO).

The Corporate Project Review Committee meets once a month to discuss the progress of each project with the cognizant Project Manager. These Corporate Project Review Committee meetings cover primarily four areas:

o   Technical progress;
o   Reporting requirements;
o   Budget and manpower loading requirements; and
o   Quality assurance of deliverable products.

The objective is to ensure management cognizance of project activities and the application of guidance, corrective measures, or required resources to correct any unfavorable trends. In general, the Corporate Project Review will maintain quality progress and communications for this project. The committee is composed of senior corporate staff, senior technical staff with expertise in the project area and representatives from administration and finance.

The Corporate Officer who is assigned this project, to provide quality assurance, will be a permanent member of the review committee. The assignment of a corporate officer reflects our commitment to top management involvement in this project. Our management approach details a number of management tools which we utilize to monitor resource expenditures, schedules and deliverable quality. Project management and technical staff provide data to and utilize these tools in their project matters. The Assigned Corporate Officer (ACO) is able to utilize these same tools to monitor the project without interfering with the project manager.

The ACO also serves as a single point of contact for the project manager to obtain additional resources or assistance. Although our project managers have autonomy to arrange for required support in any exceptional case, the ACO as a corporate manager can meet emergencies or provide definitive guidance.

4 - 4

Our corporate management philosophy is to delegate the authority necessary for the project manager to effectively manage the project. We nonetheless maintain our responsibility for all aspects of the project and therefore continue corporate involvement through various monitoring mechanisms, primarily the ACO.

4.3 PROJECT MANAGEMENT APPROACH

AMCI's management approach recognizes the need to address project management requirements at two levels concurrently:

o a structure for performance of services across all phases of the project
o the detailed procedures for delivery order management, configuration management, data management, quality assurance, reporting, security, and such processes necessary for contract success on a day-to-day basis.

AMCI's senior managers have developed this plan using approaches, techniques and procedures that have been employed successfully in the initiation and long-term performance of contracts for supplying high-technology support. The key elements of AMCI's management plan are:

o an organization tailored to the specific needs of this contract, that provides flexibility to meet changing delivery order requirements, and that provides the project manager direct access to the corporate resources needed for the performance of work;
o a technical and management review board of consulting experts reporting to the president to conduct independent audits of overall contract performance;
o the most qualified project manager available for this contract, who will be a single point of contact for all contract activities and have local authority for contract performance;
o an established set of delivery order management procedures based on rigorous task performance planning, task monitoring and control, and open reporting of progress and anticipated problem areas;
o an active, independent program of quality assurance for review of each deliverable product;
o effective security control procedures and working knowledge of security and privacy requirements.

AMCI has developed a management approach to support NRC that satisfies both major requirements stated above. The goals of this approach are to ensure quality technical products and effective resource management.

4 - 5

AMCI's approach to performing work under this contract is to understand the problem and/or need to be addressed, relate it to the required objective, and then identify the necessary skills and experience to provide the right kind of support to provide the best solution. The individuals identified to support the need are then brought together to understand the problem and/or need, objective, organization, and environment, and prepare a task performance plan. Project members then provide their special skills to perform whatever analyses or actions are required. Collectively, they identify alternatives to satisfying the problem and/or need, talk through the approach, and make a recommendation. By mixing the right kind of skills and experience to satisfy a specific need, we provide the right kind of people to provide the right kind of solutions. This successful approach to problem solving has worked for our clients and will work for this project.

4.4 PROJECT ORGANIZATION APPROACH

AMCI recognizes that it is not the organization, but the people who get the job done. AMCI's principal emphasis is on the assignment of the most qualified professionals for performance of the delivery order requirement. The organization approach is tailored to the people and the requirement. Secondarily, people do need a sense of organization and lines of authority and responsibility to ensure that all aspects of the technical requirements are met. Under this concept, AMCI presents information in this subsection on its proposed organization approach, and identifies the management levels with their duties and responsibilities. The information is presented first at the corporate level and then at the project level.

AMCI is organized in terms of projects, each directed by a highly qualified project manager reporting to the assigned corporate officer for maximum visibility and quality control. This approach has proven to be highly successful in ensuring that project develops with top quality products and services, on schedule, and within estimated costs.

Mr. Derrick Schreiner is the proposed project manager for this project. He will be reporting directly to ████████████████████ the assigned corporate officer for the NRC project.

████████████████████ will personally dedicate a high level of support to Mr. Schreiner in initiation of the project activities. He will attend the contract initiation meetings, assist Mr. Schreiner in planning the initial task order efforts, ensure that appropriate AMCI staff members are assigned to the project team, and ensure the adequacy of corporate administrative services and facilities for the project.

4 - 6

AMCI is conscious of the need for a project organization that is responsive, one that will provide for an adequate span of control over all activities without the costly layering of unnecessary management levels. The NRC Project Organization is presented in Figure 4.2.
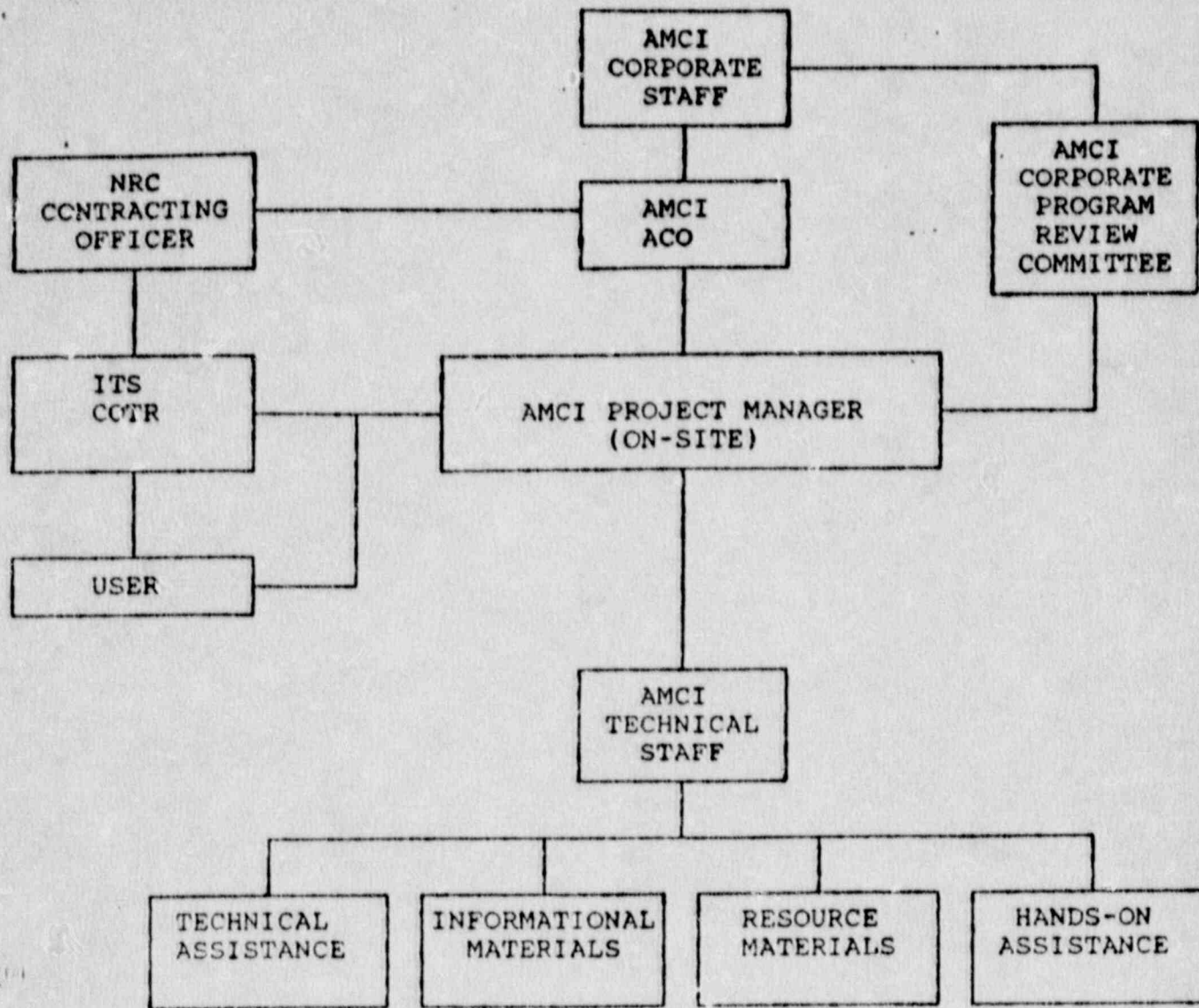
FIGURE 4.2   NRC PROJECT ORGANIZATION

AMCI's selection of Mr. Schreiner as Project Manager illustrates our recognition of the critical nature of the support requirement and our commitment to project success. He is a hands-on technical manager with extensive experience in managing and supporting Information Technical Centers.

Mr. Schreiner's duties as project manager will address the day-to-day performance of on-going contract activities. He will function as the overall manager and single point of contact with the COTR. This responsibility includes technical and management liaison with management and other government personnel.

AMCI is conscious of the need for a project organization that is responsive to NRC requirements for support, one that will provide for an adequate span of control over all delivery order activities and without the costly layering of unnecessary management levels.

4.5 CONTINGENCY PLAN

AMCI's project plan is flexible enough to handle personnel problems in support of the Information Technical Centers, and an influx in the number of calls made to the Center. The plan can also handle changes in the scope of the Center and/or additions to the types of support necessary.

4.5.1 Information Technical Centers

In our initial plan, AMCI will staff the Information Technical Centers with three full-time employees. Each staff member will provide daily service to the center. A monthly plan for the staff schedule will be produced by the project manager and given to the COTR for approval. If one of the key personnel staff members is going to be on leave, AMCI will provide a qualified replacement. If for any reason, the project director can not be at the Center, the staff member at White Flint will take over the duties of this position. This will ensure that all matters dealing with the center are handled correctly.

Due to changing requirements, it may at some time be necessary to add staff members to the ITC. If this is necessary, AMCI will first look at our current pool of resources and determine if a suitable staff member is already in the company. If not, AMCI will hire to fill the needed positions. A listing of the qualifications of our staff is illustrated in Section 5.

4.6 PROJECT MANAGEMENT TECHNIQUES

AMCI's management approach, based on experience in many projects quite similar to this project, has led to the development and use of procedures and techniques for controlling work flow resources and quality which are effective and straightforward. They are based on positive actions and planning with the specific objective of preventing rather than reacting to problems and thereby achieving project goals. Each element of our approach is important. Some of the most important elements include our:

- o   Planning approach
- o   Quality Assurance Plan
- o   Problem Resolution
- o   Contract Reporting

Each of these is discussed in detail below. It is vital to emphasize that all of these elements and our plan are a framework and tools which allow our highly qualified management team to exert their talents most efficiently in a supportive environment.

4.6.1 Planning

AMCI places considerable emphasis on project planning. In our view it is not possible to carry out technical activities without a comprehensive and realistic plan. It is necessary to create a well-defined plan at the start of each project and to maintain or adjust the plan as the work progresses.

The basis of our planning for this project are the solicitation requirements and our staffs specialized knowledge of the project environment. Our long-range planning encompasses all phases of the project. Included in our long range plans are:

- o   Staff Loading Plan and Labor Budget;
- o   Financial Expenditure Plan;
- o   Quality Control Goals; and
- o   Optimization Strategy.

From the above criteria, a baseline can be created. Analysis of potential problems, constraints, and required staffing skills, will also be considered when creating the baseline.

Certain significant events must precede the realization of each project objective. These events may be the development and delivery of intermediate or final products, or the receipt and acceptability of furnished data and

documentation. When each event occurs according to a prescribed schedule, all of the objectives of the project will be met.

AMCI will conduct an impact analysis. This will involve an analysis of the ramifications of reaching the project objectives. The Project Manager will also identify and analyze potential problems that may arise during the task accomplishment. The ultimate result of this planning activity will be a work breakdown and labor allocation plan sufficiently specific to permit close monitoring and subsequent effective management of the project.

An automated system will be used to monitor progress. It will be continually updated during the course of the project from: status reports; deliverables; schedule event completions; and resource use.

4.6.2 Quality Assurance

AMCI is fully aware that successful performance on this contract is measurable in terms of delivering quality products, on time and within budget. AMCI has implemented proven measures to ensure the above criteria are achieved.

Quality control represents the single most important facet of management concern within AMCI. The following specific steps will be taken by the AMCI project manager to ensure the quality of every product delivered to the COTR.

- o Ensure that only qualified personnel are assigned to the project;
- o Ensure that all AMCI project personnel are thoroughly familiar with NRC standards, coding and naming standards, and adhere to these standards; and procedures;

- o Maintain continued visibility and oral communications with the user during the execution of the project. This will serve to identify problems early on;

- o Ensure that the COTR is kept abreast of progress and problems via written status reports and project reviews.

The above items coupled with AMCI's initiative, talent, and specifically related experience will ensure superior quality for all task deliverables.

AMCI also has several methods of maintaining corporate management awareness of project status and control of deliverable quality products. These methods include:

    o Corporate Project Review Committee, and

    o Quality Assurance Committee.

If there appears to be a potential problem in meeting a deliverable date or activity milestone; if there is a need to define alternatives, technical approaches or methodologies, or, if there exists a lack of project visibility, corporate management will initiate a technical review.

The QA Committee is directed by a member of the senior management team selected on the basis of managerial and technical expertise demanded by the situation under review. The committee consists of selected members of management and representatives of various technical areas from our senior technical staff that have expertise within the technical area of concern. Members of the committee are selected on their managerial and technical expertise. They are not members of the project team; therefore, a high level of critical objectivity can be obtained.

A report will be prepared by the committee and presented to AMCI's Assigned Corporate Officer. The report will delineate the findings of the committee and the recommendations derived jointly between the committee, the Assigned Corporate Officer and the project staff.

AMCI will conduct technical audits to ascertain that project performance is in keeping with our established reputation for quality. The purpose of auditing and reviewing task performance is to assess the soundness of the technical approach, the work progress, and adherence to the schedule and to explore alternatives for accelerating task completion. These reviews will be conducted periodically to ensure that potential problems are identified and avoided, and that errors are corrected at the earliest possible time.

We have established stringent quality assurance standards and trained our staff to follow them. The results have been a solid reputation for consistently delivering quality products on time and within cost.

4.6.3 Problem Resolution

Our experience indicates that when problems appear they are one of two distinct types. The following is a discussion of each type of problem, and the methods by which AMCI management proposes to solve each level of problem.

The first type of problem is that which can be solved on the local level, generally by the project manager or even senior technical personnel. These

4 - 12

problems include such factors as how to interpret items, what has priority, etc. When such a problem arises, the problem and the solutions taken will be documented in writing. The problem and the solution will be explained orally and, if requested, in written form to the technical representative. If the recommended solution is acceptable, it will be documented and given to the affected project personnel. If the solution involves changes in established operating procedures, specific direction will be given to the affected staff, in addition to detailed documentation. The project manager will be responsible for all associated direction and documentation production.

The second type of problem includes those which involve contractual matters or problems of similar magnitude. Although unlikely, if such a problem is discovered, it will be reported to the Contracting Officer by the AMCI Assigned Corporate Officer. The ACO and Project Manager will develop a plan for the solution of the problem and present the plan to the Contracting Officer for review. When the plan is approved, work on the problem will commence.

The above actions will be used when time permits. We recognize, however, that situations arise when immediate action is required to preclude significant delays or waste of resources. In such cases, the AMCI Project Manager will consult with technical representatives and develop a plan of action to be used in the interim period while the final plan of action is being developed.

AMCI has used this problem resolution strategy on all of our previous contracts with great success. It will assure that any problems are given the degree of attention that they deserve.

In summary. AMCI considers its problem resolution techniques to be directly applicable to this project. The procedures provide a flexible framework within which our management personnel can address and resolve a variety of unique problems and situations.

4.6.4 Contract Reporting Approach

AMCI has an accounting and financial management package system which provides for automation of cost control procedures in support of AMCI program management to the delivery order level. The system provides for daily entry and update of information from all AMCI offices for maintenance of financial records. These include:

4 - 13

o records for each delivery order, indicating the number of hours of direct labor performed, segregated to the individual employee performing the work;

o records for each individual employee identifying direct labor performed and segregated by delivery order; and

o records of all direct non-labor costs, allocated to individual delivery orders.

AMCI will maintain these records and provide them to the COTR when required. AMCI will track all costs by delivery order and ensure that allotments are not charged for amounts exceeding those authorized.

AMCI encourages open and timely exchange of technical information and reporting of delivery order progress, status, and potential problem areas among members of the project staff and the COTR. Telephone calls, visits, and project reports will be used to coordinate and report delivery order activities. A work environment is established in which Project Managers will openly report significant events to highlight accomplishments of staff members and to expose potential problems early enough to allow consideration of all possible alternatives for solution. The success of a delivery order is enhanced by these channels of communication. AMCI recognizes that these forms of correspondence do not alter delivery order scope, costs, or completion dates.

AMCI will provide a formal, monthly project fund expenditure and delivery order status report describing project status problems encountered and progress on specific tasks.

Another form of contract reporting consists of deliverable products specified by individual delivery orders. Each product will be subject to an independent Quality Assurance review. The AMCI ACO will have final approval authority of each product submitted to the COTR. He will submit each deliverable product citing the contract number, delivery order number, name of the deliverable product, specified number of copies, scheduled due date, and any other pertinent information. He will also notify the COTR in writing of any anticipated late deliveries of scheduled products, stating causes for slippage, corrective actions, anticipated new task dates, and anticipated impact on any other schedules.

SECTION 5 - CORPORATE CAPABILITIES

5.0 CORPORATE ORGANIZATION

Automation Management Consultants Incorporated (AMCI) is a small business concern incorporated in the state of Maryland offering a wide range of consulting services to government and industry. The company was founded in February of 1980 and is a privately held corporation.

AMCI is organized into seven divisions, each with a specific market segment and offering specialized services to that market. The divisions are described below.

The Information Systems Division was formed to serve the Commercial Market. The major functions of this division include the design, development and implementation of Information Systems.

The Information Management Division was formed to serve the Federal Market. The major functions of this division include the design, development and implementation, operations and management of Automated Information Systems.

The Operations Research Division serves the DOD Market, and is designed to perform personnel and manpower analysis, and operations research.
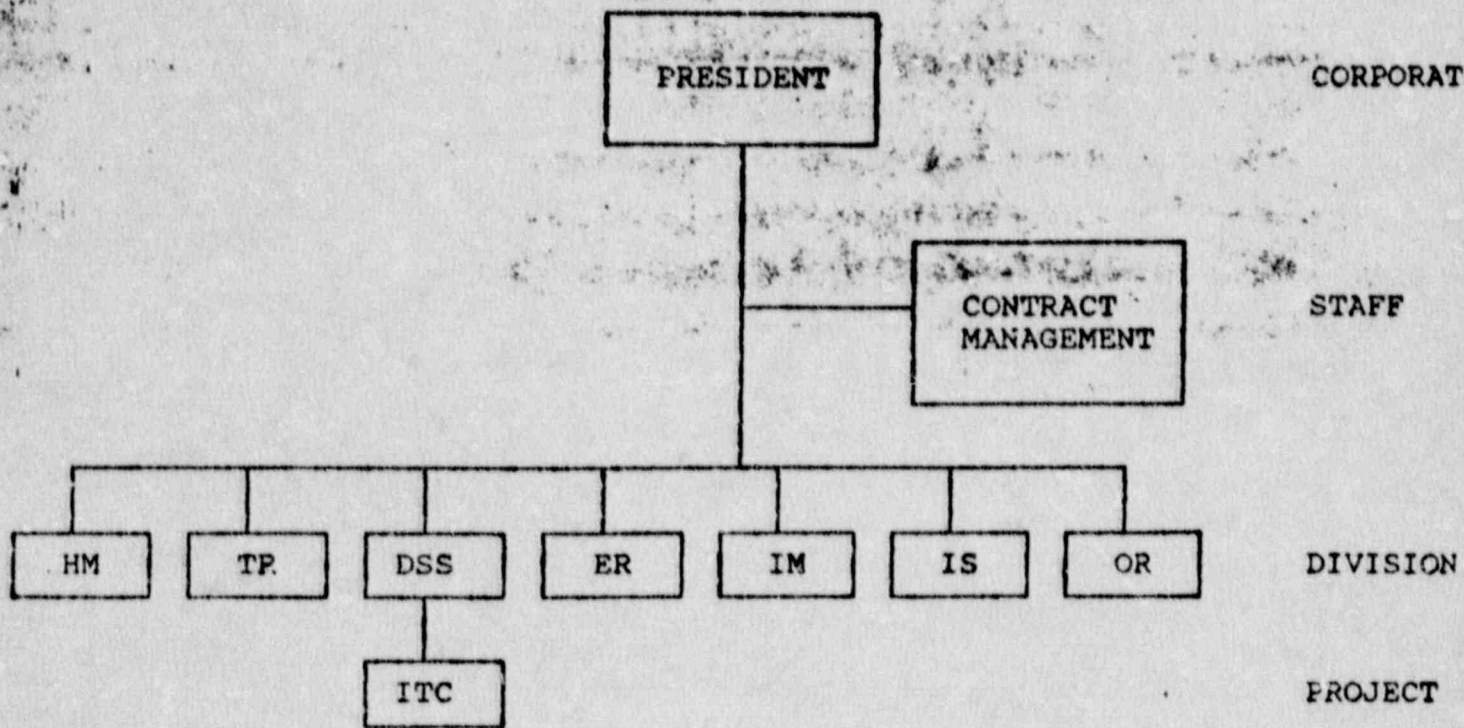
The Economics Research Division provides a staff of academically qualified personnel to perform economic and statistical analysis. A branch of this division performs cost-benefit analysis and A-76 Studies for the government.

The Training Division was established to serve the educational needs of our clients. Its major function is to conduct training seminars in all aspects of the ADP arena.

The Decision Support Systems Division serves the DOD Market, and is designed to perform Office Automation and Technical Support Services.

The Hardware Maintenance Division was established to serve the hardware maintenance needs of our clients.

The Information Technical Center Project will be assigned to the Decision Support Division. The following chart illustrates our corporate organization.

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                    │  PRESIDENT   │              CORPORAT
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                           ├─────────│   CONTRACT   │    STAFF
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CORPORATE ORGANIZATION

AMCI currently maintains its corporate offices in the Exchange Place Office Complex in Rockville, Maryland. This office serves our clients in the Washington-Baltimore metropolitan area.

AMCI also maintains satellite offices in New Orleans, Louisiana; St. Louis, Missouri; Dayton, Ohio; and Philadelphia, Pennsylvania.

Automation Management Consultants Incorporated has performed work for customers in many application areas which have provided broad background experience for our staff. AMCI brings professional analysts together to develop systems and applications in these fields:

- o   Training Development and Presentation
- o   Manpower and Personnel Management
- o   Structured Analysis and Documentation
- o   Structured Systems Design & Development
- o   Automation of Office Support Functions
- o   Economic Analysis and Cost Benefit Analysis
- o   Operations Research & Mathematical Modeling
- o   ADP Operations Analysis & Management
- o   User Needs Analysis
- o   Data and Information Management
- o   WP/DP Integration

5.1 LIST OF CLIENTS

The above application areas have been successfully performed for the following customers:

- o Department of the Navy, Naval Military Personnel Command
- o Department of the Navy, Chief of Naval Operations
- o Department of the Navy, Office of Naval Research
- o Department of the Navy, Office of Naval Technology
- o Department of the Navy, Naval Air Systems Command
- o Department of the Navy, Assistant Secretary of the Navy, for RDT&E
- o Department of the Navy, Naval Telecommunications Command
- o Department of the Navy, Navy Personnel Research & Development Center
- o Department of Defense, Directorate of Information, Operations & Reports
- o Department of the Army, Office of the Chief of Staff
- o Department of the Army, US Army Forces Command
- o Department of the Army, Office of Civilian Travel

o Department of the Army, Information Support Center - Carlisle Barracks
o Department of the Army, Office of the Surgeon General
o Department of the Army, Office of Printing and Publication
o United States Arms Control and Disarmament Agency
o Department of Health and Human Services, Office of the Inspector General
o Department of Agriculture, Foreign Agriculture Service
o Department of Agriculture, Farmers Home Administration
o Department of Agriculture, Office of the Inspector General
o Military Sealift Command
o Nuclear Regulatory Commission
o National Defense University
o Federal Home Loan Bank Board
o Office of Personnel Management

5.2 PERSONNEL RESOURCES

AMCI has over 50 employees, with many diverse interests. The following chart illustrates the educational profile of the staff. The chart is organized by labor category.

5.2.1 Personnel Skills

The following chart illustrates the experience of our technical staff in the software packages listed in the solicitation.

PERSONNEL

IBM PC/DOS
MS/DOS
IBM BASIC INT
LOTUS
dBASE
CROSSTALK
DISPLAYWRITE
5520 ATTACHMENT
SUPER PROJECT PLUS
SMARTCOM 400
CHARTMASTER
SIGN MASTER
SIDEKICK
DISPLAYCOM
AST SOFTWARE
BASIC
FORTRAN
OS/MVS/XA
TSO
WYLBUR
RAMIS
IDMS/R
IBM/TSO KERMIT
VS FORTRAN
DISSPLAY
TELL-A-GRAF
MARK IV
IMSL
SYSTEM 2000
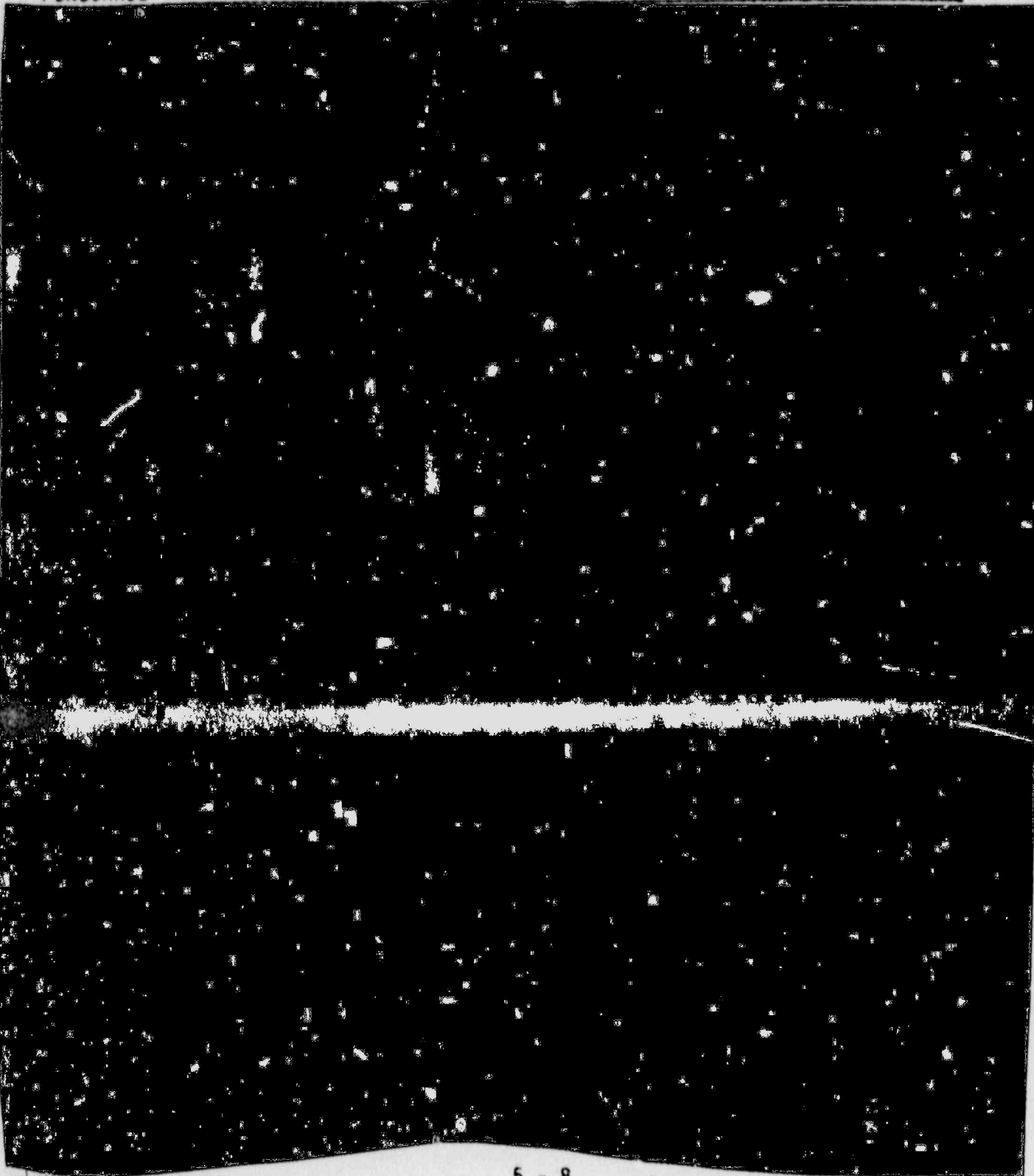
5.3 RELEVANT EXPERIENCE

This section illustrates our past and current experience in the Technical Assistance, Informational Materials, Evaluating Resources, and Programming Support arenas, relevant to this solicitation.

5.3.1 Experience Matrix

The following matrix illustrates our experience in the major areas defined above.

REFERENCE	TECHNICAL ASSISTANCE	INFORMATION MATERIALS	EVALUATING RESOURCES	PROGRAMMING SUPPORT
Headquarters Integrated Office System	X	X	X	X
Office of Naval Research Information Center	X	X		X
Facilities Management	X	X	X	X
Office Automation Procedures	X	X		X
OP-13 Customer Support	X			X
HIOS Training Center		X		
Office of Naval Research Training Center	X	X	X	X
Ingres Data Base Instruction		X		
Training Seminars		X		
FERS Training		X		
Office of Personnel Management ADP Training		X	X	
Automation of RAPIDS Office		X	X	X
Equal Opportunity Management Information System			X	X
Information Decision Support System			X	
COMNAVTELCOM Requirements Studies			X	

REFERENCE	TECHNICAL ASSISTANCE	INFORMATION MATERIALS	EVALUATING RESOURCES	PROGRAMMING SUPPORT
Requirements Analysis OP-098			X	
ACAT Tracking and Reporting System				X
ADSTAP System		X	X	X
Authorization Management				X
Billet Authorization Monetary and Assessment System				X
Training Programming System			X	X
Requisition Tracking System				X
Contract Research Program				X
Managing-to-Payroll				X
HARDMAN Conversion			X	X
OERTS Conversion			X	X
Reenlistment Studies				X
Enlisted Community Managers System				X
DSS Budget System				X

5.3.2 Knowledge of Nuclear Regulatory Processes

AMCI is currently providing ADP equipment maintenance support to the Nuclear
Regulatory Commission. AMCI technicians are responsible for on-call
maintenance of micro processors and associated peripherals at the eleven NRC
offices in the Washington Metropolitan area. The technicians are familiar
with the rules and regulations of NRC, and have experience in performing
services in accordance to the processes.

5.3.3 Contract Summaries

The following contract summaries illustrate our experience in the major
areas defined in the solicitation.

5.3.3.1 Technical Assistance Summaries

This section contains contract summaries relevant to Technical Assistance.

TITLE: Office Automation Procedures
CLIENT: Naval Military Personnel Command
CONTACT: Mr. Ken Gay, Project Director, 694-5510
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: September 1984 - June 1987
DESCRIPTION OF THE WORK PERFORMED:
AMCI provided on-site support in the training of line-managers in the use of micro-processors to aid in their duties. Both formal and one-on-one classes have been used to instruct the managers in the use of both the hardware and software applications available for their use.

The staff also conducted on-site interviews with the DSS staff to determine the automation requirements. The AMCI staff designed and developed various on-line, query systems to aid DSS in tracking the POM and Budget submits.

The staff was also responsible for evaluation of all new software packages for office automation. The staff made recommendations to DSS as to the usefulness of each package. Customized training courses were developed for accepted packages.

TITLE: Headquarters Integrated Office System (HIOS)
CLIENT: Department of Army, Office of Chief of Staff
CONTACT: Mr. Dave Bartlett, 695-4467
CONTRACT NUMBER: MDA-903-86-C-0432
AWARDING AGENCY: Defense Supply Service - Washington
PERIOD OF PERFORMANCE: December 1983 - Present
DESCRIPTION OF THE WORK PERFORMED:
HIOS (Headquarters Integrated Office System) is a prototype Office Automation System established by Chief of Staff of the Army. The system uses off-the-shelf software running on a variety of mini and mainframe computers linked together by two networks. One network links computer processors together for file transfer, the other links up to 2,500 terminals, printers, and plotters together for front end communication. The front end network uses wide band technology with cables tying network nodes together. The printers and terminals are connected to the network nodes. Users are linked to a network of three Vax 11/780 two Perkin Elmer mini-computers, and an IBM 4341, run under VMS, with ADABASE, NATURAL, and an ISSCO graphics package.

Automation Management Consultants Incorporated (AMCI) maintains the Network Management Center. AMCI is providing technical staff to monitor a user "Hotline" for this resource center and respond to system user hardware and software problems. As the on-site staff for this project, AMCI personnel are required to document trouble reports and make required system fixes.

The Resource Center is also supported by an AMCI analyst who serves as the HIOS "System Evaluator". This Senior Analyst analyzes system resources, usage, and system configuration.

TITLE: Facilities Management
CLIENT: Department of Defense, Naval Military Personnel Command
CONTACT: Cdr. A.N. Humphreys, USN Project Director, 694-5510
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: January 1985 - June 1987
DESCRIPTION OF WORK PERFORMED:
Decision Support Systems, NMPC-164, has implemented Information Systems through the use of applications on mini and micro computers. The existing applications operate on individual minicomputers and micro processors. A recently installed Local Area Network allows communication between certain of these devices, the office information systems in particular.

As this system grows, the need for technical support to manage, maintain and operate these computer centers increases. This technical support will encompass the following areas: Project Management; Resource Center; and Technical Operation Support. This technical support will provide efficient operation of the minis, micros and networks.

AMCI is providing support in the following areas.

Project Management. This will provide for the management of ongoing operation and maintenance of the computer centers. The project management will provide all information regarding the configuration of any hardware or software required to perform the functions assigned to each center. AMCI will accomplish the scheduling of both preventive and corrective maintenance, maintenance contract renewal, operations personnel and their training.

Resource Center Operation. AMCI will provide for the manning of a central point of contact for all user requests for assistance. Problem solutions will be provided when technically possible by Center personnel. Center personnel will be sent to the computer centers to attempt to isolate problems. Problems with the LAN in particular, may be relieved by rapid isolation of the failed interfacing device and its subsequent removal.

5 - 14

Technical Operation Support. AMCI will provide for the complete operation of each computing center including the LAN. Each Centers operations support staff will be responsible for scheduling the workload to include prioritization of jobs. Center operations will ensure that the facility is available for use during scheduled hours. The required hardware, supplies inventory, software systems and applications will be the center operations responsibility. The center operations will maintain a log of job initiation, work in progress and job completion. Hardware and software documentation will be maintained by center personnel.

TITLE: OP-13 Customer Support
CLIENT: Naval Military Personnel Command
CONTACT: Ms. M. Moreau, 694-7834
CONTRACT NUMBER: N00600-87-D-0514
AWARDING AGENCY: Navy Regional Contracting Center
PERIOD OF PERFORMANCE: October 1986 - Present
DESCRIPTION OF THE WORK PERFORMED:
AMCI is providing on-site support to the line-managers in the Enlisted and Officer F&nning Division. This support includes answering questions germane to the use of micro-processors to aid in their duties; troubleshooting problems in both off-the-shelf packages and programming languages; debugging user applications; and manning a "hot-line" for quick troubleshooting in daily problem areas.

This on-site technical support also includes main-frame and mini-computers. The staff has supported users in the use of the NIH/DCRT, the JHU Data Center and Argonne Labs, as well as the OP-01/NMPC Computer Complex and the Consolidated Data Center in Cleveland.

TITLE: Information Technical Support
CLIENT: Office of Naval Research
CONTACT: R.W. Clark, ONR Project Director, 692-7963
CONTRACT NUMBER: N00014-80-C-0422
AWARDING AGENCY: Office of Naval Research
PERIOD OF PERFORMANCE: March 1980 - November 1981
DESCRIPTION OF THE WORK PERFORMED:
AMCI was responsible for supporting the ONR Information Technical Support Center. This included the on-site support of various users within ONR, by use of a telephone "hot-line". The AMCI staff members provided technical support to monitor the user problems. This included both problems in hardware and software.

The staff was responsible for assisting the users with: debugging user applications; answering questions about specifics in an off-the-shelf package; answering questions regarding programming languages; and providing answers to user hardware problems.

5.3.3.2 Informational Materials Summaries

This section contains summaries of projects that are relevant to the Informational Materials task. Appendix A contains a list of documents produced by the AMCI staff.

TITLE: HIOS Training Center
CLIENT: U. S. Army, Chief of Staff
CONTACT: Mr. Dave Bartlett, Project Officer, 695-4467
CONTRACT NUMBER: MDA903-86-C-0432
AWARDING AGENCY: Defense Supply Service, Washington
PERIOD OF PERFORMANCE: October 1986 - Present
DESCRIPTION OF THE WORK PERFORMED:
AMCI is responsible for the operation and management of the HIOS Training Center. This includes the training of all military and civilian personnel associated with HIOS. The training consists of two types, formal classroom instruction, with hands-on lab work, and individual tutoring of office personnel.

The AMCI project training instructor has also completed a total re-design of all existing courses associated with the office automation system. This included the design and development of student exercises; student material; and visual-aids. This re-design was necessary to satisfy a change in user needs in a large multi-user network.

AMCI was also responsible for examining new software products and designing customized training courses for the Army personnel. Courses re-designed include Calendar, Electronic Mail and SPREADSHEET. Updated training and instructor manuals will also be produced for all courses taught at the training center.

TITLE: Research Automated Information System (RAIS) Training
CLIENT: Department of Defense: Office of Naval Research (ONR)
CONTACT: R. W. Clark, ONR Project Director, 692-7963
CONTRACT NUMBER: N00014-80-C-0422
AWARDING AGENCY: Office of Naval Research
PERIOD OF PERFORMANCE: March 1980 - November 1981
DESCRIPTION OF THE WORK PERFORMED:
AMCI was responsible for the operation and management of the RAIS Training Center for ONR. This included the instruction of both military and civilian personnel in the software associated with RAIS. The training was handled in two ways: formal classroom instruction with hands-on laboratory work and individual tutoring.

The trainers involved in this project designed and developed all student exercises; student materials; audio-visual aids; instructor guides and user manuals. The staff was also responsible for evaluating new software products, and designing customized courses for RAIS personnel.

TITLE: INGRES Data Base Instruction
CLIENT: Department of Defense: Naval Air Systems Command
CONTACT: R.W. Clark, AIR-713 Project Director, 692-7963
CONTRACT NUMBER: N00019-83-D-A98RA
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: March 1984 - May 1984
DESCRIPTION OF THE WORK PERFORMED:
Since personnel turnover is a major problem in many DOD agencies, NAVAIR decided to have AMCI instruct the users of the RPS system in the use of INGRES. AMCI held various formal training sessions with NAVAIR personnel to instruct them in the various uses of the data base, and specifically how it relates to the RPS process. The classes consisted of a combination of visual aids, lectures and "hands-on" experience.

The instructor was responsible for the design and development of student exercises; student materials; audio-visual aids; instructor manuals and course outlines.

TITLE: Micro Processor Training
CLIENT: Chief of Naval Operations
CONTACT: LCDR P.A. Miller, 694-8016
CONTRACT NUMBER: 11X28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: September 1984 - June 1987
DESCRIPTION OF THE WORK PERFORMED:
AMCI was tasked to provide on-site support in the training of line-managers in the use of micro processors to aid in their duties. Classes were held in introduction to micro-processors, WordStar, dBASE II, and communications protocols. Both formal and informal classes were held.

AMCI was responsible for the production of instructor guides; student material; visual aids; and course outlines. The staff was also responsible for evaluating new software packages to be used in automating office procedures. If these packages were used, AMCI staff members design and developed courses for these packages.

TITLE: Micro Processor Training
CLIENT: United States Marine Corps
CONTACT: CDR A.N. Humphreys, 694-5447
CONTRACT NUMBER: 11X28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: September 1984 - June 1987
DESCRIPTION OF THE WORK PERFORMED:
AMCI was tasked to provide on-site support in the training of line-managers
in the use of micro processors to aid in their duties. AMCI provided
student workbooks, course outlines, audio-visual aids and instructor guides.
Both formal and informal classes were held.

AMCI was also responsible for the evaluation of all new office automation
software. Recommendations were made by the staff as to their usefulness.
Classes were developed for each package that was accepted.

TITLE: Micro Processor Training Seminar
CLIENT: U.S. Secret Service
CONTACT: Ms. Nancy Chicoski, Phone Number 202/566-6940
CONTRACT NUMBER: TSS-84-31
AWARDING AGENCY: Secret Service
PERIOD OF PERFORMANCE: May 1983
DESCRIPTION OF THE WORK PERFORMED:
AMCI was tasked to provide on-site support in the training of line-managers
in the use of micro processors to aid in their duties. Both formal and
informal classes were held, using a combination of lecture and "hands-on"
methods.

Customized training objectives were developed by the staff for use at the
Secret Service. AMCI provided all student materials; workbooks; audio-
visual aids; and instructor guides for each course.

TITLE: FERS Training
CLIENT: Office of Personnel Management, Washington Region
Office of Personnel Management, Chicago Region
CONTACT: Mr. Robert Spycher, 202/632-4286
Ms. Denise Blake, 312/353-3294
CONTRACT NUMBER: BPA-01, BPA-02
PERIOD OF PERFORMANCE: March 1987 - October 1987
DESCRIPTION OF WORK PERFORMED:
AMCI is one of but a few Office of Personnel Management Master Trainers in
the Federal Employees Retirement System. This year AMCI has taught five 5
day Train the Trainers workshops, nine 4 day Decision Advisor courses, and
numerous one day briefings to government employees in the District of
Columbia and the states of Maryland, Virginia, Illinois and Michigan.
AMCI's expertise in every aspect of FERS, CSRS, and Social Security has
caused us to be consulted by numerous other Federal agencies, to include
NASA, GAO, the Postal Service, Forest Service, and USDA. AMCI is also
considered to be one of the foremost authorities on the use and
interpretation of the official OPM Benefit Analysis computer model (Version
1.0). AMCI has frequent interactions with the FERS Implementation Task
Force and the OPM Retirement and Insurance Group.

TITLE: ADP Training Sessions
CLIENT: Office of Personnel Management, Washington
Training and Development Branch
CONTACT: Mr. Robert French, 202/632-0338
CONTRACT NUMBER: BPA-05
PERIOD OF PERFORMANCE: July 1984 - Present
DESCRIPTION OF THE WORK PERFORMED:
AMCI has been tasked to conduct courses in off-the-shelf software packages
to OPM personnel in the Washington D.C. area. These courses include
electronic spreadsheets; data base management systems; integrated office
systems; and introduction to micro-processors.

AMCI has also been tasked to re-design the course material for various
outdated software packages.

The staff has also been asked to evaluate new off-the-shelf packages. AMCI
staff members evaluated each package for completeness, user friendly;
screen/menu driven; and training. Recommendations are made to the OPM staff
as to the usefulness of each software package reviewed. AMCI has been
assigned to design and develop custom training objectives for each package
agreed upon by OPM.

5.3.3.3 Evaluating Resources

This section contains summaries of projects that are relevant to Evaluating Resources.

TITLE: Automation of RAPIDS Project Office
CLIENT: Department of Defense: Naval Military Personnel Command
CONTACT: Cdr. S. Durst, USN Project Director 695-0042
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: October 1985 - June 1987
DESCRIPTION OF THE WORK PERFORMED:
The objective of this project is to automate the Real Time Automated Personnel Identification System (RAPIDS) Project office. To accomplish this task the AMCI staff determined the requirements for information of the project office. This task was met by an examination of the current organizational management structure. The staff also analyzed the function and processes, and identifying the current information flows. This examination was a combination of extensive on-site, staff interviews and analyzing the data collected.

After determining the user needs, AMCI evaluated various hardware and software systems to support RAPIDS. Various systems were researched to determine the best solution for the client. Specific criteria was used to determine the best off-the-shelf packages and the best micro system to support the office.

TITLE: Equal Opportunity Management Information System (EOMIS)
CLIENT: Department of Defense, Naval Military Personnel Command
CONTACT: Cdr. F. Vandover, USN Project Director 691-2007
CONTRACT NUMBE': N00600-82-D-1218
AWARDING AGENCY: Navy Regional Contracting Office (NRCO)
PERIOD OF PERFORMANCE: July 1982 - January 1984
DESCRIPTION OF THE WORK PERFORMED:
EOMIS is an on-line information system for the Equal Opportunity Management Division (NMPC-61). EOMIS measures EO program performance toward meeting the Navy's management objectives, and to evaluate the overall mission effectiveness toward meeting its EO goals. The EOMIS System centralizes all EO related data to facilitate quarterly and annual comparison analysis reporting. It also provide information to aid in long-range planning and trend analysis of program direction.

The first step in the project was system and resource evaluation. This was accomplished using the Life Cycle Management (LCM) system.

The System Decision Paper (SDP) was written to reflect the General user requirements and to compare and evaluate the economic cost/benefit of various configuration alternatives of meeting the EOMIS objectives. AMCI continued with the definition and analysis of user requirements, from on-site interviews with selected EOMIS users and prepared the necessary LCM Documentation, such as Acquisition Plan, Test and Evaluation Plan and a Configuration Management Plan, associated with the Definition Phase. To develop the Functional Description, AMCI developed both a Logical Process Model, for functional requirements, and a Logical Data Model to define the Data Base Requirements. From the two models, the FD and DRD were produced. AMCI, using a structured approach, completed the Design Phase using the Logical Process Model in conjunction with the hardware and design requirements which resulted in a System/Subsystem Specification.

TITLE: Information Decision Support System (IDSS)
CLIENT: Department of Defense: Naval Air Systems Command
CONTACT: R. W. Clark AIR-713 Project Director 692-7963
CONTRACT NUMBER: 62X-43194C-AC248GA3
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: May 1983 - August 1983
DESCRIPTION OF THE WORK PERFORMED:
The IDSS is a NAVAIR project to link Automated Data Processing Equipment and Word Processing Equipment (ADPE/WPE) computer networks in NAVAIR Headquarters. Beginning in the conceptual design phase, AMCI developed the implementation strategy to achieve inter-communication/data transfer between specific Navy offices. Once the conceptual design was approved, AMCI was tasked to evaluate the system and resources needed for IDSS. To begin, AMCI prepared the System Decision Paper (SDP) I to summarize Mission Needs, Project Management Plans and General Functional Requirements for the IDSS.

TITLE: Requirements/Needs Analysis for Naval Telecommunications Command
CLIENT: Department of Defense: Navy Telecommunications Command
CONTACT: Capt. H. Mahorich, USN Project Director 282-0719
CONTRACT NUMBER: N70092-81-D-1408
AWARDING AGENCY: Naval Security Station
PERIOD OF PERFORMANCE: September 1982 - December 1982
DESCRIPTION OF THE WORK PERFORMED:
The objective of this project was to determine the requirements for information of the Plans Directorate and each of its operating divisions. This objective has been met through documentation of those requirements. To

accomplish this objective, an examination of the current organizational management structure was conducted by analyzing the function and processes, and by identifying the current information flows and the resultant requirements of the Directorate.

This examination combined extensive staff interviews and analysis of the data gathered. AMCI conducted on-site interviews with members of the Plans Directorate staff to determine specific information needs. Existing automated data processing systems were evaluated to determine their compatibility with other systems and to ascertain if their present utility can be easily modified to encompass new applications. The manually stored information was listed and evaluated. Additionally, information which is desired but is not currently available was addressed. Following the interviews, AMCI analyzed and summarized the information needs identified and produced a formatted statement of information requirements.

TITLE: Requirements/Needs Analysis for Office of RTD&E, (OP-098)
CLIENT: Department of Defense: Assistant Secretary of the Navy for RDT&E
CONTACT: R. W. Clark, ONR Project Director 692-7963
CONTRACT NUMBER: N0014-80-C-0422
AWARDING AGENCY: Office of Naval Research
PERIOD OF PERFORMANCE: September 1980 - September 1981
DESCRIPTION OF THE WORK PERFORMED:
The need within the RDT&E community for information management is met thru the Research Budget Formulation and FYDP Development (RBFFD) System and the integrated word processing system which supports the production and maintenance of the Program Element Description's (PEDs), Issue Point Paper (ISSUES) and Mini-Management Information Papers (MINI-MIPS).

AMCI was tasked to perform a requirements/needs analysis of the OP-098 organization, to see which functions would benefit from automating/integrating with the existing on-site hardware. The AMCI staff conducted on-site interviews with the staff to determine the current organizational structure. Daily office routines were documented, and informational flows were also captured. The staff also evaluated current automated systems to determine if they could be enhanced to meet changing requirements.

5.3.3.4 Programming Support

This section contains summaries of AMCI's experience in programming support. This includes both micro processor support and NIH user support.

TITLE: ACAT I & II Tracking and Reporting System (ATARS)
CLIENT: Department of Defense : Assistant Secretary of the Navy
CONTACT: R. W. Clark, ONR Project Director 692-7963
CONTRACT NUMBER: N0014-80-C-0422
AWARDING AGENCY: Office of Naval Research
PERIOD OF PERFORMANCE: May 1981 - July 1981
DESCRIPTION OF THE WORK PERFORMED:
ATARS is an automated system for maintaining and reporting on the tracking of program milestones and documentation for Acquisition Category (ACAT I & II) Acquisition Programs. The ATARS active data dictionary contains the definitions of the 186 data elements required by this system. ATARS responds to adhoc queries concerning the status of these data elements and produces periodic reports. The Monthly Summary provides information that identifies action officers for each program and serves as a directory of key personnel involved in each program. The Monthly Status report displays those programs which have decision memo action or milestones due within the next six months. This report displays the dates of planned events versus actual events for milestone and documentation schedules. The Quarterly Acquisition Report provides basic information for all ACAT I & II programs as to program description, funding and milestone scheduling.

TITLE: Advancement, Length and Planning (ADSTAP) Support
CLIENT: Department of Defense: Naval Military Personnel Command
CONTACT: Lcdr. T. Glenn, USN Project Officer, 694-7834
CONTRACT NUMBER: N00600-87-D-0514
AWARDING AGENCY: Navy Regional Contracting Office
PERIOD OF PERFORMANCE: October 1986 - Present
DESCRIPTION OF WORK PERFORMED:
The Advancement, Strength and Planning System (ADSTAP) consists of several subsystems and models which assist the OP-01 manager in all aspects of enlisted manpower, personnel and training management. ADSTAP is intended to provide information on the size and shape of the enlisted force as it is affected by factors such as reenlistments, training, promotions and sea/ shore rotations.

ADSTAP is one of the oldest and most mature ADP support systems used by OP-01/NMPC. It is a dynamic system which has continued to evolve since its inception in the late 1960's. AMCI staff members were part of the team during the early stages of development.

Currently AMCI has been tasked to operate, maintain and modify the various subsystems which make-up ADSTAP. Members of our staff are currently conducting analysis of variables that affect personnel behavior. Specific tasking on ADSTAP includes: Feasibility Analysis; Systems Analysis; Systems Development; Implementation; Evaluation; Operation and Maintenance; Enhancements; and Documentation.

This system operates on the NIH/DCRT and the OP-01/CDC complex.

TITLE: Enlisted Authorization Management (EAM)
CLIENT: Department of Defense: Naval Military Personnel Command
CONTACT: Cdr. A. Humphreys, USN Project Director 694-5145
CONTRACT NUMBER: N00600-83-D-0409
AWARDING AGENCY: Navy Regional Contracting Office
PER'OD OF PERFORMANCE: October 1982 - September 1984
DESCRIPTION OF THE WORK PERFORMED:
AMCI personnel have been involved in the Enlisted Authorization Management System since its inception in 1976. During the analysis and definition stage, staff members reviewed the entire process of recruiting, training, assignment, rotation, promotion and retention. AMCI also reviewed the ADP models and management procedures through which enlisted plans and policies were prepared and executed.

AMCI analysts and programmers designed, developed, tested, maintained and implemented the scarce resource allocation algorithm, which "drives" the ADP portion of Enlisted Authorization Management (EAM). This model was designed utilizing FORTRAN's dynamic storage allocation process. The modular design allows for easier maintenance and computer run efficiency. This system operates on the NIH/DCRT.

TITLE: Billet Authorization Monitoring and Assessment System
CLIENT: Department of Defense: Naval Military Personnel Command
CONTACT: Cdr. A. Humphreys, USN Project Director 694-5510
CONTRACT NUMBER: N00600-83-D-0409
AWARDING AGENCY: Navy Regional Contracting Office
PERIOD OF PERFORMANCE: October 1984 - Present
DESCRIPTION OF THE WORK PERFORMED:
There is a specific need for a systematic method of assessing the billet authorizations across many different levels. During the Manpower Assessment process of the POM cycle, OP-12 and the resource sponsors must identify and resolve problem areas. The manpower analyst must be able to calculate deltas between the Documented Requirements, the FYDP, Mobilization and the billets authorized. This assessment process must be conducted at both the

5 - 24

quantity and quality levels, and must assess the levels of readiness across ship/squadron classes.

AMCI has been tasked to perform he following task areas in support of BAMAS, on th NIH/DCRT and OP-01 computer complexes:

o Control of authorized execution billets. Development of ADP support for a monitoring, evaluation and control system is essential to stabilize demand on the distribution system.

o Analysis, assessment and direction of manpower programmed and budgeted to operating forces. We must have standardized, recurring techniques for ensuring that authorizations are sufficient to maintain acceptable readiness levels.

o Conduct technical evaluation and implement program, if feasible, to back fit strength plan constrained grade structure into execution year authorizations. This initiative addresses the pay grade adjustments (to match strength plar) desired under the original EAM concept.

TITLE: The Contract Research Program (CRP)
CLIENT: Department of Defense: Office of Naval Research (ONR)
CONTACT: R. W. Clark, ONR Project Director 692-7963
CONTRACT NUMBER: N0014-80-C-0422
AWARDING AGENCY: Office of Naval Research
PERIOD OF PERFORMANCE: September 1980 - March 1981
DESCRIPTION OF THE WORK PERFORMED:
The CRP automates the management process required to track and control the formulation of a Navy contract. The process starts with the RDT&E,N Planning and Assessment functions of ONR Codes 100/200/400 and is completed with the production of the Program Managers Financial Report. The CRP system tracks all pertinent information on funds appropriation, proposals, procurements requests, funds commitment, funds obligation and contracts. The CRP system is an interactive menu-driven system implemented on a microprocessor utilizing a full networking Data Base Management System. AMCI began with feasibility studies and continued through to full implementation of the Navy's CRP.

TITLE: Conversion of HARDMAN Information System (HIS)
CLIENT: Department of Defense: Chief of Naval Operations
CONTACT: Lcdr. R. Griffin, USN Project Director, 694-4435
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: January 1986 - July 1987
DESCRIPTION OF WORK PERFORMED:
HARDMAN was a minicomputer-based management information system designed to provide Navy planners and programmers a means of identifying future changes to manpower and training resource requirements caused by emerging weapon systems. The HIS monitors individual weapon system development through the weapon system acquisition process. In addition, the HIS identifies and monitors the quantity and quality of manpower and/or training resources associated with the new weapon systems as well as the existing requirements which will be replaced by the system.

AMCI was tasked to migrate the HARDMAN system from the PERKIN-ELMER. To start, the AMCI staff had to evaluate various hardware and software combinations to determine the best alternative. The results of the evaluation determined that an IBM PC AT Tempest Micro, using dBase III, would be the best solution.

The AMCI staff then designed and developed the necessary software to migrate the system. All data files included for execution were also down-loaded from the PERKIN-ELMER.

TITLE: DSS Budget Tracking
CLIENT: Naval Military Personnel Command
CONTACT: CDR A. Humphreys, Project Director, 694-5510
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: September 1984 - Present
DESCRIPTION OF THE WORK PERFORMED:
The AMCI staff is designing and developing various on-line, query systems to aid DSS in tracking the POM and Budget submits. This system tracks the DSS budget at the system and project level. System level information is extracted from the automated RTS and Budget systems located in OP-16, which were also built by AMCI. The DSS system, then divides the system level dollars into project categories. The project data is then monitored through out the life cycle of the project. Funds are tracked by commitments, obligations and expenditures. The system also produces reports by category and can summarize data to the system level.

TITLE: Enlisted Community Management System
CLIENT: Naval Military Personnel Command
CONTACT: Cdr. A. Humphreys, Project Director, 694-5510
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: May 1985 - June 1986
DESCRIPTION OF THE WORK PERFORMED:
The first task associated with the system was the design and development of a batch system to calculate the necessary inventories, reenlistments, eligibles and accessions from the current and historical Enlisted Master Records. Data for three years of history and the most current month were calculated by both pay grade and los, for specific NEC communities. Both distributable and total data was calculated.

In the second task, AMCI obtained the historical and current billets authorized for the specific NEC communities. This data was also split into distributables.

In the third task, AMCI provided the ECM's with an on-line, menu-driven, user-friendly system, to query data germane to the NEC communities. This system utilizes a DBMS and allows the user to make queries regarding the inventory, reenlistments, eligibles and accessions of specified NEC communities by both length of service and pay grade. Manning percentages can also be calculated.

A users guide and user training was also supplied. Tasks 1 and 2 were executed on the NIH/DCRT, task 3 used a micro processor.

TITLE: Officer En-Route Training System (OERTS)
CLIENT: Naval Military Personnel Command
CONTACT: Cdr. A. Humphreys, Project Director 694-5510
CONTRACT NUMBER: 11X-28602V
AWARDING AGENCY: Department of Energy
PERIOD OF PERFORMANCE: December 1985 - June 1987
DESCRIPTION OF THE WORK PERFORMED:
OERTS determines and validates total officer en route specialized skill training requirements and supports the acquisition of necessary training resources. This centralized system consolidates billet requirements and associated prerequisite training, and has the capability to predict out year officer training requirements for resource planning. This type of officer training management system determines officer training requirements based on current and future billet requirements and not merely on historical data. The system provides a means for more accurately assessing the validity of

the present training requirements and serve as a tool to monitor future training requirements.

AMCI has been tasked to convert this system from a batch support system, to an on-line, user-friendly system. To accomplish this task, various micro systems were evaluated to determine the best solution. Off-the-shelf software packages were also evaluated.

It was determined that the best alternative was an IBM Tempest system, using dBase III.

TITLE: Reenlistment Studies
CLIENT: Department of Defense, Chief of Naval Operations
CONTACT: Mr. Steve Cylke, Project Director, 694-4822
CONTRACT NUMBER: N00600-82-D-3543
AWARDING AGENCY: Navy Regional Contracting Center
PERIOD OF PERFORMANCE: July 1985 - October 1986
DESCRIPTION OF THE WORK PERFORMED:
In recent years, the outputs of FAST have been used as the basis for performing economic analysis in regard to major issues germane to the Enlisted Force. Since the latter has become a more pressing issue due to policy changes that may occur, there is a need to analyze the outputs of the FAST model, from an economic standpoint.

One of the major areas to be explored is the analysis of the reenlistment rates that are produced by FAST. In order to accomplish this task, AMCI will obtain the projected eligibility and reenlistment data from the latest official FAST. For each rating that FAST projects, a reenlistment rate by LOS cell will be calculated.

These ratings will then be compared against the latest retention report produced by the Management Information Systems Division (NMPC-165), as part of the Manpower, Personnel and Training Information Systems (MAPTIS) system. A document containing the results of the reenlistment analysis will be prepared by the contractor.

AMCI also designed, developed and implemented an on-line, user-friendly retention management information system. The system contains information already collected by Career Programs Branch (OP-136) line-managers and will "aid" them in answering questions germane to retention.

The system is implemented on the MRI-8000 system, resident in OP-136, and will utilize dBASE II. It contains a data entry and edit feature, and a

reporting/display capability. AMCI also supplied user training, and produce a Users' Manual.

TITLE: Requisition Tracking System (RTS)
CLIENT: Department of Defense: Naval Military Personnel Command
CONTACT: Project Director J. R. Simborski, NMPC-1C2 694-1108
CONTRACT NUMBER: N00171-81-D-9259
AWARDING AGENCY: Navy Military Personnel Command
PERIOD OF PERFORMANCE: December 1982 - June 1984
DESCRIPTION OF THE WORK PERFORMED:
AMCI. in support of the ADP Resource Management Office, designed, developed and implemented the RTS system to track procurement requisitions during the budget execution year. The system was developed and implemented on micro-computers that not only satisfy the design objectives, but also greatly reduce and simplify the overall management procurement actions resulting in an automated office environment.

The system is a dBASE II application, which provides the Navy Military Personnel Command (NMPC) with an efficient method of matching projected spending plans to current expenditures. NMPC project managers (PM) develop an initial POM, Budget and Spending Plan for their respective programs. The approved Spending Plan is then loaded into the database, and as the PM writes requisitions for procurement actions, the plan is matched to the requisition to monitor funding status. The system also maintains the status of the requisitions through the procurement process and updates the data base as they become obligated, or committed, comparing the costs to the original plans.

The system was developed for micro computers and is completely menu driven and modular in structure. The user is asked to select a function from an initial control menu to execute the basic functions for update, backup, query and run standard reports. Once the user chooses an option, the program reveals a secondary menu which further defines the function for user selection. For instance, when a user selects run standard reports, they then choose one of 12 standard report formats.

AMCI has developed several additional smaller systems for this office. One system focuses on budgeting, another handles travel accounting and still another works as a correspondence tickler file.

TITLE: Training Programming System (TPS)
CLIENT: Department of Defense: Naval Military Personnel Command
CONTACT: Lt. L. Babuchiwski, USN Project Director 694-5145
CONTRACT NUMBER: N00600-86-D-0315
AWARDING AGENCY: Navy Regional Contracting Office
PERIOD OF PERFORMANCE: January 1986 - Present
DESCRIPTION OF THE WORK PERFORMED:

The Training Programming System was developed as a tool to assist Navy decision makers during the Program Objective Memorandum (POM) assessment process. To achieve these ends, the following models have been developed:

o The Training Resource Model (TRM) was developed to assist Navy decision makers in the analysis of training programming alternatives. TRM provides the training resources required for a given student input for recruit, apprentice, and "A", "C" and "F" school plans. The input is based on a user specified programming base, such as the POM or the Five Year Defense Program (FYDP).

o The Skill Accession Training (SKAT) Model provides two "A" School Plans; the first is an end strength constrained plan, the second is an accession constrained plan. SKAT will produce an "A" School Plan for all USN, TAR, and SELRES populations. The Navy decision maker can select the POM, FYDP, or another base for the SKAT run.

o The Training Requirements Identification Data (TRID) system is a series of documents used to identify specific training agent resource requirements for Sponsor consideration during the POM. The data base originates within CNET and is transferred to the OP-12 WANG computer ia telecommunications. OP-12 analysts then input other TRIDs. TRID software allows the user to sort and display the data base in a variety of ways during the planning phase of the POM. After the POM locks, OP-12 analysts update the data base by inputting what resources have been programmed against each TRID.

o The Resource Information Tracking System (RITS) is an interactive system developed to provide Navy analysts an automated capability to integrate all OP-01 programs and resources into a single data file, thus allowing a "Total Resource" approach to the Training Programming System. RITS aids the Navy Decision maker in developing the OP-01 Sponsor Program Proposal (SPF) by electronically: automating the collection of data; manipulating the data; and translating the data.

5 - 30

o The Military Manpower Training Report (MMTR) describes student training loads and service workloads by training category. This system automates the production of the report for OP-01. The MMTR model also assists OP-12 by performing simple comparisons on current and historical data.

o The automated Enlisted Programmed Authorizations (EPA) and the Officer Programmed Authorizations (OPA) system is an accurate statement of Enlisted and Officer authorizations for the current and budget year and Programmed authorizations for Five Year Defense Plan (FYDP) years. The EPA/OPA documents are based on authorizations in the Navy Manpower Data Accounting System (NMDAS) adjusted to match the FYDP.

In support of TPS, AMCI has been tasked to perform work in the following areas:

o Develop detailed long-range plans, perform specialized studies and analysis in such areas as conversion planning, standardization of data bases, interfaces to other computers and networks, etc.

o Design, develop, implement, test and document new ADP software systems.

o Modify existing program and systems.

o Study, evaluate and develop requirements for new and/or upgraded ADP hardware and software.

o Prepare standards, documentation, and procedures IAW DOD Standards.

o Develop plans for system design, implementation and integration.

o Develop and implement large-scale data bases.

o Install and maintain operating systems program products.

o Provide training to the user for new development efforts.

TITLE: Managing-to-Payroll
CLIENT: Department of Defense, Naval Military Personnel Command
CONTACT: LCDR D. Parker, Project Director, 694-5145
CONTRACT NUMBER: N00600-86-D-0296
AWARDING AGENCY: Naval Regional Contracting Center
PERIOD OF PERFORMANCE April 1987 - September 1987
DESCRIPTION OF WORK PERFORMED:
AMCI was tasked to aid NMPC-16 with the third phase of Managing-to-Payroll, the Personnel Budget Execution. This phase gives the line manager the authority to control payroll expenditures.

AMCI was tasked to perform three tasks in support of Managing-to-Payroll. The first task included building a base line data base for the beginning of the fiscal year. This base would then be used to produce an initial projection of salaries for the 26 pay periods.

The second task involved posting transactions against the data base to update personnel actions such as promotions, in-grade increases and merits.

The final task is to produce a series of reports that show the: Annual Operating Plan; the Budget Execution Plan; and the Projection Plan.

APPENDIX A

DOCUMENTATION

APPENDIX A - AMCI DOCUMENTS

The following is a list of products developed by the AMCI staff. The associated contract and Task Reference are also cited.

8075   N00600-82-D-3543
        Chief of Naval Operations

Economic Analysis Support

o   Transition Matrix Probabilities Users Guide
o   Nuclear Officer Force Users Guide
o   Inter-Rating Lateral Movement, 7/18/86
o   Inter-Rating Lateral Transfers, 12/11/86

Enhancements to BREFT and ROGER

o   BREFT Users Guide, 10/31/86
o   BREFT Programmers Guide
o   ROGER Users Guide, 7/11/86
o   ROGER Programmers Guide, 7/11/86

FASM Updates

o   NEC FASM Analysis
o   NEC FASM Users Guide

Reenlistment Studies

o   Fast vs Actual Reenlistments
o   Retention "Query" Users Guide
o   Retention "Query" Programmers Guide

8090   N00600-83-D-0409
        Naval Military Personnel Command

Billet Authorization Monitoring and Assessment System

o   System Decision Paper for BAMAS
o   Data Requirements for the Trend Analysis System

A - 1

- o Test Plan for the Trend Analysis System
- o Program Maintenance Manual for Trend Analysis System
- o Computer Operations Manual for the Trend Analysis System
- o Users Guide for the Trend Analysis System
- o Feasibility Study - Billet Quality Assessment System
- o Demonstration Manual - Billet Quality Assessment System
- o LOOMIS Demonstration and Users Guide

Enlisted Authorization Management

- o DMP-X Users Guide
- o EAM "What-if" Users Guide

Management Support for Reserve Manpower

- o SELRES Query Users Guide

Reserve Billet Instability Studies

- o Reserve Billet Instability Feasibility Study

8132   62X-43194C-AC248GA3
(8129) Naval Air Systems Command

Information Decision Support System

- o System Decision Paper for IDSS

8146   BK-83-1123
U.S. Army Chief of Staff

Headquarters Integrated Office System

- o Standard Operating Procedures for HIOS
- o HIOS Users Manual
- o Systems Administration Guide for HIOS
- o HIOS Policies and Procedures

A - 2

8174   53-3148-4-2004
        U.S. Department of Agriculture - FAS

        ## Foreign Agriculture Service

        o   Meat Import Reconciliation System (MIRS), 11/6/86
        o   Logistics Management System - System Specifications, 4/14/85
        o   Logistics Management Service - Users Guide, 7/86

8201   11X-28602V
        Chief of Naval Operations

        ## Enlisted Community Management System

        o   ECM Query Users Guide

        ## Officer En-Route Training System (OERTS)

        o   OERTS Users Guide
        o   OERTS Programmers Guide

8201   11X-28602V
        Decision Support System - Naval Military Personnel Command

        ## Office Automation Procedures

        o   DSS Pom/Budget Tracking System Users Guide
        o   DSS Travel Tracking Users Guide
        o   DSS Training Tracking Users Guide
        o   DSS Time Sharing Tracking Users Guide

8201   11X-28602V
        Naval Military Personnel Command

        ## Facilities Management

        o   Inventory Control System Users Guide
        o   Trouble Desk Log
        o   Standard Operating Procedures for HARRIS 800
        o   HARRIS 800 Users Guide

NMPC-083

o Determination of Information Requirements for the RAPIDS Project Office, 1/12/87

8214   N00600-85-D-2967
Chief of Naval Operations

Billet Cost Model Systems

o Analysis of the Construction of a Reserve Billet Cost Model, 4/17/87
o Billet Cost Model Methods, Nov. 1987
o Bonus Reenlistment Force Transition Model (B/REFT) - System Documentation, 12/5/86
o Comparison of Methods for Retirement Cost Calculation in Billet Cost Model, 12/15/87
c Critique of Billet Cost Model
o Economic Analysis of Billet Cost Model, 4/1/86
o Economic Analysis of Manpower
o Enlisted Billet Cost Model, 9/30/87
o Enlisted Billet Cost Model - PC Users Guide, 9/30/87
o Technical Critique of Bonus Reenlistment Force Transition Model, 12/5/86
o PC-BCM - Users Manual, 1/30/88
o Evaluation of the PC-BCM Output, 2/29/88

8219   N00600-86-D-0315
Naval Military Personnel Command

Training Programming System

o MITS System Decision Paper
o MPTPBS Security Program Users Guide
o MPTPBS Appropriation Summary Users Guide, (D02), 10/27/86
o MPTPBS Homing Program Users Guide
o MPTPBS Data Extract Program - Users Guide, 12/22/86
o MPTPBS Growth Comparison (%) Program, Users Guide, 12/22/86
o MPTPBS Data Requirements Document, 10/27/87
o RAD Data Base Creation - Operator's Guide, 6/5/87

8249   AC5VX703
U.S. Arms Control and Disarmament

Computer Application Conversion

o Spent Fuel Model Users Guide
o IMSL System Design

8267   SA 83-3352
Department of Health and Human Services

OIG Budget System

o OIG/HHS Budget System Users Guide

8280   N00600-87-D-0514
Chief of Naval Operations

ADSTAP

o OP-135 Model Analysis, 9/87
o Auto-A, 9/16/87
o SKAT Users Guide

8290   N00600-86-D-0296
Navy Military Personnel Command

Reserve Issues

o Selected Reserves Billet Changes, Database Query System, 10/85 -
   2/86 (RJ)

8360   N66001-87-R-0161
Navy Personnel R&D Center

MANPOWER Analysis

o Examining Manpower Investment Cost Effects on Either/Or Billets,
   10/23/87

8375 OPM-87-9020
      Office of Personnel Management

      FERS Training

        o FERS Software Report, 6/87

8379 N00600-87-D-2796
      Navy Military Personnel Command

      Navy Officer Modelling System

        o NOPPS - Plan of Action & Milestones, 4/6/88

8393 N66001-87-D-0284
      Navy Personnel R&D Center

      Officer Distribution Projection System

        o Matrix of Skill Fills, 10/27/87
        o Conceptual Design for Handling TPPH Within ODPROJ, 11/16/87
        o Student Handling Considerations, 11/16/87

8414 OPM-87-2138
      Office of Personnel Management

      Training Guides

        o Symphony Student Workbook, 10/19/87 (J.W.)

8139 N00019-83-D-A98RA
      Naval Air Systems Command

      Resource Planning System

        o RPS Users Guide

8032   N00171-81-D-9259
        Naval Military Personnel Command

        Requisition Tracking System

        o RTS Users Guide
        o RTS Programmers Guide
        o Travel Funds Users Guide
        o NACMIS Users Guide

8011   N00171-81-M-4176
        Chief of Naval Operations

        Navy Manpower Management Tools

        o Enlisted Grade Guide Users Manual

8062   N70092-81-D-1408
        Naval Telecommunications Command

        Requirements Analysis for NAVTELCOM

        o Information Requirements Document

8082   RGI-AFZK-DI-P-54
        U.S. Army Forces Command

        Continental Army Management Information System

        o CAMIS Information Requirements Document
        o Functional Description for CAMIS