

AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) RATING 1 PAGE OF PAGES 39

2. CONTRACT (Proc. Inst. Ident.) NO. **HQ0006-97-C-0001** 3. EFFECTIVE DATE **October 18, 1996** 4. SOLICITATION/PURCHASE REQUEST/PROJECT NO. **5015/PO16**

5. ISSUED BY **Ballistic Missile Defense Organization** CODE **HQ0006** 6. ADMINISTERED BY (if other than Item 5) CODE **S2404A**
1725 Jefferson Davis Highway, BMDO/DCT
Suite 809
Arlington, VA 22202
ATTN: Stephen M. Moss (703) 604-4307
DCMC Baltimore
ATTN: Chesapeake
200 Towsontown Blvd., West
Towson, MD 21204-5299

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code)
Cost Management Systems, Inc.
301 Maple Ave, West Tower Building
Vienna, VA 22180

8. DELIVERY FOB ORIGIN OTHER (See below)

9. DISCOUNT FOR PROMPT PAYMENT
N/A

10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN:
 ITEM
See Section G-5

11. SHIP TO/MARK FOR CODE **See Section E-2** FACILITY CODE **See Section G-5**

12. PAYMENT WILL BE MADE BY CODE **SC1030**
DFAS-Columbus Center
DFAS-CO/Chesapeake Div., P.O. ox 182264
Columbus, OH 43218-2264

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:
 10 U.S.C 2304() 41 U.S.C. 253(c)()

14. ACCOUNTING AND APPROPRIATION DATA
See Section G-9

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
0001	AIS Technical Support	1	LOT	N/A	\$3,413,473
0002	Data and Reports	1	LOT	N/A	NSP

15G. TOTAL AMOUNT OF CONTRACT **\$3,413,473**

16. TABLE OF CONTENTS

SEC.	DESCRIPTION	PAGE(S)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE			PART II - CONTRACT CLAUSES		
✓ A	SOLICITATION/CONTRACT FORM	1	✓ I	CONTRACT CLAUSES	28-38
✓ B	SUPPLIES OR SERVICES AND PRICES/COSTS	2-5	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS		
✓ C	DESCRIPTION/SPECS./WORK STATEMENT	6-7	✓ J	LIST OF ATTACHMENTS	39
✓ D	PACKAGING AND MARKING	8	PART IV - REPRESENTATIONS AND INSTRUCTIONS		
✓ E	INSPECTION AND ACCEPTANCE	9	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
✓ F	DELIVERIES OR PERFORMANCE	10	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
✓ G	CONTRACT ADMINISTRATION DATA	11-13	M	EVALUATION FACTORS FOR AWARD	
✓ H	SPECIAL CONTRACT REQUIREMENTS	14-27			

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 2 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18. AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER (Type or print)
Thomas A. Anderson
Director of Contracts and Pricing

20A. NAME OF CONTRACTING OFFICER
STEPHEN M. MOSS
Contracting Officer

19B. NAME OF CONTRACTOR BY **Thomas A. Anderson**
 (Signature of person authorized to sign)

19C. DATE SIGNED **10-18-96**

20B. UNITED STATES OF AMERICA BY **Stephen M. Moss**
 (Signature of Contracting Officer)

20C. DATE SIGNED **OCT 21 1996**

000001

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B-1 LINE ITEM DESCRIPTION

In accordance with this contract, the Contractor shall furnish all materials, labor, equipment and facilities, except as specified herein to be furnished by the Government, and shall do all that which is necessary or incidental to the satisfactory and timely performance of the following:

a. BASE PERIOD

**CONTRACT
LINE ITEM
NO. (CLIN) SUPPLIES/SERVICES QTY UNIT AMOUNT**

0001 Automated Information System 1 LOT
(AIS) Support Services in
accordance with Section C-1
and the Statement of Work
(SOW) (Attachment 1).

Estimated Cost: \$ [REDACTED]
Fixed Fee: \$ [REDACTED]
Estimated Cost-Plus-Fixed-Fee: \$3,413,473

0002 Data and reports for CLIN 1 LOT Not
0001 in accordance with the Separately
Contract Data Requirements Priced
Lists, DD Form 1423-1
(Exhibit A).

b. **OPTION 1**

The Government may exercise the option for the effort set forth below by the Contracting Officer's issuance of a modification exercising such right in accordance with Special Contract Requirement H-7, "FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT."

CONTRACT

LINE ITEM

NO. (CLIN) SUPPLIES/SERVICES

QTY UNIT

AMOUNT

0101 Automated Information System (AIS) Support Services in accordance with Section C-1 and the SOW (Attachment 1). 1 LOT

Estimated Cost:

Fixed Fee:

Estimated Cost-Plus-Fixed-Fee:

\$

\$

\$1,786,137

0102 Data and reports for CLIN 0101 in accordance with the Contract Data Requirements Lists, DD Form 1423-1 (Exhibit A). 1 LOT Not Separately Priced

c. OPTION 2

The Government may exercise the option for the effort set forth below by the Contracting Officer's issuance of a modification exercising such right in accordance with Special Contract Requirement H-7, "FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT."

**CONTRACT
LINE ITEM**

NO. (CLIN) SUPPLIES/SERVICES QTY UNIT AMOUNT

0201 Automated Information System 1 LOT
(AIS) Support Services in
accordance with Section C-1
and the SOW (Attachment 1).

Estimated Cost: \$ [REDACTED]
Fixed Fee: \$ [REDACTED]
Estimated Cost-Plus-Fixed-Fee: \$1,814,258

0202 Data and reports for CLIN 1 LOT Not
0201 in accordance with the Separately
Contract Data Requirements Priced
Lists, DD Form 1423-1
(Exhibit A).

B-2 ESTIMATED COST AND FIXED FEE

The total estimated cost and fixed fee of this contract, including all options that have been exercised by the Government, are:

Estimated Cost:	\$	[REDACTED]
Fixed Fee:	\$	[REDACTED]
Estimated Cost-Plus-Fixed-Fee:	\$	<u>7,013,868</u>

B-3 CONTRACT TYPE

This is a Cost-Plus-Fixed-Fee, completion-type contract with a two-year base period and two (2) one-year options as specified in paragraph B-1.

B-4 PAYMENT OF FIXED FEE (COMPLETION CLINs)

The Government will make payments to the Contractor when requested as work progresses, in accordance with FAR 52.216-7, "Allowable Cost and Payment." The Contractor shall invoice the fee separately and submit such invoices to the BMDO COTR for verification of the percentage of work performed for the billing period. Each invoice for fee shall contain a statement by the Contractor as to the cumulative percentage of work performed and the cumulative percentage of fee invoiced. Fee shall be payable, subject to other provisions of FAR 52.216-8, "Fixed Fee," in amounts commensurate with the percentage of work performed. In no case shall the cumulative amount of the fee invoiced, when expressed as a percentage of the total fixed fee for the applicable CLIN, exceed the cumulative percentage of work performed for that CLIN (as verified by the BMDO COTR) at the end of the billing period.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C-1 SCOPE OF WORK

CLINs 0001 and 0002, and Option CLINs 0101, 0102, 0201 and 0202 - The Contractor shall perform the work specified in the SOW, and other Attachments and Exhibits in Section J of this contract. The Contractor shall provide any material, equipment, and facilities incidental to performance.

C-2 REPORTS AND OTHER DELIVERABLES

a. The Contractor shall submit all reports and other deliverables in accordance with the delivery schedule set forth in Section F, and the attached CDRIs, DD Form 1423-1.

b. Reports delivered by the Contractor in the performance of the contract shall be considered "Technical Data," as defined in DFARS 252.227-7013, "Rights in Technical Data -- Noncommercial Items."

c. Bulky reports shall be mailed by other than first-class mail unless the urgency of submission requires use of first-class mail. In this situation, one copy shall be mailed first-class and the remaining copies forwarded by less than first-class.

d. The following information shall be provided with all reports. However, if the report incorporates a BMDO logo or letterhead, this information will be provided on a severable cover sheet and not on the same sheet of paper as the BMDO logo or letterhead.

CONTRACT NUMBER

NAME OF CONTRACTOR

CONTRACT EXPIRATION DATE
AND TOTAL DOLLAR VALUE

CONTRACTOR'S PROJECT
DIRECTOR AND PHONE NUMBER

SHORT TITLE OF CONTRACT WORK

GOVERNMENT SPONSOR

e. All reports generated under this contract will contain the following disclaimer statement on the cover page:

"The views, opinions, and findings contained in this report are those of the author(s) and should not be construed as an official Department of Defense position, policy, or decision, unless so designated by other official documentation."

f. Except as provided by the CDRLs, DD Form 1423-1, Exhibit A, and the Contract Security Classification Specification, DD Form 254, the distribution of any contract report in any stage of development or completion is prohibited without the approval of the Contracting Officer.

C-3 SECURITY OF BMDO SPACES AND INFORMATION SYSTEMS

To maintain the security of the BMDO spaces and information systems, the Contractor shall notify the COTR whenever a prime or subcontractor employee included on the current Visit Authorization Request/Letter discontinues support to this contract. This requirement shall apply to both Contractor and employee initiated termination of services and to temporary suspension of services longer than four weeks. Upon notification, the COTR will ensure that the Technical Area Security Officer (TASO)/Office Security Manager (OSM) take timely action to: (1) remove the employee from the current Visit Authorization Request/Letter; (2) cancel the BMDO badge, keycard and Pentagon Pass issued pursuant to the Visit Authorization Request/Letter; and, (3) terminate the BMDO LAN account/access privileges. The Contractor shall identify the reason for and date of termination or expected period of suspension, and submit the notification to the COTR within five working days prior to service discontinuation. For unplanned termination or suspension of services exceeding four weeks, notification shall be made within one working day after termination/suspension action.

SECTION D - PACKAGING AND MARKING

D-1 PACKAGING AND MARKING OF TECHNICAL DATA

CLINs 0001 and 0002, and Option CLINs 0101, 0102, 0201 and 0202 - The data to be delivered hereunder shall be preserved, packaged, packed, and marked in accordance with the best commercial practices to ensure safe delivery at destination.

SECTION E - INSPECTION AND ACCEPTANCE

E-1 CLAUSES INCORPORATED BY REFERENCE

a. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
52.246-5	Inspection of Services - Cost-Reimbursement	APR 1984

**b. DEPARTMENT OF DEFENSE FEDERAL ACQUISITION REGULATION
SUPPLEMENT (48 CFR CHAPTER 2)**

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
252.246-7000	Material Inspection and Receiving Report	DEC 1991

E-2 INSPECTION AND ACCEPTANCE

Final acceptance of CLINs 0001, 0002, 0101, 0102, 0201 and 0202 will be based on submittal and approval of the invoice marked "Final Invoice". Final inspection and acceptance of the work called for herein shall be by the COTR at:

Office of the Secretary of Defense
Ballistic Missile Defense Organization
1725 Jefferson Davis Highway, BMDO/POI
Crystal Square 2, Room 12072
Arlington, VA 22202

SECTION F - DELIVERIES OR PERFORMANCE

F-1 CLAUSE INCORPORATED BY REFERENCE

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
52.242-15	Stop-Work Order Alternate I	AUG 1989 APR 1984

F-2 DELIVERY SCHEDULE/PERIOD OF PERFORMANCE

a. CLINS 0001 and 0002 - The Contractor shall accomplish the work required as set forth in the SOW during the twenty-four month period after the effective date of the contract. The technical and administrative/financial data to be furnished hereunder shall be delivered in accordance with Exhibit A, CDRL, DD Form 1423.

b. Option CLINS 0101 and 0102 - The Contractor shall perform the work required as set forth in the SOW during the twelve-month period commencing from the effective date of Option 1. The technical and administrative/financial data to be furnished hereunder shall be delivered in accordance with Exhibit A, CDRL, DD Form 1423.

d. Option CLINS 0201 and 0202 - The Contractor shall accomplish the work required as set forth in the SOW during the twelve-month period commencing from the effective date of Option 2. The technical and administrative/financial data to be furnished hereunder shall be delivered in accordance with Exhibit A, CDRL, DD Form 1423.

SECTION G - CONTRACT ADMINISTRATION DATA

G-1 CONTRACT ADMINISTRATION

Administration of this contract will be performed by the cognizant office indicated on the cover page of the award document. No changes, deviations, or waivers shall be effective without a modification of the contract executed by the Contracting Officer or the designated Administrative Contracting Officer.

G-2 IDENTIFICATION OF CORRESPONDENCE

All correspondence and data submitted by the Contractor under this contract shall reference the contract number.

G-3 TAXPAYER IDENTIFICATION NUMBER (TIN)

The Contractor's TIN is 54-1383490. This number shall appear in the space identifying the Contractor in the appropriate blocks of contract forms and billing submittals.

G-4 PATENT INFORMATION

Patent information in accordance with FAR 52.227-11, "Patent Rights -- Retention by the Contractor (Short Form)," shall be forwarded through the Procuring Contracting Officer to:

Office of the Secretary of Defense
Ballistic Missile Defense Organization
7100 Defense Pentagon, BMDO/DGC
Washington, D.C. 20301-7100

G-5 SUBMISSION OF VOUCHERS

a. The Contractor's vouchers for costs incurred shall be submitted in quadruplicate to the cognizant Defense Contract Audit Agency office for review and provisional approval. One copy of each voucher shall be provided to the Contracting Officer.

b. Final payment shall be made in accordance with FAR 52.216-7, "Allowable Cost and Payment." The Contractor shall establish compliance with all terms of the contract by submitting a signed copy of the Material Inspection and Receiving Report (DD Form 250) or Letter of Transmittal, as applicable.

G-6 REMITTANCE ADDRESS

Payment of invoices furnished by the Contractor shall be sent to the following address:

Cost Management Systems c/o
Patriot National Bank
Attn. GCA Department
2071 Chain Bridge Road, 6th Floor
Vienna, VA 22182

The following information is provided pursuant to FAR 52.232-28, "Electronic Funds Transfer Payment Methods," (if applicable):

G-7 PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS

This contract may be funded by multiple accounting classifications. The Contractor shall segregate costs and submit vouchers as required by provisions H-1 and G-5. The Defense Finance and Accounting Service shall make payments from those Accounting Classification Reporting Numbers (ACRN) assigned to each CLIN.

G-8 ALLOTMENT OF FUNDS


Pursuant to FAR 52.232-22, "Limitation of Funds," the total amount of funds presently available for payment and allotted to

this contract (which covers all items, including fee payable),
through the estimated funds exhaustion date is as follows:

CLINs 0001 and 0002	\$400,000
Estimated funds exhaustion date	January 15, 1997

G-9 ACCOUNTING AND APPROPRIATION DATA

CLIN 0001

ACRN: AA
ACCT CLASS: 
AMOUNT: \$400,000 (INCREASE)
TOTAL ACRN: \$400,000

(b)(2)

SECTION H - SPECIAL CONTRACT REQUIREMENTS

TABLE OF CONTENTS

<u>Clause</u>	<u>Title</u>	<u>Page</u>
H-1	SEGREGATION OF COSTS	15
H-2	TRAVEL AND TRAVEL COSTS	15
H-3	CONTRACTOR ACCESS TO PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) DATA	15
H-4	PUBLIC RELEASE OF INFORMATION	20
H-5	ACQUISITION OF FACILITIES	21
H-6	ORGANIZATIONAL CONFLICT OF INTEREST (OCI)	22
H-7	FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 1989)	25
H-8	KEY PERSONNEL	25
H-9	ENABLING CLAUSE FOR BMD INTERFACE SUPPORT	26
H-10	BMDO VISIT AUTHORIZATION PROCEDURES	27

H-1 SEGREGATION OF COSTS

The Contractor agrees to segregate and bill costs incurred under this contract by CLIN. Vouchers shall contain actual hours and cost by cost element (cost elements shall be at the lowest level of identification/discrimination consistent with the Contractor's cost accounting system) expended by CLIN and overall cumulative summaries of all work vouchered to date.

H-2 TRAVEL AND TRAVEL COSTS

All travel must be approved in advance in writing by the Contracting Officer's Technical Representative using BMDO Form 110 (APR 94).

H-3 CONTRACTOR ACCESS TO PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) DATA (13 APR 92)

a. In order to perform the requirements of this contract, the Contractor shall be required to receive, review, analyze, and prepare (hereinafter shall be referred to as "process") reports/data which contain Government Planning, Programming, and Budgeting System (PPBS) data. However, the BMDO is authorized to release Ballistic Missile Defense (BMD)-related PPBS data to the Contractor only after:

(1) The BMDO obtains written authorization from the Office of the Secretary of Defense (OSD) to release the data to the Contractor; and

(2) Compliance with the provisions of this clause have been met.

b. The Prime Contractor shall provide the following information to the Contracting Officer within fifteen (15) days from the date of this contract:

(1) Affiliates (parent company, subsidiaries, joint ventures, and partnerships, etc.):

- (a) Company's name and complete address;
- (b) Affiliation; and
- (c) Nature of the company's business.

(2) Agents, consultants, and subcontractors related to this contract:

- (a) Company's name and complete address;
- (b) Relationship; and
- (c) Nature of the company's business.

The Contracting Officer shall be notified immediately in writing in the event of any changes in b.(1) and (2) above throughout the lifetime of this contract. With regard to competing on future BMDO procurements, the Contractor must abide by the organizational conflict of interest provisions of this contract.

c. BMD-related PPBS data is defined as: Current or future PPBS data regarding any activity relating to the BMD Program or any of its projects regardless of the funding source or date of the document. Planning data defines the national military strategy; integrates the military forces necessary to accomplish that strategy; prioritizes the resources for effectively accomplishing the mission; and provides decision options. Programming data reflect the systematic analysis of missions and objectives to be achieved, alternative methods, and effective allocation of limited resources. Budgeting data are detailed financial estimates of the BMD Program or any of its related projects.

d. The following list of documents (which is exemplary but not all inclusive) obtained from Department of Defense (DoD) Directive 7045.14 are considered PPBS documents:

- (1) **PLANNING**
 - Defense Planning Guidance
- (2) **PROGRAMMING**
 - (a) Fiscal Guidance (when separate from Defense Planning Guidance)
 - (b) Program Objective Memoranda (POM)
 - (c) POM Defense Program (formerly FYDP) documents (POM Defense Program, Procurement & RDT&E Annexes)
 - (d) Program Review Proposals
 - (e) Issue Papers (e.g., Major Issue Papers, Tier II Issue Papers, Cover Briefs)
 - (f) Proposed Military Department Program Reductions (or Program Offsets)
 - (g) Tentative Issue Decision Memoranda
 - (h) Program Decision Memoranda

(3) **BUDGETING**

- (a) Defense Program (formerly FYDP) documents for September Budget Estimate Submission (BES) & President's BES including Procurement (P-1), RDT&E (R-1), & Construction (C-1) Program Annexes
- (b) Classified P-1, R-1, & C-1 Program Annexes
- (c) Program Budget Decisions/Defense Management Review Decisions
- (d) Reports Generated by the Automated Budget Review System (BRS)
- (e) DD Form 1414 Base for Reprogramming
- (f) DD Form 1416 Report of Programs
- (g) Contract Award Reports
- (h) Congressional Data Sheets
- (i) Congressional Descriptive Summary

e. If a document(s) required by an OSD/BMDO PPBS approved Contractor contains:

(1) Only BMD-related PPBS information, the Contractor may be granted access to the entire document.

(2) Other Government agency information, the Contractor ONLY may be granted access to BMD-related PPBS data extracted or derived from the document as defined in paragraph c. above.

f. The Contractor shall be responsible for informing its personnel (hereinafter including persons employed by the Contractor as an agent, consultant, or subcontractor) of the provisions of this clause and providing original certifications of BMDO (PPBS Non-disclosure Agreements [SDIO Form 99] Attachment 5) to the Contracting Officer within fifteen (15) days after the effective date of this contract. An agreement shall be obtained from each of its employees involved in the performance of this contract who require access to such data. Each individual shall be required to agree to:

(1) Read and comply with the applicable provisions of this clause.

(2) Ensure BMD-related PPBS data entrusted to them ONLY will be used in accordance with applicable DoD and BMDO governing regulations, for the purpose for which it was provided, and within the scope of the SOW.

(3) Not divulge BMD-related PPBS data (obtained directly or indirectly in the performance of this contract unless directed by the Contracting Officer) to any individual, except to Government personnel whom they know to have a need-to-know and non-Government person(s) whom they know to have BMDO authorization. Verification of Contractor personnel authorized access to BMD-related PPBS data can be obtained from the Contracting Officer. Even though data becomes part of the public domain, Contractor personnel are bound by the provisions of this clause not to confirm or deny questions regarding BMD-related PPBS data. Inquiries by unauthorized persons should be referred to the COTR or the Contracting Officer.

(4) Not transport (by any medium), maintain, or process BMD-related PPBS data outside a Government facility unless the removal or preparation of such data at the facility is accomplished in accordance with the company's facility plan approved by the BMDO. (Verification of BMDO PPBS-approved Contractor facilities and individuals can be obtained from the Contracting Officer.)

(5) Not to accept any portion of any document which is described in paragraph d. above, unless the portion of the document contains only BMD-related PPBS data.

(6) Notify the Contracting Officer promptly if any non-Government person(s) or company(s) requests access to BMD-related PPBS data.

g. The non-disclosure agreements shall be reviewed and approval granted by the Contracting Officer based on the individual's need-to-know.

h. The Contractor shall be responsible for immediately notifying the Contracting Officer in writing of any changes in its personnel with access to BMD-related PPBS data, e.g., departures, new employees, or employees who no longer need access to such data under this contract, etc.

i. Contractor personnel who have been granted access to BMD-related PPBS data shall process, when possible, such data in Government work spaces using equipment furnished by the Government. However, if a Contractor anticipates processing BMD-related PPBS data in a Government facility on Contractor-owned equipment, prior written approval from the Contracting Officer must be obtained. The Contractor's request (letter) should describe the equipment being used and a brief justification.

After approval by the Contracting Officer, the request must be endorsed by the appropriate BMDO office before bringing the equipment into the facility:

(1) Information Systems Directorate - all Automatic Data Processing equipment.

(2). Management Operations Directorate - all other equipment, e.g., telefax and reproduction machines, tables, chairs, mobile and permanent white boards, etc.

j. Processing BMD-related PPBS data at the Contractor's facility shall be performed only when absolutely essential and processing in Government work spaces is impractical. Prior to the processing of any such data outside of a Government facility or removal of BMD-related PPBS data from a Government facility, the Contractor shall submit a written plan to the Contracting Officer outlining the procedures for maintaining such data at its facility. The Contractor shall submit its own plan or a plan which meets the general requirements identified in BMDO Directive 7045 "Contractor Access to Planning, Programming, and Budgeting System (PPBS) Data." The plan shall be approved in writing by the Contracting Officer prior to removal of any BMD-related PPBS data from a Government facility or the processing of any such data in the Contractor's facility. A Contractor may submit a separate plan for each of its facilities that need to maintain such data or one plan as long as any differences between the procedures followed at each facility are clearly distinguishable in the plan. If an agent, consultant, or subcontractor requires the processing of BMD-related PPBS data at its facility(s), they also must submit a separate facility plan through the prime Contractor for approval by the Contracting Officer. NOTE: A plan is not required for Contractor personnel who have been given access to BMD-related PPBS data to transport, process, or maintain such data at a Government or a BMDO PPBS-approved Contractor facility. (Verification of BMDO-approved Contractor facilities and authorized personnel can be obtained from the Contracting Officer.)

k. If the Contractor is not required to process BMD-related PPBS data at its facility(s), the Contractor shall inventory all Government documents in its possession and destroy or return all DoD-generated PPBS and BMD-related PPBS data/documents to the Contracting Officer. If the requirement to process such data at the Contractor's facility(s) changes in the future, compliance with paragraph j. above shall be required.

1. The Contractor shall be responsible for ensuring that persons in their employment who have been granted access to BMD-related PPBS data understand the consequences of divulging such data. Revealing BMD-related PPBS data to unauthorized persons may provide other companies with an unfair advantage in future competitions or jeopardize national security interests. Violations by individuals or companies may result in contractual actions or criminal prosecution.

m. In the event the Contractor or any of its employees, agents, subcontractor employees, or consultants fail to comply with the provisions of this clause, such non-compliance shall be deemed a material breach of the contract for which the Government reserves the right to terminate the contract for default and/or resort to such other rights and remedies as provided for under this contract or under Federal laws. Non-compliance with the provisions of this clause also may adversely affect the evaluation of a Contractor's reliability in future acquisitions.

H-4 PUBLIC RELEASE OF INFORMATION

a. The policies and procedures outlined herein apply to information submitted by the Contractor and his subcontractors for approval for public release. Prior to public release, all information shall be cleared as shown in the "National Industrial Security Program Operating Manual" (DoD 5220.22-M).

b. All public information materials prepared by the Contractor shall be submitted to the BMDO (see paragraph e. below) for clearance prior to release. These materials include, but are not limited to, technical papers, and responses to news queries which relate to a Contractor's work under this contract.

c. However, once information has been cleared for public release, it does not have to be cleared again for later use. The information shall be used in its originally cleared context.

d. The BMDO Director for External Affairs is responsible for processing Contractor-originated material for public release.

e. All material to be cleared shall be sent to:

Office of the Secretary of Defense
Ballistic Missile Defense Organization
7100 Defense Pentagon, BMDO/SRE
Washington, DC 20301-7100

Subcontractor proposed public releases shall be submitted for approval through the prime Contractor.

f. The Contractor shall submit the material proposed for public release to the above addressee by a letter of transmittal which states: (1) to whom the material is to be released; (2) the desired date for public release; (3) that the material has been reviewed and approved by officials of the Contractor, or the subcontractor, for public release; (4) the contract number and the applicable COTR.

g. Two (2) copies of each item, including written material, photographs, drawings, "dummy layouts" and the like shall be submitted at least six (6) weeks in advance of the proposed release date.

h. The items submitted must be complete. Photographs shall have captions.

i. Abbreviated materials or abstracts may be submitted if the intent is to determine the feasibility of going further in preparing a complete paper for clearance. However, final approval for release or disclosure of the material cannot be given on the basis of abstracts.

j. Outlines or rough drafts will not be cleared.

k. Materials submitted to BMDO for release purposes shall be void of all Contractor logos or other attributions to the Contractor.

H-5 ACQUISITION OF FACILITIES

The Contractor agrees to provide all necessary facilities (as defined under FAR 45.301 and further defined under FAR 45.101 definitions of Plant Equipment and Real Property) for the performance of this contract. The term facilities includes all general purpose office equipment and automated data/information processing equipment and software. Accordingly, the Contractor shall not purchase or lease facilities for the account of the Government without the express permission of the Contracting Officer. In no case shall the cost to the Government for leased facilities, acquired under this contract, exceed the constructive cost of ownership. Additionally, acquisition or lease of facilities, if approved by the Contracting Officer, shall be provided at cost, applicable burdens applied, exclusive of prime

Contractor fee/profit of other profit centers or business units of the prime Contractor.

H-6 ORGANIZATIONAL CONFLICT OF INTEREST (OCI)

a. Purpose: The primary purpose of this clause is to aid in ensuring that:

(1) the Contractor's objectivity and judgement are not biased because of its present, or currently planned interests (financial, contractual, organizational, or otherwise) which relate to work under this contract;

(2) the Contractor does not obtain an unfair competitive advantage by virtue of its access to non-public information regarding the Government's program plans and actual or anticipated resources; and

(3) the Contractor does not obtain any unfair competitive advantage by virtue of its access to proprietary information belonging to others.

b. Scope: The restrictions described herein shall apply to performance or participation by the Contractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as "Contractor") in the activities covered by this clause as prime Contractor, subcontractor, co-sponsor, joint venturer, consultant, or in any similar capacity. The term "proprietary information" for purposes of this clause is any information considered so valuable by its owners that it is held secret by them and their licensees. Information furnished voluntarily by the owner without limitations on its use, or which is available without restrictions from other sources, is not considered proprietary.

(1) Maintenance of Objectivity: The Contractor shall be ineligible to participate in any capacity in contracts, subcontracts, or proposals thereof (solicited or unsolicited) which stem directly from the Contractor's performance of work under this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any services under this contract on any of its own products or services, or the products or services of another firm if the Contractor is, or has been, substantially involved in their development or marketing. In addition, if the Contractor under this contract prepares a complete, or essentially complete, Statement of Work (SOW) to be used in competitive acquisitions,

the Contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such SOW or specifications. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts involving the same or similar services based on such a SOW or specification.

(2). Access To and Use of Government Information: If the Contractor, in the performance of this contract, obtains access to information such as plans, policies, reports, studies, financial plans, or data which has not been released or otherwise made available to the public, the Contractor agrees that without prior written approval of the Contracting Officer, it shall not: (a) use such information for any private purpose unless the information has been released or otherwise made available to the public, (b) compete for work based on such information for a period of one year after the completion of this contract, or until such information is released or otherwise made available to the public, whichever occurs first, (c) submit an unsolicited proposal to the Government which is based on such information until after such information is released or otherwise made available to the public, or (d) release such information unless such information has previously been released or otherwise made available to the public by the Government.

(3) Access To and Protection of Proprietary Information: The Contractor agrees that, to the extent it receives or is given access to proprietary data, trade secrets, or other confidential or privileged technical, business, or financial information (hereinafter referred to as "proprietary data") under this contract, it shall treat such information in accordance with any restrictions imposed on such information. The Contractor further agrees to enter into a written agreement for the protection of the proprietary data of others and to exercise diligent effort to protect such proprietary data from unauthorized use or disclosure. In addition, the Contractor shall obtain from each employee who has access to proprietary data under this contract, a written agreement which shall in substance provide that such employee shall not, during his/her employment by the Contractor or thereafter, disclose to others or use for their benefit, proprietary data received in connection with the work under this contract. The Contractor will educate its employees regarding the philosophy of Federal Acquisition Regulation (FAR) Part 9.505-4, Obtaining Access to Proprietary Information, so that they will not use or disclose proprietary information or data generated or acquired in the performance of this contract except as provided herein.

c. Subcontracts: The Contractor shall include this clause or substantially the same clause, including this paragraph, in consulting agreements and subcontracts of all tiers. The terms "Contract", "Contractor", and "Contracting Officer", will be appropriately modified to preserve the Government's rights.

d. Representations and Disclosures:

(1) The Contractor represents that it has disclosed to the Contracting Officer, prior to award, all facts relevant to the existence or potential existence of organizational conflict of interest as that term is used in FAR Subpart 9.5. To facilitate disclosure and Contracting Officer approval, the Contractor shall complete an OCI Analysis/Disclosure Form (Attachment 4, Section J) for each BMDO, BMD, and BMD-related contract or subcontract.

(2) The Contractor represents that if it discovers an organizational conflict of interest or potential conflict of interest after award, a prompt and full disclosure shall be made in writing to the Contracting Officer. This disclosure shall include a description of the action the Contractor has taken or proposes to take in order to avoid or mitigate such conflicts.

e. Remedies and Waiver:

(1) For breach of any of the above restrictions or for non-disclosure or misrepresentation of any relevant facts required to be disclosed concerning this contract, the Government may terminate this contract for default, disqualify the Contractor for subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this contract. If, however, in compliance with this clause, the Contractor discovers and promptly reports an organizational conflict of interest (or the potential thereof) subsequent to contract award, the Contracting Officer may terminate this Contract for convenience if such termination is deemed to be in the best interest of the Government.

(2) The parties recognize that this clause has potential effects which will survive the performance of this contract and that it is impossible to foresee each circumstance to which it might be applied in the future. Accordingly, the Contractor may at any time seek a waiver from the Director, BMDO, (via the Contracting Officer) by submitting a full written description of the requested waiver and the reasons in support thereof.

f. Modifications: Prior to contract modification, when the SOW is changed to add new work or the period of performance is significantly increased, the Contracting Officer will request and the Contractor is required to submit either an organizational conflict of interest disclosure or an update of the previously submitted disclosure or representation.

H-7 FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 1989) (OPTION CLINS 0101, 0102, 0201 AND 0202)

(a) This contract is renewable in two increments at the unilateral option of the Government. The Government may extend the term of this contract by written notice to the Contractor within 30 days prior to the end of the current contract period; provided, that the Government shall give the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option provision.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed five (5) years.

H-8 KEY PERSONNEL

The Contractor shall notify the Contracting Officer and Contracting Officer's Technical Representative prior to making any changes in key personnel. Key personnel are defined as follows:

a. As a minimum: the Facility Program Manager, and personnel designated as Automated Information System (AIS) Facility Task Manager, Network Task Manager, Computer Information Center (CIC) Task Manager and Acquisition Specialist regardless of labor category.

b. Personnel identified in the proposal as key individuals to be assigned for participation in the performance of the contract.

c. Individuals who are designated as key personnel by agreement of the Government and Contractor during negotiations.

Key personnel shall not be replaced unless the Contractor has demonstrated to the satisfaction of the Contracting Officer and Contracting Officer's Technical Representative that the qualifications of the proposed substitute personnel meet the qualifications in Attachment 2 of Section J for the relevant labor category.

Substitute key personnel shall meet the qualifications in Attachment 2 of Section J for the relevant labor category.

H-9 ENABLING CLAUSE FOR BMD INTERFACE SUPPORT

a. It is anticipated that, during the performance of this contract, the Contractor will be required to support Technical Interface/Integration Meetings (TIMS) with other BMD Contractors and other Government agencies. Appropriate organizational conflicts of interest clauses will be negotiated by the Contracting Officer as needed to protect the rights of the Contractor and the Government.

b. Interface support deals with activities associated with the integration of the requirements of this contract into Strategic Defense System plans and the support of the key BMDO program reviews.

c. The Contractor agrees to cooperate with BMD Contractors by providing access to technical matters, provided, however, the Contractor will not be required to provide proprietary information to non-Government entities or personnel in the absence of a non-disclosure agreement between the Contractor and such entities.

d. The Contractor further agrees to include a clause in each subcontract requiring compliance with the response and access provisions of paragraph c. above, subject to coordination with the Contractor. This agreement does not relieve the Contractor of its responsibility to manage its subcontracts effectively, nor is it intended to establish privity of contract between the Government and such subcontractors.

e. Changes and/or modifications to the contract shall be in writing by the Procuring Contracting Officer (PCO). Personnel from BMD Contractors, other Government agencies or Contractors, or BMDO personnel other than the PCO, are not authorized to direct the Contractor in any manner.

f. This clause shall not prejudice the Contractor or its subcontractors from negotiating separate organizational conflict of interest agreements with BMD Contractors; however, these agreements shall not restrict any of the Government's rights established pursuant to this clause.

H-10 BMDO VISIT AUTHORIZATION PROCEDURES

a. The Contractor shall submit all required visit clearances in accordance with Defense Investigative Service Contractor Office (DISCO) regulations and will forward all visit requests, identifying the contract number, to:

Office of the Secretary of Defense
Ballistic Missile Defense Organization
7100 Defense Pentagon, BMDO/ACC
Washington, D.C. 20301-7100
Phone No.: (703) 695-8048 FAX No.: (703) 693-1526

b. The COTR is authorized to approve visit requests for the Contracting Officer.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I-1 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

a. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
52.202-1	Definitions	OCT 1995
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions on Subcontractor Sales to the Government	OCT 1995
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	SEP 1990
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	JAN 1990
52.203-13	Procurement Integrity-Service Contracting	SEP 1990
52.204-2	Security Requirements	AUG 1996
52.204-4	Printing/Copying Double-Sided on Recycled Paper	JUN 1996
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUL 1995
52.215-2	Audit and Records--Negotiation	AUG 1996
52.215-23	Price Reduction for Defective cost or Pricing Data -- Modifications	OCT 1995
52.215-25	Subcontractor Cost or Pricing Data -- Modifications	OCT 1995
52.215-27	Termination of Defined Benefit Pension Plans	MAR 1996
52.215-33	Order of Precedence	JAN 1986

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
52.215-39	Reversion or Adjustment of Plans For Post-Retirement Benefits Other Than Pensions (PRB)	MAR 1996
52.215-40	Notification of Ownership Changes	FEB 1995
52.216-7	Allowable Cost and Payment	AUG 1996
52.216-8	Fixed Fee	APR 1984
52.219-6	Notice of Total Small Business Set-Aside	APR 1984
52.219-8	Utilization of Small, Small Disadvantaged and Women-Owned Small Business Concerns	OCT 1995
52.219-14	Limitations on Subcontracting	JAN 1991
52.222-2	Payment for Overtime Premiums (Insert zero (0) in paragraph (a))	JUL 1990
52.222-3	Convict Labor	AUG 1996
52.222-26	Equal Opportunity	APR 1984
52.222-28	Equal Opportunity Preaward Clearance of Subcontracts	APR 1984
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans	APR 1984
52.222-36	Affirmative Action for Handicapped Workers	APR 1984
52.222-37	Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era	JAN 1988
52.222-48	Exemption From Application of Service Contract Act Provisions for Contracts for Maintenance, Calibration, and/or Repair of Certain ADP, Scientific and Medical and/or Office and Business Equipment--Contractor Certification	OCT 1995
52.223-2	Clean Air and Water	APR 1984
52.223-6	Drug-Free Workplace	JUL 1990
52.223-14	Toxic Chemical Release Reporting	OCT 1995
52.225-11	Restrictions on Certain Foreign Purchases	MAY 1992
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	AUG 1996

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
52.227-10	Filing of Patent Applications - Classified Subject Matter	APR 1984
52.227-11	Patent Rights--Retention by the Contractor (Short Form)	JUN 1989
52.227-14	Rights in Data--General	JUN 1987
52.228-7	Insurance - Liability to Third Persons	MAR 1996
52.232-9	Limitation on Withholding of Payments	APR 1984
52.232-17	Interest	JUN 1996
52.232-22	Limitation of Funds	APR 1984
52.232-23	Assignment of Claims	JAN 1986
52.232-25	Prompt Payment	MAR 1994
52.232-28	Electronic Funds Transfer Payment Methods	APR 1989
52.233-1	Disputes	OCT 1995
	Alternate I	DEC 1991
52.233-3	Protest After Award	OCT 1995
	Alternate I	JUN 1985
52.237-2	Protection of Government Buildings, Equipment, and Vegetation	APR 1984
52.237-3	Continuity of Services	JAN 1991
52.242-1	Notice of Intent to Disallow Costs	APR 1984
52.242-3	Penalties for Unallowable Costs	OCT 1995
52.242-4	Certification of Indirect Costs	OCT 1995
52.242-13	Bankruptcy	JUL 1995
52.243-2	Changes - Cost-Reimbursement	AUG 1987
	Alternate I	APR 1984
52.243-7	Notification of Changes	APR 1984
52.244-2	Subcontracts (Cost-Reimbursement and Letter Contracts)	MAR 1996
	Alternate I	JUL 1995
52.244-5	Competition in Subcontracting	JAN 1996
52.244-6	Subcontracts for Commercial Items and Commercial Components	OCT 1995
52.245-5	Government Property (Cost- Reimbursement, Time-and-Material, or Labor-Hour Contracts)	JAN 1986
52.246-25	Limitation of Liability - Services	APR 1984

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
52.249-6	Termination (Cost-Reimbursement)	SEP 1996
52.249-14	Excusable Delays	APR 1984
52.251-1	Government Supply Sources	APR 1984
52.253-1	Computer Generated Forms	JAN 1991

b. DEPARTMENT OF DEFENSE FEDERAL ACQUISITION REGULATION
SUPPLEMENT (48 CFR CHAPTER 2)

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Statutory Prohibitions on Compensation to Former Department of Defense Employees	NOV 1995
252.203-7001	Special Prohibition on Employment	NOV 1995
252.203-7002	Display of DoD Hotline Poster	DEC 1991
252.204-7000	Disclosure of Information	DEC 1991
252.204-7003	Control of Government Personnel Work Product	APR 1992
252.205-7000	Provision of Information to Cooperative Agreement Holders	DEC 1991
252.208-7000	Intent to Furnish Precious Metals as Government-Furnished Material (Insert "The Contractor shall identify their requirements when the need is known" in paragraph (b))	DEC 1991
252.209-7000	Acquisition From Subcontractors Subject to On-Site Inspection Under the Intermediate-Range Nuclear Forces (INF) Treaty	NOV 1995
252.209-7004	Reporting of Commercial Transactions with the Government of a Terrorist Country	SEP 1994
252.215-7000	Pricing Adjustments	DEC 1991
252.223-7004	Drug-Free Work Force	SEP 1988
252.223-7006	Prohibition on Storage and Disposal of Toxic and Hazardous Materials	APR 1993
252.225-7012	Preference for Certain Domestic Commodities	NOV 1995

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
252.225-7026	Reporting of Contract Performance Outside the United States	NOV 1995
252.225-7031	Secondary Arab Boycott of Israel	JUN 1992
252.227-7013	Rights in Technical Data -- Noncommercial Items	NOV 1995
252.227-7016	Rights in Bid or Proposal Information	JUN 1995
252.227-7017	Identification and Assertion of Use, Release, or Disclosure Restrictions	JUN 1995
252.227-7025	Limitations on the Use or Disclosure of Government-Furnished Information Marked With Restrictive Legends	JUN 1995
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government	JUN 1995
252.227-7030	Technical Data - Withholding of Payment	OCT 1988
252.227-7034	Patents - Subcontracts	APR 1984
252.227-7036	Certification of Technical Data Conformity	MAY 1987
252.227-7037	Validation of Restrictive Markings on Technical Data	NOV 1995
252.227-7039	Patents - Reporting of Subject Inventions	APR 1990
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7006	Reduction or Suspension of Contract Payments Upon Finding of Fraud	AUG 1992
252.233-7000	Certification of Claims and Requests for Adjustment or Relief	MAY 1994
252.239-7016	Telecommunications Security Equipment, Devices, Techniques, and Services (Insert "See DD 254" in paragraphs (b) and (c))	DEC 1991
252.242-7000	Postaward Conference	DEC 1991
252.245-7001	Reports of Government Property	MAY 1994
252.247-7023	Transportation of Supplies by Sea	NOV 1995
252.249-7001	Notification of Substantial Impact on Employment	DEC 1991

<u>CLAUSE NO.</u>	<u>TITLE</u>	<u>DATE</u>
252.249-7002	Notification of Proposed Program Termination or Reduction	MAY 1995
252.251-7000	Ordering From Government Supply Sources	MAY 1995

I-2 FAR 52.203-9 REQUIREMENT FOR CERTIFICATE OF PROCUREMENT INTEGRITY -- MODIFICATION (SEP 1995)

a. Definitions. The definitions set forth in FAR 3.104-4 are hereby incorporated in this clause.

b. The Contractor agrees that it will execute the certification set forth in paragraph (c) of this clause when requested by the Contracting Officer in connection with the execution of any modification of this contract.

c. Certification. As required in paragraph (b) of this clause, the officer or employee responsible for the modification proposal shall execute the following certification. The certification in paragraph (c) (2) of this clause is not required for a modification which procures commercial items.

CERTIFICATE OF PROCUREMENT INTEGRITY MODIFICATION (NOV 1990)

(1) I, _____ (Name of certifier) am the officer or employee responsible for the preparation of this modification proposal and hereby certify that, to the best of my knowledge and belief, with the exception of any information described in this certification, I have no information concerning a violation or possible violation of subsection 27(a), (b), (d), or (f) of the Office of Federal Procurement Policy Act, as amended* (41 U.S.C. 423), (hereinafter referred to as "the Act"), as implemented in the FAR, occurring during the conduct of this procurement _____ (contract and modification number).

(2) As required by subsection 27(e)(1)(B) of the Act, I further certify that to the best of my knowledge and belief, each officer, employee, agent, representative, and consultant of _____ (Name of Offeror) who has participated personally and substantially in the preparation or submission of this proposal has certified that he or she is familiar with, and will comply with, the requirements of subsection 27(a) of the Act, as implemented in the FAR, and will report immediately to me

any information concerning a violation or possible violation of subsections 27(a), (b), (d), or (f) of the Act, as implemented in the FAR, pertaining to this procurement.

(3) Violations or possible violations: (Continue on plain bond paper if necessary and label Certificate of Procurement Integrity-Modification (Continuation Sheet), ENTER NONE IF NONE EXISTS)

(Signature of the officer or employee responsible for the modification proposal and date)

(Typed name of the officer or employee responsible for the modification proposal)

* Subsections 27 (a), (b), and (d) are effective on December 1, 1990. Subsection 27(f) is effective on June 1, 1991.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

(End of certification)

d. In making the certification in paragraph (2) of the certificate, the officer or employee of the competing Contractor responsible for the offer or bid, may rely upon a one-time certification from each individual required to submit a certification to the competing Contractor, supplemented by periodic training. These certifications shall be obtained at the earliest possible date after an individual required to certify begins employment or association with the contractor. If a contractor decides to rely on a certification executed prior to the suspension of section 27 (i.e., prior to December 1, 1989), the Contractor shall ensure that an individual who has so

certified is notified that section 27 has been reinstated. These certifications shall be maintained by the Contractor for a period of 6 years from the date a certifying employee's employment with the company ends or, for an agency, representative, or consultant, 6 years from the date such individual ceases to act on behalf of the contractor.

e. The certification required by paragraph (c) of this clause is a material representation of fact upon which reliance will be placed in executing this modification.

I-3 FAR 52.215-42 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS. (OCT 1995) --ALTERNATE III (OCT 1995)

a. Exceptions from cost or pricing data.

(1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.804-2(a)(1) on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Information relative to an exception granted for prior or repetitive acquisitions.

(ii) Catalog price information as follows:

(A) Attach a copy of or identify the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which this proposal is being made.

(B) Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, and reseller.

(C) Additionally, for each catalog item that exceeds \$100,000 (extended value not unit price), provide evidence of substantial sales to the general public. This may include sales order, contract, shipment, invoice, actual recorded sales or other records that are verifiable. In addition, if the

basis of the price proposal is sales of essentially the same commercial item by affiliates, other manufacturers or vendors, those sales may be included. The offeror shall explain the basis of each offered price and its relationship to the established catalog price. When substantial general public sales have also been made at prices other than catalog or price list prices, the offeror shall indicate how the proposed price relates to the price of such recent sales in quantities similar to the proposed quantities.

(iii) Market price information. Include the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. The nature of the market should be described. The supply or service being purchased should be the same as or similar to the market price supply or service. Data supporting substantial sales to the general public is also required.

(iv) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(v) Information on modifications of contracts or subcontracts for commercial items.

(A) If (1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition, catalog or market prices of commercial items, or prices set by law or regulation; and (2) the modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor may provide information on prices at which the same item or similar items have been sold in the commercial market.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an

exception under this clause, and the reasonableness of price. Access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(3) By submitting information to qualify for an exception, an offeror is not representing that this is the only exception that may apply.

b. Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data on Standard Form (SF) 1411, Contract Pricing Proposal Cover Sheet (Cost or Pricing Data Required), with supporting attachments prepared in accordance with Table 15-2 of FAR 15.804-6(b)(2).

(2) As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.804-4.

c. Submit the cost portion of the proposal via the following electronic media:

- (1) Data files should be submitted on 3 1/2", high density diskettes;
- (2) Data files/diskettes should be accessible by a 486/33PC compatible computer running MS-DOS 3 or later;
- (3) Spreadsheet data and formats shall be readable by Microsoft Excel 5.0.

I-4 FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (OCT 1995)

a. Definition.

Commercial item, as used in this clause, has the meaning contained in the clause at 52.202-1, Definitions.

Subcontract, as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

b. To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

c. Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Special Disabled and Vietnam Era Veterans (38 U.S.C. 4212(a));

(3) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996).

d. The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

I-5 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

EXHIBIT A Contract Data Requirements Lists (DD Form
1423-1, 20 pages, dated June 21, 1996)

ATTACHMENT 1 Statement of Work titled "Automated
Information System (AIS) Support
Services" (16 pages, dated September 25,
1996)

ATTACHMENT 2 Personnel Qualifications (7 pages, dated
March 20, 1996)

ATTACHMENT 3 Contract Security Classification
Specification (DD Form 254, 2 pages,
dated October 15, 1996)

ATTACHMENT 4 OCI Analysis/Disclosure Form

ATTACHMENT 5 PPBS Non-Disclosure Agreements (SDIO Form
99)

Exhibit A
HQ0006-97-C-0001

CONTRACT DATA REQUIREMENTS LIST
FOR
AUTOMATED INFORMATION SYSTEM (AIS) SUPPORT SERVICES

JUNE 21, 1996

PREPARED BY
BALLISTIC MISSILE DEFENSE ORGANIZATION

000040

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
---	-----------------	---

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
--	--	--

1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Technical Report - Study /Services	3. SUBTITLE <div style="background-color: gray; width: 100px; height: 15px;"></div>
--------------------------	---	--

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 3.1.d(2)	6. REQUIRING OFFICE BMDO/POI
---	--	---------------------------------

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY One/R	12. DATE OF FIRST SUBMISSION 25 DAC	14. DISTRIBUTION		
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION 10 DARC	a. ADDRESSEE	b. COPIES	
					Draft	Final

<p>16. REMARKS</p> <p>Block 4: Contractor format admissible.</p> <p>Block 7: Acceptance by COTR at BMDO/POI by way of memorandum.</p> <p>Blocks 8: Approval will be for technical content that includes back-up and recovery procedures for the system software; a back-up tape tracking system; and back-up schedules, back-up tapes location, and a mechanism for version control. Allow 30 calendar days for Government review and comment.</p>	BMDO/POI	1	1		
	BMDO/DCT		LT		
	15. TOTAL	⇒	1	1	

G. PREPARED BY <i>T. Castorina</i> T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY <i>S. Moss</i> S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
--	-----------------------	---	-----------------------

000041

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP ___ TM ___ OTHER <u>XX</u>
---	-----------------	---

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
--	--	--

1. DATA ITEM NO. A003	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE System Security Audit
--------------------------	--	--------------------------------------

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 3.1.e(3)	6. REQUIRING OFFICE BMDO/POI
---	--	---------------------------------

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY MTHLY	12. DATE OF FIRST SUBMISSION See Block 16	14. DISTRIBUTION
8. APP CODE A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION 10 DARP		

16. REMARKS	a. ADDRESSEE	b. COPIES			
		Draft	Reg	Repro	
<p>Block 4: Information Systems Security Officer (ISSO) will define format.</p> <p>Block 7: Acceptance by COTR at BMDO/POI by way of memorandum</p> <p>BLOCK 12: First submission due ten calendar days after the first full month following contract award to include reporting period from the date of contract award.</p>	BMDO/POI	1	1		
	BMDO/DCT		LT		
	15. TOTAL	⇒	1	1	

G. PREPARED BY T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
--	-----------------------	--------------------------------------	-----------------------

**CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)**

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/ 0102/ 0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
---	-----------------	---

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
--	--	--

1. DATA ITEM NO. A004	2. TITLE OF DATA ITEM Status Report	3. SUBTITLE Monthly Status Report
--------------------------	--	--------------------------------------

4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-80368/T Jun 87	5. CONTRACT REFERENCE Contract Clause C-1	6. REQUIRING OFFICE BMDO/POI
--	--	---------------------------------

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY MTHLY	12. DATE OF FIRST SUBMISSION See Block 16	14. DISTRIBUTION b. COPIES Final Draft Reg Repr
8. APP CODE N/A	11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION 10 DARP		

16. REMARKS <p>BLOCK 4: Report shall be modified as follows.</p> <p>Section 10.1 Replace with: <u>Format</u>. The format of the Status Report may be in contractor format consistent with 10.2 and CDRL DI requirements. Sample is at Attachment 1.</p> <p>Section 10.2.2.1.i Replace with: "Any other information which may cause significant changes in the program schedule and may impact task/delivery order compliance."</p> <p>ADD Section 10.2.2.1.j "Items discussed must reflect the performance of contracted service/support, and language used must not erroneously give the impression that the contractor has performed an inherently governmental function."</p> <p>Section 10.2.2.2 Add: "The description will apply only to items included in the statement of work. The report should not be used to pursue marketing efforts."</p> <p>DELETE Section 10.2.2.3.</p> <p>BLOCK 7: Acceptance by COTR at BMDO/POI by way of memorandum.</p> <p>BLOCK 12: First submission due ten calendar days after the first full month following contract award to include reporting period from the date of contract award.</p>	BMDO/POI		3		
	BMDO/DCT		1		
	BMDO/POC		1		
	15. TOTAL		⇒	5	

G. PREPARED BY T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
--	-----------------------	--------------------------------------	-----------------------

000044

COMPANY NAME
COMPANY ADDRESS

MONTHLY STATUS REPORT

Month Year

Submitted to:
Ballistic Missile Defense Organization
Applicable COTR Division

in accordance with
Contract HQ0006-97-C-0001
CDRL A004

Distribution:
BMDO/Applicable COTR
BMDO/DCT

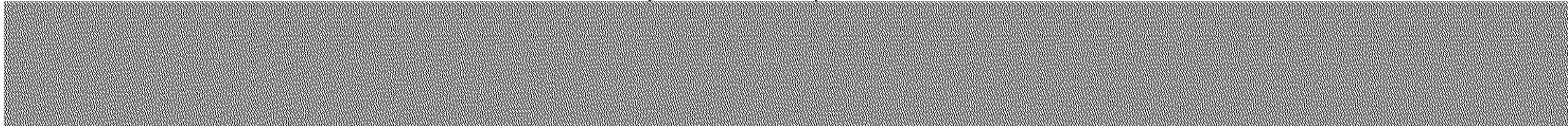
MONTHLY STATUS REPORT
October 1996

I. SUMMARY

The summary shall include a brief statement of the overall project status, covering the accomplished technical activities and development and objectives of efforts.

II. BODY OF REPORT

The body of the report shall include a brief statement of the following items (where applicable):

- A. Milestone/task status: In accordance with DI-MGMT-80368, 10.2.2.1 as modified by CDRL.
- B. Contract Deliverable Status: A summary statement of the status of each deliverable end item as required by the contract.
- C. Appendices: Appendices (where applicable) for tables, references, charts, or other descriptive material. Each Appendix shall be identified and referenced in the appropriate area of the report.
- D. Exhibits:
 1. Network Utilization Report [SOW 3.1 f]
 2. 
 3. Computer Information Center Problem Data Report [SOW 3.2.c(2)]
 4. ADPE Maintenance Contract and Software License Report [SOW 3.3.f]
 5. Maintenance Activities/Obsolescence Report [SOW 3.3.1]
 6. Inventory Report [SOW 3.3.m(2)]

A brief description of technology refreshments identified/recommended to the BMDO AIS during the reporting period.

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
--	------------------------	--

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
---	---	---

1. DATA ITEM NO. A005	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE Configuration Management Plan (CMP)
---------------------------------	---	---

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 3.1.h	6. REQUIRING OFFICE BMDO/POI
--	--	--

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION 60 DAC	14. DISTRIBUTION		
8. APP CODE A	11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION 20 DARC	a. ADDRESSEE			
					Final	
				Draft	Reg	Repro

16. REMARKS

Block 4: Contractor format admissible.

Block 7: Acceptance by COTR at BMDO/POI by way of memorandum

Blocks 8: Approval will be for technical content. Allow 30 calendar days for Government review and comment.

BMDO/POI	1	1	
BMDO/DCT		LT	
15. TOTAL	⇒	1	1

G. PREPARED BY T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
---	------------------------------	---	------------------------------

CONTRACT LINE ITEM REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202			B. EXHIBIT A		C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>				
D. SYSTEM/ITEM AIS Support Services				E. CONTRACT/PR. NO HQ0006-97-C-0001		F. CONTRACTOR Cost Management Systems, Inc.			
1. DATA ITEM NO. A006		2. TITLE OF DATA ITEM Technical Report - Study/Services			3. SUBTITLE Site Drawings				
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508			5. CONTRACT REFERENCE SOW Para 3.1.h			6. REQUIRING OFFICE BMDO/POI			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY QRTLY		12. DATE OF FIRST SUBMISSION See Block 16		14. DISTRIBUTION		
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION 10 DARP		a. ADDRESSEE				
16. REMARKS Block 4: Contractor format admissible. Block 7: Acceptance by COTR at BMDO/POI by way of memorandum Block 8: Approval will be for technical content. Content, submission and resubmittal requirements in accordance with COTR instructions. Block 12: First submission due ten calendar days after the second full month after contract award.				b. COPIES					
				BMDO/POI		1	1		
				BMDO/DCT			LT		
				15. TOTAL		⇒	1	1	
G. PREPARED BY T. Castorina, BMDO/POI			H. DATE 21 JUNE 96		I. APPROVED BY S. Moss, BMDO/DCTT		J. DATE 21 JUNE 96		

000048

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
--	------------------------	--

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
---	---	---

1. DATA ITEM NO. A007	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE Continuity of Operations (COOP) Plan
---------------------------------	---	--

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 3.1.n	6. REQUIRING OFFICE BMDO/POI
--	--	--

7. DD 250 REQ LT	9. DIST STATEMENT * REQUIRED N/A	10. FREQUENCY One/R	12. DATE OF FIRST SUBMISSION 90 DAC	14. DISTRIBUTION		
8. APP CODE A		11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION 10 DARC			

<p>16. REMARKS</p> <p>Block 4: Contractor format admissible.</p> <p>Block 7: Acceptance by COTR at BMDO/POI by way of memorandum</p> <p>Blocks 8: Approval will be for technical content. Allow 30 calendar days for Government review and comment.</p>									
	BMDO/POI	1	1						
	BMDO/DCT		LT						
	15. TOTAL	⇒	1	1					

G. PREPARED BY T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss, BMDO/DCTI	J. DATE 21 JUNE 96
---	------------------------------	---	------------------------------

000049

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
--	------------------------	--

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
---	---	---

1. DATA ITEM NO. A008	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE Quarterly Computer Information Center Newsletter
---------------------------------	---	--

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 3.2.e	6. REQUIRING OFFICE BMDO/POI
--	--	--

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY QRTLY	12. DATE OF FIRST SUBMISSION See Block 16	14. DISTRIBUTION		
8. APP CODE A	11. AS OF DATE 0	13. DATE OF SUBSEQUENT SUBMISSION See Block 16	a. ADDRESSEE			

<p>16. REMARKS</p> <p>Block 4: Format shall be developed by the Contractor for Government approval with the first issue.</p> <p>Block 7: Acceptance by COTR at BMDO/POI by way of memorandum.</p> <p>Block 8: Government approval will be for basic format (at first issue) and technical content (each issue). Allow 10 working day for Government review and comment; the Contractor shall submit revisions 5 working day after receipt of Government comments.</p> <p>Block 12: Drafts shall be submitted for approval such that publication/distribution of the first issue will be 60 days after contract award.</p> <p>Block 13: Drafts shall be submitted for approval such that publication/distribution of subsequent issues will be on the first business day of the quarter starting with the April 1, 1997 issue.</p> <p>Block 14: Additional distribution in accordance with Newsletter mailing list, as outlined in SOW paragraph 3.2.e.</p>				
	BMDO/POI	1	1	
	BMDO/DCT		LT	
	See Block 16			
	15. TOTAL	⇒	1	1

G. PREPARED BY T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
---	------------------------------	---	------------------------------

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
--	------------------------	--

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
---	---	---

1. DATA ITEM NO. A009	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE ADP Acquisition Tracking System
---------------------------------	---	---

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508.	5. CONTRACT REFERENCE SOW Para 3.3.d	6. REQUIRING OFFICE BMDO/POI
---	--	--

7. DD 250 REQ LT	9. DIST STATEMENT * REQUIRED N/A	10. FREQUENCY One/R	12. DATE OF FIRST SUBMISSION 30 DAC	14. DISTRIBUTION				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION 10 DARC				a. ADDRESSEE	
					Draft		Final	
						Reg	Repro	

16. REMARKS

Block 4: Contractor format for COTR approval.

Block 7: Acceptance by COTR at BMDO/POI by way of memorandum

Blocks 8: Approval will be for technical content. Allow 30 calendar days for Government review and comment.

BMDO/POI	1	1	
BMDO/DCT		LT	
15. TOTAL	⇒	1	1 0

G. PREPARED BY T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
---	------------------------------	---	------------------------------

000051

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/ 0102/ 0202	B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
--	------------------------	--

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
---	---	---

1. DATA ITEM NO. A010	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE Acceptance Test Plan
---------------------------------	---	--

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 3.3.j	6. REQUIRING OFFICE BMDO/POI
--	--	--

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION 120 DAC	14. DISTRIBUTION	
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION 10 DARC	a. ADDRESSEE	b. COPIES
				Draft	Final
					Reg
					Repro

16. REMARKS

Block 4: Contractor format admissible.

Block 7: Acceptance by COTR at BMDO/POI by way of memorandum

Blocks 8: Approval will be for technical content. Allow 30 calendar days for Government review and comment.

BMDO/POI	1	1	
BMDO/DCT		LT	
15. TOTAL	⇒	1	1

G. PREPARED BY T. Castorina T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY S. Moss S. Moss, BMDO/DCTT	J. DATE 21 JUNE 96
--	------------------------------	---	------------------------------

000052

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/0102/0202	B. EXHIBIT A	C. CATEGORY TDP ___ TM ___ OTHER XX
--	------------------------	---

D. SYSTEM/ITEM AIS Support Services	E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
---	---	---

1. DATA ITEM NO. A011	2. TITLE OF DATA ITEM Technical Report - Study/Services	3. SUBTITLE Transition Plan
---------------------------------	---	---------------------------------------

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508	5. CONTRACT REFERENCE SOW Para 4.2	6. REQUIRING OFFICE BMDO/POI
--	--	--

7. DD 250 REQ LT	9. DIST STATEMENT * REQUIRED N/A	10. FREQUENCY One/R	12. DATE OF FIRST SUBMISSION See Block 16	14. DISTRIBUTION		
8. APP CODE A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION See Block 16	a. ADDRESSEE		b. COPIES	
					Draft	Final
					Reg	Repro

16. REMARKS

Block 4: Contractor format admissible.

Block 7: Acceptance by COTR at BMDO/POI by way of memorandum

Block 8: Approval will be for technical content. Allow 30 calendar days for Government review and comment. Resubmittal (if required) 10 days after receipt of Government comments.

Blocks 12: Initial submission four (4) months prior to the expiration of the contract base period.

Block 13: Plan shall be updated four (4) months prior to expiration of any contract option period exercised by the Government.

BMDO/POI	1	1		
BMDO/DCT		1		
15. TOTAL	⇒ 1	2		

G. PREPARED BY <i>T. Castorina</i> T. Castorina, BMDO/POI	H. DATE 21 JUNE 96	I. APPROVED BY <i>S. Moss</i> S. Moss, BMDO/DCT	J. DATE 21 JUNE 96
--	------------------------------	--	------------------------------

CONTRACT LINE ITEM REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002/ 0102/ 0202			B. EXHIBIT A		C. CATEGORY TDP _____ TM _____ OTHER XX				
D. SYSTEM/ITEM AIS Support Services				E. CONTRACT/PR. NO. HQ0006-97-C-0001		F. CONTRACTOR Cost Management Systems, Inc.			
1. DATA ITEM NO. A012		2. TITLE OF DATA ITEM Funds and Manhour Expenditure Report			3. SUBTITLE Funds & Labor Hour Expenditure Report				
4. AUTHORITY (Data Acquisition Document No.) DI-FNCL-80331/T Feb 87				5. CONTRACT REFERENCE Contract Clause C-1		6. REQUIRING OFFICE BMDO/POI			
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED N/A		10. FREQUENCY MTHLY	12. DATE OF FIRST SUBMISSION See Block 16				
8. APP CODE N/A		11. AS OF DATE 0		13. DATE OF SUBSEQUENT SUBMISSION 20 DARP			14. DISTRIBUTION		
16. REMARKS For Level of Effort contracts, the following data shall be provided monthly: 1. Data and graphs for the current contract period of performance. 2. Data and graphs for the total contract period of performance, i.e. from the award of contract through the end of the latest period of performance. 3. Data only for all prior contract periods of performance. BLOCK 4: DI-FNCL-80331/T Feb 87 shall be modified as noted. Section 10, Preparation Instructions, shall be revised, in its entirety, to the following: 10.1 General. The Funds & Labor Hour Expenditure Report shall contain the following data: a. A tabular listing of contract baseline and authorized values (when applicable), along with actual labor hours and expenditures inclusive of the reporting period compared to the latest negotiated change, including estimate at completion, as shown in Attachment 1. b. A graphical plot of actual expenditures versus planned dollars projected to completion along with a plot of the current funding. c. A graphical plot of actual labor hours versus planned labor hours projected to completion. 10.2 Scope. Each unit (Contract Line Item Numbers {CLINs}, Task Orders {T.O.s}, POPs) will be addressed as identified above in bold.				a. ADDRESSEE			b. COPIES		
				BMDO/POI			Draft	Final	
				BMDO/DCT			Reg	Repr o	
				See Block 16			1		
15. TOTAL			⇒	See Blk 16					
G. PREPARED BY <i>Castorina</i>			H. DATE 21 JUNE 96		I. APPROVED BY <i>S. Moss</i> S. Moss, BMDO/DCTT				
T. Castorina, BMDO/POI					J. DATE 21 JUNE 96				

CONTRACT DATA REQUIREMENTS LIST
(CONTINUATION PAGE)

A. CONTRACT LINE ITEM NO. 0002, 0102, 0202		B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
D. SYSTEM/ITEM AIS Support Services		E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
1. DATA ITEM NO. A012	2. TITLE OF DATA ITEM Funds and Manhour Expenditure Report		3. SUBTITLE Funds & Labor Hour Expenditure Report

16. REMARKS

BLOCK 4: Continued

10.3 Format and Content. Each detailed report shall contain the following:

10.3.1 Monthly Funds and Labor Hour Expenditure Report. This chart shall contain the following data elements (see Attachment 1):

10.3.1.1 The table heading on the left side shall include contract number, latest executed modification, contract type (cost and fee arrangements, CPFF, CPAF, etc.), report description (Contract Summary, Option 1, CLIN, etc.). The table heading on the right side shall include preparation date, reporting period, POP, and funding.

10.3.1.2 The elements shall contain a breakdown by the following categories: Direct Labor Hours, Total Labor (Unburdened \$), Other Direct Costs (ODCs)(\$), Total Indirect Costs (\$), and Fee (\$).

Line 1, Direct Labor, shall identify direct labor hours by the labor categories negotiated in the contract (as awarded or later modified) for both the Prime Contractor and Subcontractors.

Line 2 shall provide a subtotal of Direct (unburdened) Labor Dollars for the Prime Contractor.

Line 3 shall identify ODCs for the Prime Contractor. Separate line items within the ODC category shall identify facilities (rent, equipment, etc.), travel (including subsistence and other allowable costs related to travel), and any minor categories listed in "other".

Line 4 shall identify the Prime Contractor's Total Indirect Cost amount.

Line 5 shall provide Overall Cost for the Prime Contractor and Subcontractors.

Line 6 shall provide the Fee amount for the Prime Contractor. Cost Plus Fee amount shall be identified.

Open/Outstanding Commitments (the estimated dollar obligations, excluding accrued expenditures, to vendors or subcontractors including any termination liability) shall be identified, and total amount plus commitments shall be provided.

10.3.1.3 Column "A" shall be labeled Current Contract Baseline. This column shall contain a total summary of the latest negotiated contract up to and including the fully executed modification identified in the table heading. Column "A1" shall contain all data for the Prime Contractor. Column "A2" shall contain all data for the Subcontractors. Column "A3" shall contain the combined total data for both the Prime Contractor and the Subcontractors.

10.3.1.4 Column "B" shall be labeled Task/Delivery Order Authorized. This column shall contain a total summary of the latest authorized task/delivery orders. This will not be applicable for completion contracts.

CONTRACT DATA REQUIREMENTS LIST
(CONTINUATION PAGE)

A. CONTRACT LINE ITEM NO. 0002/ 0102/ 0202		B. EXHIBIT A	C. CATEGORY TDP _____ TM _____ OTHER <u>XX</u>
D. SYSTEM/ITEM AIS Support Services		E. CONTRACT/PR. NO HQ0006-97-C-0001	F. CONTRACTOR Cost Management Systems, Inc.
1. DATA ITEM NO. A012	2. TITLE OF DATA ITEM Funds and Manhour Expenditure Report	3. SUBTITLE Funds & Labor Hour Expenditure Report	

16. REMARKS

BLOCK 4: Continued

10.3.1.5 Column "C" shall be labeled Cumulative Expenditures to Date. This column shall contain a total summary of expenditure data from inception through the current reporting period. Expenditures are recorded costs as defined within FAR Clause 52.216-7, Allowable Cost and Payment, plus the estimated fee earned. Such costs include: (1) actual payments for services or items purchased directly for the contract, and (2) costs incurred, but not necessarily paid, for direct labor, direct travel, other direct costs and allocated indirect costs. Cumulative expenditures that result in a variance of ± 10 percent of the Cumulative Planned in both of the graphs shall be explained in the "Remarks" section.

10.3.1.6 Column "D" shall be labeled Estimate at Completion. This column shall contain an estimate of the final total cost at completion of the work effort. Estimates that vary from section 10.3.1.3, Current Contract Baseline, by ± 10 percent shall be explained in the "Remarks" section.

10.3.1.7 Column "E" shall be labeled Reporting Period Expenditures. This column shall contain a total summary of expenditure data for the current reporting period. Expenditures are recorded costs as defined within FAR Clause 52.216-7, Allowable Cost and Payment, plus the estimated fee earned. Such costs include: (1) actual payments for services or items purchased directly for the contract, and (2) costs incurred, but not necessarily paid, for direct labor, direct travel, other direct costs, and allocated indirect costs.

10.3.2 Funds Expenditure Graph. A funds expenditure graph shall be included. The graph shall portray, on a monthly basis, the planned versus actual dollar expenditures (including fee) along with funding for the applicable report. The graph shall include a corresponding table of figures specifying period and cumulative data for planned and actual expenditures, and funding.

10.3.3 Hours Expenditure Graph. A labor hour graph shall be included. The graph shall portray, on a monthly basis, the planned versus actual total labor hours for the applicable work. The graph shall include a corresponding table of figures specifying period and cumulative data for planned and actual labor hours.

Block 7: Acceptance by COTR at BMDO/POI by way of memorandum

BLOCK 14: Distribution to BMDO/DCT shall be via EDI when directed by the PCO; all distribution to other directorates will be via hard copy.

PROPRIETARY INFORMATION*

CONTRACT NO: HQ0006-97-C-0001 THRU MOD: P00000
 CONTRACT TYPE: COST PLUS XXXXX FEE
 REPORT DESCRIPTION: CONTRACT SUMMARY, or POP, or CLIN, or TO

MONTHLY FUNDS & LABOR HOUR EXPENDITURE REPORT

PREPARATION DATE: 14-Jun-94
 REPORTING PERIOD FROM: 01-May-94 THRU 31-May-94
 PERIOD OF PERFORMANCE: 16-Dec-93 THRU 15-Dec-94
 FUNDING: \$0

	A CURRENT CONTRACT BASELINE			B TASK/DELIVERY ORDER AUTHORIZED			C CUMULATIVE EXPENDITURES TO DATE			D ESTIMATE AT COMPLETION			E REPORTING PERIOD EXPENDITURES		
	AI	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	E1	E2	E3
	PRIME	SUBS	TOTAL	PRIME	SUBS	TOTAL	PRIME	SUBS	TOTAL	PRIME	SUBS	TOTAL	PRIME	SUBS	TOTAL
1. DIRECT LABOR (HOURS)															
PROGRAM MANAGER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRINCIPAL ENGINEER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SENIOR ENGINEER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SENIOR ANALYST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ENGINEER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANALYST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASSOCIATE ENGINEER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASSOCIATE ANALYST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL LABOR (HOURS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. TOTAL LABOR (UNBURDENED \$)															
3. OTHER DIRECT COSTS															
FACILITIES	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
TRAVEL	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
OTHER	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
SUBTOTAL ODCs	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
4. TOTAL INDIRECT COSTS (\$)															
5. OVERALL COST	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
6. FEE (\$)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
COST PLUS FEE	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
OPEN/OUTSTANDING COMMITMENTS															
TOTAL COMMITMENTS & EXPENDITURES															

This report includes data that shall not be disclosed outside the government and shall not be duplicated, used, or disclosed, in whole or in part, for any other purpose than to evaluate this report. This restriction does not limit the government's right to use information contained in this data if it is obtained from another source without restriction.

00057

CONTRACT NO:

HQ0006-XX-C-XXXX

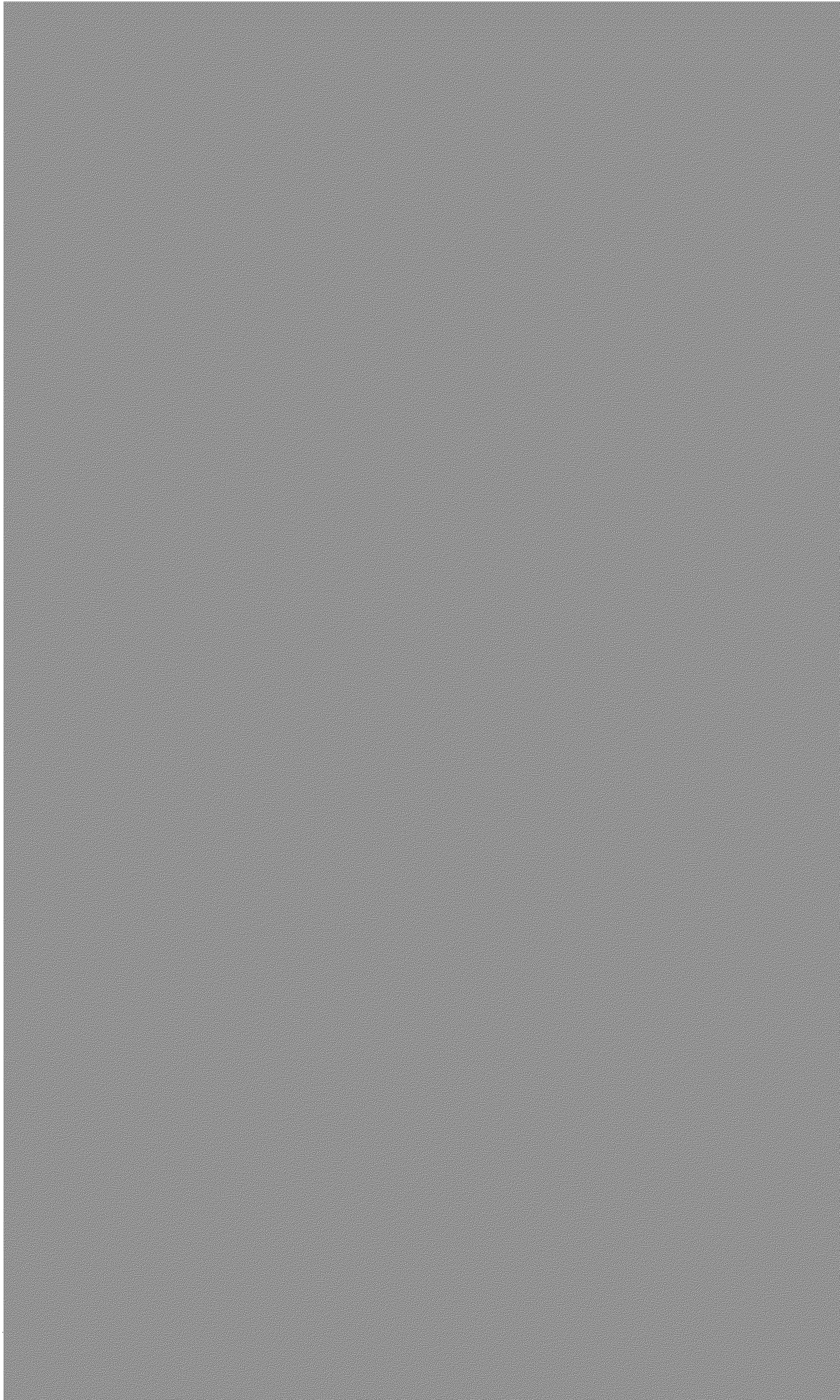
REPORTING PERIOD: May-94

CONTRACT TYPE:

COST PLUS XXXXX FEE

REPORT DESCRIPTION:

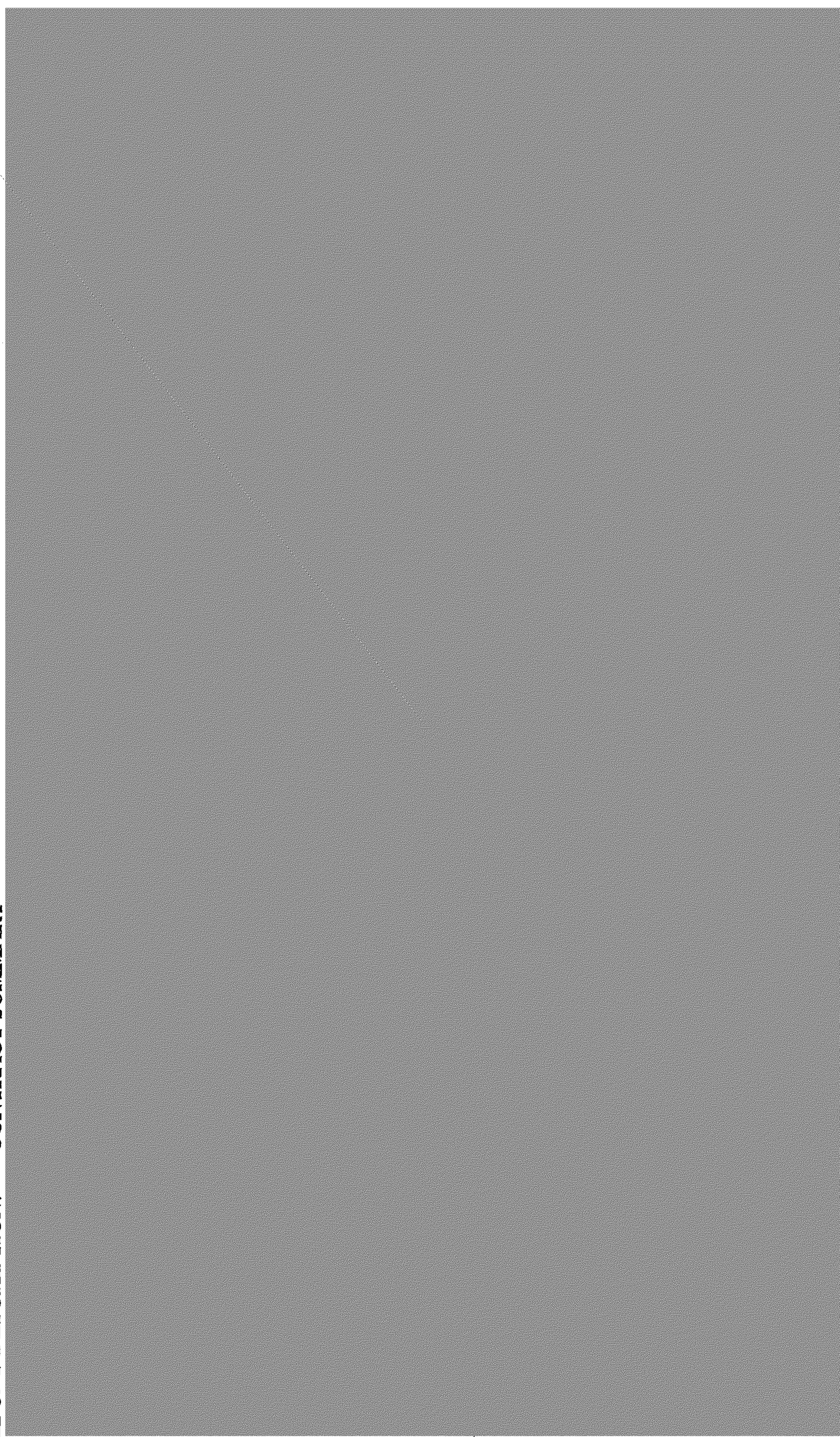
CONTRACT SUMMARY



000058

REPORTING PERIOD: May-94

CONTRACT NO: HQ0006-XX-C-XXXXX
CONTRACT TYPE: COST PLUS XXXXX FEE
REPORT DESCRIPTION: CONTRACT SUMMARY



SUPPLEMENTAL INFORMATION

DEFINITIONS OF ACRONYMS AND ABBREVIATIONS

ASREQ	As Required
DAC	Days After Contract Award
DARC	Days After Receipt of Comments
DARP	Days After Reporting Period
MTHLY	Monthly
N/A	Not Applicable
One/R	One Submission with Revisions
LT	Letter of Transmittal
QRTLY	Quarterly

TRANSMITTAL LETTER TRANSMISSION

For those distribution locations in DD Form 1423-1, Block 14, marked with LT, only a data item letter of transmittal shall be delivered.

ADDRESSEE LIST

<u>Block 14 Entry</u>	<u>Complete Address</u>
BMDO/POI, BMDO/DCT, DSIM, POC	Ballistic Missile Defense Organization ATTN: BMDO/ 1725 Jefferson Davis Highway Suite 809 Arlington, VA 22202

Attachment 1
HQ0006-97-C-0001

STATEMENT OF WORK
FOR
AUTOMATED INFORMATION SYSTEM (AIS) SUPPORT SERVICES

September 25, 1996

PREPARED BY
BALLISTIC MISSILE DEFENSE ORGANIZATION

000061

TABLE OF CONTENTS

1	<u>INTRODUCTION</u>	2
1.1	<u>BACKGROUND</u>	2
1.2	<u>SCOPE</u>	5
2	<u>APPLICABLE DOCUMENTS AND DEFINITIONS</u>	5
2.1	<u>REFERENCES</u>	5
2.2	<u>GLOSSARY OF TERMS</u>	6
3	<u>REQUIREMENTS</u>	7
3.1	<u>AIS FACILITY OPERATIONS AND SERVICES</u>	7
3.2	<u>COMPUTER INFORMATION CENTER (CIC) OPERATIONS AND SERVICES</u>	10
3.3	<u>AUTOMATIC DATA PROCESSING (ADP) ACQUISITION AND INVENTORY SUPPORT</u>	12
3.4	<u>AIS MAINTENANCE</u>	14
3.5	<u>TECHNOLOGY MODERNIZATION</u>	15
4	<u>CONTRACT TRANSITION</u>	16
ANNEX A		
<u>AIS FACILITY SUMMARY EQUIPMENT AND SOFTWARE LIST</u>		
ANNEX B		
<u>LOCAL AREA NETWORK (LAN) SERVER/WORKSTATION SUMMARY HARDWARE LIST</u>		
ANNEX C		
<u>LAN SERVER/WORKSTATION SUMMARY SOFTWARE LIST</u>		
ANNEX D		
<u>LAN IMPLEMENTATION PLAN - PROPOSED SYSTEM DESIGN</u>		
ANNEX E		
<u>CURRENT BMDO EQUIPMENT AND SOFTWARE MAINTENANCE CONTRACTS</u>		

1 INTRODUCTION

This Statement of Work (SOW) describes the BMDO AIS operations and maintenance requirements. This effort is solely for AIS support services. Any reference to the Information Resource Management (IRM)/Information Systems Architecture (ISA) Development and the Management Support System (MSS) Services efforts, as described in Section 1.1 of this SOW are for informational purposes only.

1.1 BACKGROUND

1.1.a The BMDO Deputy for Program Operations (PO) provides, through the Information Systems Directorate (POI), ADP services for all BMDO headquarters offices located in the Pentagon and the BMDO Annex at Crystal City, Virginia. This support can be divided into three categories, each supported by a separate contract:

- IRM/ISA Development - supports BMDO in defining the ISA and assists POI in capturing and documenting BMDO's functional requirements through the BMDO Requirements Working Group (RWG).
- MSS services - provides software integration/engineering technical solutions to meet BMDO's functional business requirements.
- AIS support services - provides operations and maintenance services for BMDO's AIS Facility. AIS support services include operating and maintaining:
 - The AIS Facility,
 - LAN and wide area network (WAN),
 - Dedicated, encrypted telecommunications lines and associated equipment;
 - Two CICs.

1.1.b The BMDO AIS Facility, a classified computer operations center, supports security application and business application systems developed under the MSS contract. Development and upgrades to the MSS-developed software are not part of this SOW. These applications are processed on the following systems:

- The BMDO Integrated Access Control System (IACS) is on a Digital Equipment Corporation (DEC) MICROVAX 3100 system.

- The business applications, which include Contract Workload Management (CWM), Action Tracking (AT) and financial management systems, are on a DEC VAX 8820 system. System software includes the VAX Virtual Memory System (VMS) Operating System Software Version 5.5, as well as system management software tools such as Disk-keeper and I/O Express.
- Equipment models and configurations including peripherals and systems software, that the AIS contractor is responsible for operating, are listed in the AIS Facility Summary Equipment and Software List in [Annex A].

1.1.c BMDO is migrating the Support and Programatic Integrated Management System (SPIMS) environment to a DEC Alpha Server 2100 running Open VMS. This migration strategy includes the shift from a classified to an unclassified/sensitive environment. This migration of SPIMS to the DEC Alpha Server will be completed during FY96.

1.1.d

1.1.f By the end of Fiscal Year 1996, when the migration is expected to be completed, the total number of network servers

000064

will increase to twenty, plus or minus three. The Network Operating System (NOS) will be Windows NT and the workstations will operate under WINDOWS 95. The current number of approximately 350 personal computer workstations will increase to approximately 550, plus or minus 50. The increase will occur in increments of approximately 50 per year during the next four-year period. The 550 workstations will be divided evenly between the Pentagon and Annex locations. Also, the standard COTS application on the new LAN system will be Microsoft Office 7.0 with Access, Exchange, Scheduler +. The contractor shall support the standard office automation COTS and other packages, e.g. Delrina Form Flow Filler and dBase V., which will migrate from the current LAN. Annex D to this SOW, Chapter 5 of the LAN Implementation Plan, provides further detailed information on the Proposed System Design.

1.1.g Two CICs, one at the BMDO Pentagon and one at the BMDO Annex location, provide PC hardware/software assistance to users, LAN usage assistance, and troubleshooting of any problems occurring in the AIS Facility and the telecommunications network. Day-to-day problems are resolved by the Contractor CIC personnel in direct interface with the users.

1.1.h The BMDO AIS Resources Technical Data Library, currently housed in three large bookcases within the BMDO Pentagon computer room, is anticipated to triple by the end of calendar year 1997.

1.2 SCOPE

This requirement for AIS Support Services includes the operation and maintenance of the BMDO AIS Facility, two CICs, LAN and WAN including existing and future BMDO acquired ADPE and telecommunications hardware and systems software, and COTS/GOTS software. The required contract services also include ADP acquisition support, ADPE maintenance support, and support with periodic technology modernization of the AIS.

2 APPLICABLE DOCUMENTS AND DEFINITIONS

2.1 REFERENCES

The following list of documents apply to this effort. In the event of conflict between this SOW and any of the following documents, this SOW shall take precedence. All specifications and standards cited in this SOW and first tier references shall be mandatory for use; lower tier references shall be used for guidance only.

DoD 5220.22-M National Industrial Security Program Operating Manual (NISPOM), January 1995.

DoD Automation Resources Management System (ARMS) Users Guide, June 1993.

DoDI 8000.X-M, Defense Automation Resources Management Manual, October 1994.

Federal Information Processing Standard (FIPS) Publication (PUB) #31, Guidelines for Automatic Data Processing Physical Security and Risk Management, June 1, 1974.

FIPS PUB #87, Guidelines for ADP Contingency Planning, March 27, 1981.

FIPS PUB #94, Guideline on Electrical Power for ADP Installations, September 21, 1983.

RGB Technology Manual, "Image Boss 2000: The Multiscreen Presentation Workstation Users Guide," Version 3.0.

2.2 GLOSSARY OF TERMS The following are definitions and acronyms applicable to this effort.

AIS Downtime. Downtime is the time during AIS facility operational hours in which ADPE and/or AIS software is inoperable due to AIS malfunction. Downtime shall be measured from the time the hardware or software is not available to BMDO users until the hardware or software is returned to the Government in a fully operational condition.

AIS Facility. The AIS Facility is the Computer/Server Room(s) and all associated ADPE and software housed on the ADPE as described in Annexes A through E of this SOW. This definition refers to the BMDO classified Computer Room located in the Pentagon and three Server Rooms located at the BMDO Annex. The hours of operation for the Pentagon Computer Room are 0600 to 2300, Monday through Friday, excluding Government holidays. The hours of operation for the BMDO Annex are 0600 to 2200, Monday through Friday, and 0800 to 1600 on weekends and holidays.

AIS Malfunction, Non-critical. Malfunction that degrades performance of the system or component but does not render the system unusable.

AIS Malfunction, Critical. Malfunction that halts the performance of the system or component, rendering the system unusable.

AIS Support Services. This definition refers to contracted operation and maintenance of the ADPE and telecommunications hardware and systems software, and COTS/GOTS software that is part of the BMDO AIS Facility.

Application Software. This is a prewritten, precoded, commercially available software program that handles the processing for a particular computer application, such as word processing, spreadsheet, or database management.

AIS. AIS is a combination of computer hardware and software, data, or telecommunications, that perform functions such as collecting, processing, transmitting, and displaying information.

CICs. The CICs are the computer Help Desks that provide hardware/software support to BMDO end users. Hours of operations for the Pentagon CIC are 0700 to 1830, Monday through Friday, excluding Government holidays. Hours of operation for the BMDO

Annex CIC are 0630 to 2000, Monday through Friday, excluding Government holidays.

COTS. Commercial-Off-The-Shelf software.

GOTS. Government-Off-The-Shelf software.

MSS. This is an automated support system that serves management to plan and control the operations of the organization.

(b)(2) [REDACTED]

SPIMS. The BMDO automated information management system provides comprehensive support to BMDO programmatic and administrative support needs. SPIMS provides access to planning, financial, program management and administrative data via on-line computer workstations, and generates printed reports and graphics.

System Software. System software directs the operation of the hardware and application software.

TCP/IP. Transmission Control Protocol/Internet Protocol.

3 REQUIREMENTS

3.1 AIS FACILITY OPERATIONS AND SERVICES. The Contractor shall operate and maintain the BMDO AIS Facility, maximizing system performance and minimizing downtime for all existing and future BMDO acquired ADPE and telecommunication hardware, systems software. Examples of future systems may include, Electronic Document and Workload Management System and Desk-Top Video system. In accomplishing this function, the Contractor shall:

3.1.a [REDACTED]

(b)(2)

3.1.b Establish and maintain a computer room working environment that is compliant with FIPS PUB #31, #87, #94 and DoD 5220.22-M, the NISPOM.

3.1.c Operate and maintain BMDO Headquarters telecommunications links originating or terminating in the BMDO AIS Facility, all telecommunications hardware, and CRYPTO equipment as listed in Annex B of this SOW. Receive CRYPTO keys, load encryption devices (KGs), and destroy CRYPTO keys.

3.1.d

(b)(2) [REDACTED]

(b)(2) (1) [REDACTED]

(2) Develop and implement back-up strategy coordinated with the AIS COTR and the MSS Services COTR, submitted to the Government for approval 25 working days after contract award. (CDRL A001).

(b)(3):5 USC §574(j) (b)(2) (3) Prior to Government approval of the [REDACTED] required under subparagraph 3.1.d(2), perform [REDACTED]

3.1.e Monitor and audit LAN components, WAN components, telecommunications links, and SPIMS platform components; review operational performance diagnostic reports for systems status and proper operations and potential AIS malfunctions. This effort shall include:

(1) Responding to a critical AIS malfunction within 15 minutes and to a non-critical malfunction within one working hour of determination of hardware or software malfunction(s). Verbally and/or electronically notify the COTR or authorized Government representative; the Director, Information Systems; and the Deputy of Program Operations immediately, when system failures occur or system shutdowns are necessary and when systems are again operational.

(2) Taking action as soon as an AIS malfunction has been detected to either correct faults that can be corrected by the

Contractor and are not covered under an existing maintenance contract or contact the designated contractor personnel under the applicable maintenance contract(s). Prior to taking the system down to either correct a problem or perform preventive maintenance actions, the Contractor shall provide estimated system downtime, problem characteristics, recommended solutions, and proposed schedule to the COTR or other authorized Government representative. Once approval is received from either the COTR for this Contract or his/her authorized Government representative, the system may be taken down. The Contractor shall assist maintenance personnel with the diagnostics and problem resolution.

(3) Develop, for COTR approval, procedures for security audit reporting and implement the procedures upon COTR approval. Provide monthly system security audit reports to the COTR and Information Systems Security Officer (ISSO) in accordance with the Government approved security audit procedures. Identify security breaches or suspicious systems activities, such as incorrect remote log-ons, to both the COTR and ISSO immediately. Based upon the ISSO's guidance and approval, correct all security breaches. (CDRLs A002, A003)

3.1.f. Provide network administration to include managing and maintaining all BMDO mail systems, managing all TCP/IP addresses, adding/deleting user accounts as necessary, modifying system privileges to users, and overseeing user data storage requirements and file clean-up. Provide monthly network utilization reports to include system utilization and downtime, E-Mail gateway statistics, and network performance statistics. (CDRL A004)

3.1.g Develop, for COTR approval, maintain, and implement a Configuration Management Plan (CMP) that includes methodology and procedures for managing and documenting all system changes to include hardware/software additions, deletions and/or upgrades. (CDRL A005).

3.1.h Update site drawings quarterly to reflect all hardware additions to include telecommunications connections, cable runs, and new system components. (CDRL A006)

3.1.i Provide analysis and programming support to install and configure the computer operating systems software (e.g., DEC VMS 5.5, Netware, Windows NT, Open VMS) for version changes and upgrades and/or system and security improvements in accordance with the Government approved CMP.

3.1.k Install and/or upgrade BMDO acquired COTS/GOTS software in accordance with the Government approved CMP. Resolve compatibility problems with newly installed hardware or software. Also, install and maintain, in coordination with the AIS COTR and the MSS Services COTR, MSS-developed software on the BMDO LAN.

3.1.l Monitor and review the existing BMDO AIS Facility and telecommunications network capacity to ensure continued support for the increase in personal computer workstations set forth in paragraph 1.1.f of this SOW.

3.1.m Maintain the BMDO AIS Resources Technical Data Library of ADP assets as required by the CMP, to include all COTS/GOTS master diskettes and manuals, telecommunication configuration diagrams, ADPE manuals, systems software, and Government accepted MSS-developed software and documentation.

3.1.n Develop for COTR approval and maintain a BMDO AIS

(b)(2) [REDACTED]
[REDACTED] (CDRL A007)

(b)(2) 3.1.o In accordance with the Government approved [REDACTED]
(b)(2) [REDACTED] and provide test results to the COTR. (CDRL A004)

3.2 CIC OPERATIONS AND SERVICES. The Contractor shall operate the two CICs described in paragraph 2.2. for the purpose of providing system and operations information leading to increased user knowledge and reduced user downtime. This shall include Help Desk operations; coordination and accomplishment of troubleshooting to include resolution of hardware or software compatibility issues; implementation COTR approved PC hardware or COTS/GOTS software installations or upgrades; performance of computer virus prevention and inoculations; installation and maintenance of existing and additional LAN drops to accommodate increases in BMDO personal computer workstations; and provision of informal, hands-on training to new BMDO personnel on existing and new BMDO PC hardware and software, including usage of the BMDO LAN with the exception of MSS-developed software. In providing these services, the Contractor shall:

3.2.a Maintain hours of operation as described in Section 2.2 "CIC(s)" of this SOW.

3.2.b Provide a minimum of two CIC personnel at each location who are capable of supporting the standard office automation suite of software (Windows 95; Microsoft Office 7.0 with Access,

Exchange, and MS Schedule+; dBase) at an advanced level. All other CIC personnel must be proficient on the above software suite to the intermediate level. This level of expertise shall be maintained throughout the contract period(s) of performance.

3.2.c Provide Help Desk services and tasks, including:

(1) Installation, configuration, and preparation of personal computer workstations and software; user assistance with personal computer workstation hardware and software; and troubleshooting of hardware and software problems.

(2) Provide end-user Hot Line services responding to user questions and/or problems concerning BMDO PC and/or LAN software applications and hardware. All Hot Line calls shall be logged into the BMDO Help Desk Tracking System using the BMDO Magic Solution software. Problems shall be resolved over the phone when possible, or in person, within a response time of one CIC operating hour. The Contractor shall also collect, organize, and report monthly raw data, trend data, and summary data concerning problems reported to the CIC. (CDRL A004)

(3) Operate and update an electronic bulletin board or similar device to provide BMDO users operating tips, answers to routine questions, and other useful information.

(4) Provide to the COTR an end of day status via e-mail of all unresolved hardware or software problems including an estimated time for problem resolution for each.

(5) Provide operational and presentation support on the Image Boss 2000 (IB2000) system (RGB Technology Manual, "Image Boss 2000: Multiscreen Presentation Workstation Users Guide," Version 3.0) located in the BMDO Management Information Center (MIC) and Secure Conference Room (SCR). This support shall include training of BMDO personnel on the usage of the system. Additional IB2000 support may include rehearsing presentations with users and operating the system during presentations.

(6) Provide informal, "on-the-job" LAN system introductory training to new BMDO personnel prior to issuance of system passwords and Internet access. Training shall include PC hardware and software operation, LAN usage, and proper usage of Internet and World-Wide-Web (WWW). The contractor shall also ensure that removable hard drives (Mercury Megadrives) and PCs are configured, tested, and distributed to new Government personnel within two hours after completion of new user training.

(7) Provide formal classroom training on the standard office automation suite of software to all incoming BMDO personnel (average turn over rate of 50 people per year) in the BMDO provided training rooms that are equipped to seat a maximum of 8 people each.

(8) Create and maintain electronic versions of BMDO forms using the standard BMDO form designer program, Delrina PerForm Pro. The contractor shall install these forms on the BMDO AIS Facility LAN together with electronic versions of other Government forms downloaded from the DoD Forms Repository as identified by the BMDO Forms Manager and approved by the COTR.

3.2.d Install new or upgrade existing PC hardware, PC COTS/GOTS software, and LAN drops as approved by the COTR in accordance with the CMP.

3.2.e Compose quarterly newsletters not exceeding four (4) pages per issue. Upon COTR approval of content, distribute the newsletters electronically on the LAN system and provide one (1) hard copy to each BMDO Deputate, Directorate, and separate office, through the BMDO mail room. (CDRL A008)

3.3 ADP ACQUISITION AND INVENTORY SUPPORT. The Contractor shall provide administrative and technical support to BMDO for acquisition of technology upgrades, hardware, software, ADPE maintenance, software license renewals and emergency consumable supplies. The Contractor shall track and report the status of ADPE maintenance contracts and software licenses identified in Annex E. This effort includes renewal, based upon Government approval, of the aforementioned and future acquired software licenses. The Contractor shall maintain and update the existing inventory tracking system. In providing this support, the Contractor shall:

3.3.a Record all user acquisition requests and assist in the development of the necessary requirements documentation.

3.3.b Prepare draft requirements analyses, cost estimates, procurement requests, and other technical documents for ADP hardware, software, and ADPE maintenance procurements.

3.3.c Support POI in obtaining information from various Government organizations (e.g., Defense Supply Services, Washington (DSSW), BMDO Contracts Office (BMDO/DCT), and the Air Force, Army, Navy, and OSD) to procure hardware or software in the most efficient and cost effective way.

- 3.3.d Develop, for Government approval, and maintain an automated system to track all ADP acquisitions to include maintenance contracts and software license information. (CDRL A009)
- 3.3.e Provide end-of-day update via e-mail to COTR and Government ADP Acquisition Manager on status of all open ADP acquisitions.
- 3.3.f Report ADPE maintenance contract and software license status including expiration dates on a monthly basis to the COTR and Government ADP Acquisition Manager. Contracts and licenses expiring within six months shall be flagged for Government action. (CDRL A004)
- 3.3.g Renew and update, with Government approval, BMDO-owned software licenses.
- 3.3.h Maintain a centralized ADP procurement package and documentation file within BMDO/POI office space. Ensure that each original software license is maintained in this centralized file.
- 3.3.i Maintain and track the ADPE consumable supplies inventory to ensure uninterrupted operation of the AIS Facility. Prepare paperwork identifying required ADPE consumables for acquisition by the BMDO Supply Custodian. In an emergency, the Contractor shall acquire, with prior written PCO approval, consumable supplies; such as diskettes, printer toner cartridges, and Calcomp plotter supplies.
- 3.3.j Develop an acceptance test plan for newly purchased workstations, laptops, and peripherals or upgrades to existing workstations. In accordance with the Government approved acceptance test plan, perform acceptance testing prior to new PC installations or upgrades. (CDRL A010)
- 3.3.k Maintain the inventory in ready for issue condition of BMDO laptop computers.
- 3.3.l Monitor trends in maintenance activities to identify hardware becoming obsolete and submit recommendations for the replacement of such assets. (CDRL A004)
- 3.3.m The Contractor shall provide ADPE life-cycle and inventory support in accordance with the Government approved CMP. Specifically, the Contractor shall:

(1) Bar code new hardware within 2 working days of Government acceptance of ADPE;

(2) Update the BMDO automated inventory database to reflect new BMDO acquired ADPE, relocated or reassigned existing ADPE, and removal of ADPE. Provide monthly reports in accordance with the CMP (CDRL A004);

(3) Prepare, for Government approval, paperwork required by the DoD ARMS User Guide and in accordance with the CMP for either inter-agency transfers or disposal and surplussing of ADPE; and

(4) Archive hardware records from the database on the day of disposal.

3.4 AIS MAINTENANCE. The Contractor shall provide first level preventive and corrective maintenance of the AIS Facility Access Control System (ACS). Specifically, the Contractor shall:

(1) Conduct semi-annual preventive maintenance inspections of BMDO ACS components and interconnecting cables. Inspections shall include, as a minimum, visual inspection of access control system operation; verification of proper activation of electrical door strikes, door bell equipment, and request-to-exit buttons, including remote door release buttons.

(2) Replace defective components identified during inspections. This replacement will be from the Government maintained on-site spare parts package. During a Critical/Non-critical AIS Malfunction, the Contractor shall acquire, with prior written PCO approval, items not available in the on-site spare parts package. Each order shall not have a unit value that exceeds \$400.00 or a total value that exceeds \$3,900.00.

Item	Quantity
Remote door release button (Edwards 576-360)	4
Door chime (Nutone LB-12)	1
Door chime power supply (Nutone 301-N)	1
Request to exit pushbuttons (Ademco 273)	10
Electric door strike (SDC 16-K-24VDC)	4
Door strike power supply (Soundolier PS24-100)	1
20 ma current loop interface (GH-CL050 B)	1
Magnetic door contacts (Sentrol 1062)	4
Multiple switch monitor (Schlage 774)	1
Power supply (Schlage 3008)	1
Door controller (Schlage 708P)	1

Door controller (Schlage 808S)	1
Card reader (Schlage 2714)	1

(3) The contractor shall recommend, via e-mail, additions in type and quantity of on-site spares.

(4) The contractor shall respond to repair calls within two hours during normal working hours as described in section 2.2 "AIS Facility".

3.5 TECHNOLOGY MODERNIZATION.

The Contractor shall stay current with changes and upgrades to information technology products that may enhance the operations of the AIS Facility. The Contractor shall provide recommendations orally or electronically to the Government concerning these technologies. The Contractor shall:

3.5.a Keep abreast of new ADP technologies, and hardware and software products that may improve the efficiency and effectiveness of overall system performance and/or system security. In addition to local travel, the Contractor's staff may travel to participate in national seminars or meetings to research new technologies. All non-local trips shall be approved in accordance with special contract requirement H-2.

3.5.b Test and evaluate specific items of hardware, AIS software, or telecommunications products or Contractor prototyping from combinations of products. The Contractor shall:

(1) Acquire, as Contractor Acquired Property (CAP), COTR-recommended and PCO approved components necessary for test and evaluation.

(2) Develop test plans and evaluation criteria.

(3) Conduct tests.

(4) Report results of testing conducted under 3.5.b(3) above together with analyses and recommendations regarding acquisition and installation.

3.5.c Identify and provide recommendations, for Government approval, concerning the operational aspects of software and hardware, or system changes that will improve LAN and WAN and mini-computer performance. Recommendations shall be made to the COTR electronically.

4 CONTRACT TRANSITION.

4.1 Upon contract award, the Contractor shall exercise its best efforts and cooperation to effect an orderly and efficient start-up of the requirements set forth under this Statement of Work. This effort includes the transition of existing services from the incumbent contractor so as to provide for uninterrupted AIS services. The start-up of this contract and the transition of services from the incumbent contractor shall not exceed a period of 90 days from contract award.

4.2 Four months prior to expiration of the contract base period, the Contractor shall develop and submit to the COTR a plan to transition AIS Support Services to the Government or to a successor contractor. The Plan shall be updated and submitted for COTR approval four months prior to the expiration of any contract option period, if exercised by the Government. Upon approval by the Contracting Officer, the Contractor shall implement the approved plan in coordination with the successor contractor and/or the Government. (CDRL A011)

ANNEX A
AIS FACILITY SUMMARY EQUIPMENT AND SOFTWARE LIST

<u>Name</u>	<u>Version</u>
Summary of Software	
VAX 8820 Platform	
Digital VMS	5.50
Digital C Compiler	3.10
Digital Polycenter Data Collector	2.00
Digital Performance Advisor	2.00
Digital Polycenter Capacity Planner	2.00
Digital DECnet	4.00
Oracle Pro*C	1.50
Oracle Forms Menu	3.00
Oracle Report Writer	1.10
Oracle RDBMS	7.0.15
Oracle SQL *Plus	3.10
Oracle SQL *Net	1.10
Oracle TCP/IP Driver	1.10
PicSure Plus	4.20
TGV Multinet	3.20
Executive Software Disk Keeper	6.00
Executive Software I/O Express	2.10
Summary of Software	
MicroVAX 3100 Platform	
Digital VMS	5.50
Digital DECNet	1.50
Oracle Pro*C	1.50
Oracle Forms/Menu	3.00
Oracle Report Writer	1.10
Oracle RDBMS	7.0.13
Oracle SQL *Plus	3.10
Oracle SQL *Net	1.10
Oracle TCP/IP Driver	1.10
TGV Multinet	3.20
Software House C-Cure	4.50
Executive Software Disk Keeper	6.00

	QTY
Summary of Hardware	
VAX 8820	1
Cybernetics Tape Backup	1
Cybernetics Disk RAID Array	1
TU 81 9 Track Backup Unit	1
MicroVax 3100	2
8mm Tape Backup Unit	1
TK 50 Backup Unit	1
Peripherals	
Talaris Printers	2
Calcomp Plotters	4
VAX LNO3 Printer	1

ANNEX B
LAN SERVER/WORKSTATION SUMMARY HARDWARE LIST

Name	QTY
Summary of Hardware	
LAN Workstations	
486 66 MHZ	430+
Pentium/90 PCS	5
Servers	
Zenith Pentium Servers	6
Everex 486 Servers	3 (not part of LAN)
Everex Pentium Servers	4 (not part of LAN)
Intel Storage Express	2
Communication/Encryption Devices	
Cabletron MMAC 8 Routers	6
Cisco Routers	4
KG 94A	9
KG 194	15
KG 84	3
Standalones	
Apple SE	13
Apple II	2
Apple IISI	3
Apple IICI	31
Apple IIX	27
Apple IICX	11
Apple IIFX	3
Apple IIVX	1
Mac Plus	4
Apple IIVE	1
Apple Classic	1
Apple Quadra 840	1
Apple Quadra 610	1
Apple Quadra 650	3
Apple Power Mac	9

486 Laptop	78
386 Laptop	4
286 Laptop	5
Apple Powerbook 170	1
Apple Powerbook 180	8
Apple Powerbook 540C	20
Peripherals	
LaserJet	14
LaserJet II	20
LaserJet IID	21
LaserJet III	29
LaserJet 111D	1
LaserJet III SI	22
LaserJet 4 SI	7
LaserJet 4	34
LaserJet 4	28
LaserJet 4M Plus	4
LaserJet 4MV	1
LaserJet 4P	3
LaserJet 5MP	1
LaserJet 5P	13
HP DeskJet 310	2
HP DeskJet 320	52
HP DeskJet 660	1
Apple LaserJet II	
Apple LaserWriter	1
Apple LaserWriter IIG	1
Apple LaserWriter II	24
Apple ImageWriter LQ	1
Apple ImageWriter II	1
Apple LaserWriter 16	1
Apple LaserWriter Pro	2
Apple Write Move II	2
Apple Portable StyleWriter	7
Panasonic Printer	2
Cannon BubbleJet 330	1
QMS ColorScript 100	3
Phaser PXI	2

Phaser 220I Color	2
Phaser II SDX	1
NEC Silentwriter	1
Texas Instruments Omnilaser	1
HP Scanner	8

ANNEX C
LAN SERVER/WORKSTATION SUMMARY SOFTWARE LIST

Name	Version	QTY	Type
PC Workstations/Network Servers			
Novell NetWare	3.12	8X100	(server X user)
NetWare NFS Gateway		7X100	(server X user)
NFS Client for DOS	3.0D	7X100	(server X user)
LAN Workgroup	4.20	9X100	(server X user)
LAN WorkPlace, NFS Client		9X100	(server X user)
LAN WorkPlace, Macintosh		6X200	(server X user)
NetWare Early Warning System	1.50D	9	(server)
NetWare Management	2.00	9	(server)
LAN Directory		9	(server)
LAN Desk Manager	1.51	7X100	(server X user)
LAN Desk Virus Protect	2.10	7X100	(server X user)
Storage Express Central Console	1.41	4	(server)
LAN Work Station	5.00	515	(user)
LAN Manager		5	(server)
Remote LAN View for Windows	4.20	1	(user)
MS-DOS 6.2 Plus Enhanced Tools	6.20	515	(user)
Windows for Workgroups	3.11	515	(user)
Microsoft Project	4.00	111	(server)
MS Office Pro	4.30	400	(server)
MS Word	6.00		
Excel	5.00		
Powerpoint	3.00		
Access	2.00		
Mail Check	2.00	515	(server)
Microsoft Scheduler +		515	(server)
Groupwise	4.10	515	(server)

Delrina Formflow Designer	1.10	10	(user)
Delrina Formflow Filler	1.10	200	(user)
Harvard Graphics for Windows	3.00	75	(user)
Lotus 1-2-3 for Windows	4.01	134	(user)
WordPerfect for Windows	6.10	315	(server)
WordPerfect Office for Windows	4.00	550	(server)
dBase for Windows	5.00	12	(user)
Support Magic	2.12	10	(user)
Cognos Impromptu	2.00	35	
Oracle SQL *Net	1.1,2.0	unlimited	
Oracle SQL*Forms/Menu			
Em4105	5.00	250	(user)
Kane Security Analyst			
Netscape Navigator	3.50	5	(user)
NetManage Chameleon	4.50	5	(user)
NLM Global Access w/ODT Lite	3.00	1	(user)

Annex D
Attachment 1
HQ0006-97-C-0001
Page 1

ANNEX D
LAN IMPLEMENTATION PLAN - PROPOSED SYSTEM DESIGN

000085

5. PROPOSED SYSTEM DESIGN

5.1 BACKGROUND

The MISSI Workstation Security Package (WSP) which addresses multi-level security risks at the workstation is still under development by NSA. In lieu of the WSP, several alternatives were explored in the development of this design. Among these alternatives were the use of multilevel compartmented workstations (CMW), Mail Gateways, A/B switches on the workstations, and centralized processing and storage for classified diskless workstations. Except for A/B switches, all these alternatives were rejected because the constraints of security, cost, and performance placed on the functional requirements of the BMDO LAN would be untenable.

Since the current requirements of the BMDO LAN cannot wait for the Multilevel Information System Security Initiatives (MISSI) under development by the National Security Agency (NSA), an interim approach employing separated System High LANs for processing classified and unclassified data has been used. The UNCLASS LAN will be interconnected to the OSD LAN through a secure gateway for connectivity outside the BMDO LAN. For workstations that require access to both the Unclassified and Classified LANs, a switch box will control the workstation access. The following paragraphs detail the proposed design.

5.2 DESIGN APPROACH

The proposed architecture employs a modular approach to the BMDO LAN design. The basic module is the workgroup which contains all the network resources necessary to support approximately 100 users. The next module in the architecture is the facility. The facility module provides network wide computation resources, communication paths between workgroups and network management components. Facility modules are bounded by the ownership and control of the communications lines used to interconnect the workgroups.

In Figure 5-1, two geographically separated facilities have workgroup LANs. Workgroups A, B, and C are part of the facility module since the interconnection lines are owned and controlled by the owning organization within each facility. However, since the connectivity between the two facilities is over a leased line, each of the locations is considered to be a standalone facility. For BMDO, both the Pentagon and Annex are considered standalone facilities. The advantage of this approach is that any number of facilities and/or workgroups can be added or moved to the network without altering the basic architecture.

In this design, one of the major objectives is to provide distributed resources that can be managed and controlled from any location within the network. Each facility contains all the components to function as a independent network which means that each facility is equal in capability and functionality. While the network management components are distributed throughout the network, network administration and control for any network device can be exercised from any designated workstation.

5.3 LAN VERSUS WAN CONNECTIVITY

The ability to classify a communication circuit between facilities as either LAN or WAN connection becomes more difficult as the complexity of the LAN increases. For the purpose of this plan, communication circuits that provide peer-to-peer services through the ISO Data Link Layer (Layer 2) are considered a LAN connection and communication circuits that provide peer-to-peer services between the ISO Network Layer (Layer 3) and above are WAN circuits. In simpler terms, a circuit that connects similar topologies, i.e. NTAS to NTAS will most likely be a LAN circuit. However, a circuit that provides communication between a NTAS host and a UNIX host will most likely be a WAN connection.

5.4 WORKSTATION CONNECTIVITY

Workstations may be implemented in one of three configurations in the BMDO LAN. These configurations are 1) Unclassified Only; 2) Classified Only; or 3) Switched Classified/Unclassified/Standalone. The use of a switch to select a network connection, unclassified or classified, increases the risk of inadvertently connecting a workstation operating in one mode to the network of the other mode, i.e. unclassified workstation to classified LAN. To mitigate this risk, a combination of color coding, connector keys, and boot processes will be implemented. A detailed discussion of workstation security is provided in Section 7.1, Workstation Security.

5.5 BMDO CLASSIFIED LAN TOPOLOGY

5.5.1 PENTAGON FACILITY

Figure 5-2 depicts the typical top-down view of the Pentagon portion of the BMDO Classified LAN. The facility consists of one (1) facility module and three (3) workgroup modules. The topology of the Pentagon facility uses IEEE Ethernet 10BASE-F FOIRL over multi-mode fiber optic cable in a STAR configuration. Logically, the workgroup

BMDO DESIGN AND IMPLEMENTATION PLAN

operates as a Carrier Sense Multiple Access/Carrier Detection (CSMA/CD) 802.3 LAN. In this configuration, each workgroup functions as an independent segment with up to a maximum of 90 users per workgroup. This will provide improved response times over the current single segment LAN with over 200 users accessing the same segment. Also, the workgroup servers will be connected to the workgroup side of the MMAC-8FNB resulting in a logical distribution of servers while the physical location of the servers will be centralized.

(b)(2)



FIGURE 5-2 CLASSIFIED LAN - PENTAGON FACILITY

Each of the Pentagon workgroup hubs and network backbone devices will be connected to the facility concentrator over a 100 MBps FDDI connection. The FDDI ring improves response times and reduces contention over equivalent 10 MBps Ethernet buses. Network resources to be connected directly to the FDDI backbone include a shared network wide server(s), CD-ROM servers, network management devices, etc.

5.5.2 ANNEX FACILITY

Figure 5-3 depicts the typical top-down view of the Annex portion of the BMDO Classified LAN. The facility consists of one (1) facility module and up to five (5) workgroup modules.

The topology of the Annex facility uses IEEE Ethernet 10BASE-T UTP cable in a STAR configuration. Logically, the workgroup operates as a Carrier Sense Multiple Access/Carrier Detection (CSMA/CD) 802.3 LAN. In this configuration, each workgroup hub provides a Ethernet segment for up to 24 ports per segment. Each workgroup segment is connected through a Ethernet switch to an internal FDDI ring which provides connections to the workgroup server and other workgroup network devices. Except for the 12th floor in which the facility and workgroup hubs are collocated, work-

BMDO DESIGN AND IMPLEMENTATION PLAN

group hubs will be connected to the facility hub over encrypted T1/E1 lines. The encryption devices will be NSA Type I Encryption such as KG-94.

5.6 UNCLASSIFIED LAN TOPOLOGY

5.6.1 PENTAGON FACILITY

Figure 5-4 depicts the typical top-down view of the Pentagon portion of the BMDO Unclassified LAN. The Unclassified LAN is similar to the Classified LAN except that the Unclassified LAN will employ DES encryption between facilities and will provide connectivity to the INTERNET through a secure gateway (firewall). The facility will consist of one (1) facility module and three (3) workgroup modules. The topology of the Pentagon facility uses IEEE Ethernet 10BASE-F FOIRL over multi-mode fiber optic cable in a STAR configuration. Logically, the workgroup operates as a Carrier Sense

BMDO DESIGN AND IMPLEMENTATION PLAN

Multiple Access/Carrier Detection (CSMA/CD) 802.3 LAN. In this configuration, each workgroup functions as an independent segment with up to a maximum of 90 users per workgroup. This will provide improved response times over the current single segment LAN with over 200 users accessing the same segment. Also, the workgroup servers will be connected to the workgroup side of the MMAC-8FNB resulting in a logical distribution of servers while the physical location of the servers will be centralized.

5.6.2 ANNEX FACILITY

Figure 5-5 depicts the typical top-down view of the Annex portion of the BMDO Unclassified LAN. The facility consists of one (1) facility module and up to five (5) workgroup modules.

The topology of the Annex facility uses IEEE Ethernet 10BASE-T UTP cable in a STAR configuration. Logically, the workgroup operates as a Carrier Sense Multiple Access/Carrier Detection (CSMA/CD) 802.3 LAN. In this configuration, each workgroup hub provides a Ethernet segment for up to 24 ports per segment. Each workgroup segment is connected through a Ethernet switch to an internal FDDI ring which provides connections to the workgroup server and other workgroup network devices. Except for the 12th floor in which the facility and workgroup hubs are collocated, workgroup hubs will be connected to the facility hub over encrypted T1/E1 lines. The encryption devices will conform to the NIST DES standard.

(b)(2)



5.7 BMDO LAN ELEMENTS

The BMDO LAN has been organized into subsystems or elements to simplify the design effort. These elements include:

- **Transmission Subsystem**
 - ⇒ Horizontal Distribution Cable Plant
 - ⇒ Riser Cable Plant
- **Network Subsystem**
 - ⇒ Workgroup Concentrators
 - ⇒ Facility Concentrators
 - ⇒ Workgroup File Servers

BMDO DESIGN AND IMPLEMENTATION PLAN

- ⇒ Facility File Servers
- ⇒ CD-ROM Servers
- ⇒ Uninterruptible Power Supplies (UPS)
- Client Subsystem
 - ⇒ Workstations
 - ⇒ Printers
- Network Management Subsystem
 - ⇒ Tape Back-up Units
 - ⇒ NMS Workstations
 - ⇒ SNMP software
 - ⇒ Server Management Service
- Communications Subsystem
 - ⇒ Secure Gateway
 - ⇒ SMTP Mail Gateway
 - ⇒ Communications Servers
 - ⇒ Network Router

In most cases, the implementation of these elements is the same for both the Classified and Unclassified LANs. The primary difference is the use of Type I encryption devices in the Classified LAN and the connection of the Unclassified LAN to the INTERNET. The following paragraphs discuss the features of each subsystem used in the BMDO LAN design.

5.7.1 TRANSMISSION SUBSYSTEM

The transmission subsystem provides an internal communications architecture consisting of the cable plant and riser components necessary for providing connectivity between the network components.

5.7.1.1 Horizontal Distribution Cable Plant

The horizontal distribution cable plant consists of the cabling components used to connect the workstations to the workgroup concentrators. These components include the workstation jumper cables used to connect the workstation or workstation switch box to the wall outlet, wall outlets and jacks, and cable connecting the LAN equipment room patch panels to the wall outlets. The existing cable plant will continue to use the fiber optic cabling while all new cabling will use EIA/TIA Category 5 UTP cabling.

In terms of performance, there is little difference in the capabilities of the fiber optic cable over the UTP when cable drops are less than 350 feet. Current FO technology uses 62.5/125 multi-mode fiber optic cable. The inherent bandwidth of this multi-mode cable is limited to 200 MHz. Since fiber is AM (on/off) modulated, binary is the maximum encoding that can be accomplished on multi-mode cable providing for a throughput of 200 MBps maximum. On the other hand, an enhanced Category 5 UTP cable has

BMDO DESIGN AND IMPLEMENTATION PLAN

a rated bandwidth of 120 MHz. The use of copper cable supports M-ary signaling which allows for over 200 MBps throughput over the copper lines.

Shielded twisted pair cable has not been specified because no TEMPEST requirement exists. Current technology does not support Category 5 shielded twisted pair cable as a migration path and the electrical performance characteristics of shielded cable limits the expected bandwidth of the cable. Should future uses require additional security precautions, the use of DES or DSS encryption or the use of NSA's MISSI INE over the network should satisfy security requirements.

5.7.1.1.1 Pentagon Facility

The horizontal distribution cable plant in the Pentagon facility is GFE. The plant consists of 62.5/125 of multi-mode fiber optic cable with zip (2 strand) construction. The cable is terminated with 'ST' type connectors. No additional cable runs are required in the main facility.

5.7.1.1.2 Annex Facility

The horizontal distribution cable plant in the Annex facility will be new. An existing 10BASE-2 coaxial cable on the 12th floor will be replaced by the new cable plant. The Annex cable plant will use an EIA/TIA Category 5 Unshielded Twisted Pair (UTP) architecture. The UTP cable will be 4 pair terminated in EIA/TIA 568B RJ-45 jacks. EIA/TIA 568 is the industry standard for telecommunication and network cabling. The Category 5 cable is rated to support data rates up to 100 MBPS and has been specified in the CDDI and Fast Ethernet specifications. Use of the Category 5 cable insures a migration path to either 100 MBPS CDDI or 100 MBPS Ethernet.

The initial implementation at the annex building will cable the 12th, 10th and 5th floors. The 5th floor has been also referred to as Xth floor in other documents. A subsequent phase may cable the 8th floor in the annex facility. Dual drops, one for classified and one for unclassified has been planned. The drops for unclassified and classified will be color coded to aid in recognition of the drops. The outer sheath color of the unclassified cable will be blue while the classified cable will be red. In addition, the unclassified wall jacks and workstation jumpers will be keyed to prevent the accidental connection of an unclassified drop to the classified network. The 12th floor has 192 classified and 192 unclassified drops planned while the 10th and other floors have 120 classified and 120 unclassified drops planned.

5.7.1.1.3 Horizontal Distribution Bill of Materials

The horizontal distribution components include:

TABLE 5-1 HORIZONTAL DISTRIBUTION BILL OF MATERIALS

ITEM	MEGR	PART #	DESCRIPTION	UNIT	QTY
12 th Floor Unclassified LAN Drops (192 Outlets)					
CB001	Hitachi		Category 5 UTP Cable 1000' Reels	RL	39
CB002	ACC	5101	Box Eliminator	EA	192

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFGR	PART #	DESCRIPTION	UNIT	QTY
CB003	Panduit	MFPD1EL	Face Plate, Simplex, Ivory	EA	192
CB004	Panduit	MUJC588BB	CAT 5 RJ-45 Jack, Black	EA	192
CB005	ACC	6314	Cable Label, Self Laminating	EA	384
CB006	ACC	4003	Clip Mounting, CC27	EA	7,500
CB007	ACC	4001	Booster, Red Shot, 10 per Strip	EA	750
CB008	ACC	6304	Ty-Wrap, 15"	EA	5,600
CB009	ACC	6302	Ty-Wrap, 8"	EA	4,000
CB010	ACC	6301	Ty-Wrap, 4"	EA	1,400
CB011			Miscellaneous Consumable H/W	LT	1
12th Floor Classified LAN Drops (192 Outlets)					
CB012	Hitachi		Category 5 UTP Cable 1000' Reels	RL	39
CB013	ACC	5101	Box Eliminator	EA	192
CB014	Panduit	MFPD1EL	Face Plate, Simplex, Ivory	EA	192
CB015	Panduit	MUJC588BR	CAT 5 RJ-45 Jack, Red	EA	192
CB016	ACC	6314	Cable Label, Self Laminating	EA	384
CB017	ACC	4003	Clip Mounting, CC27	EA	7,500
CB018	ACC	4001	Booster, Red Shot, 10 per Strip	EA	750
CB019	ACC	6304	Ty-Wrap, 15"	EA	5,600
CB020	ACC	6302	Ty-Wrap, 8"	EA	4,000
CB021	ACC	6301	Ty-Wrap, 4"	EA	1,400
CB022			Miscellaneous Consumable H/W	LT	1
10th Floor Unclassified LAN Drops (120 Outlets)					
CB023	Hitachi		Category 5 UTP Cable 1000' Reels	RL	24
CB024	ACC	5101	Box Eliminator	EA	120
CB025	Panduit	MFPD1EL	Face Plate, Simplex, Ivory	EA	120
CB026	Panduit	MUJC588BB	CAT 5 RJ-45 Jack, Black	EA	120
CB027	ACC	6314	Cable Label, Self Laminating	EA	240
CB028	ACC	4003	Clip Mounting, CC27	EA	5,000
CB029	ACC	4001	Booster, Red Shot, 10 per Strip	EA	500
CB030	ACC	6304	Ty-Wrap, 15"	EA	3,500
CB031	ACC	6302	Ty-Wrap, 8"	EA	2,500
CB032	ACC	6301	Ty-Wrap, 4"	EA	1,000
CB033			Miscellaneous Consumable H/W	LT	1
10th Floor Classified LAN Drops (120 Outlets)					
CB034	Hitachi		Category 5 UTP Cable 1000' Reels	RL	24
CB035	ACC	5101	Box Eliminator	EA	120
CB036	Panduit	MFPD1EL	Face Plate, Simplex, Ivory	EA	120
CB037	Panduit	MUJC588BR	CAT 5 RJ-45 Jack, Red	EA	120
CB038	ACC	6314	Cable Label, Self Laminating	EA	240
CB039	ACC	4003	Clip Mounting, CC27	EA	5,000
CB040	ACC	4001	Booster, Red Shot, 10 per Strip	EA	500
CB041	ACC	6304	Ty-Wrap, 15"	EA	3,500
CB042	ACC	6302	Ty-Wrap, 8"	EA	2,500
CB043	ACC	6301	Ty-Wrap, 4"	EA	1,000
CB044			Miscellaneous Consumable H/W	LT	1
5th Floor Unclassified LAN Drops (120 Outlets)					
CB045	Hitachi		Category 5 UTP Cable 1000' Reels	RL	24

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFR	PART #	DESCRIPTION	UNIT	QTY
CB046	ACC	5101	Box Eliminator	EA	120
CB047	Panduit	MFPD1EL	Face Plate, Simplex, Ivory	EA	120
CB048	Panduit	MUJC588BB	CAT 5 RJ-45 Jack, Black	EA	120
CB049	ACC	6314	Cable Label, Self Laminating	EA	240
CB050	ACC	4003	Clip Mounting, CC27	EA	5,000
CB051	ACC	4001	Booster, Red Shot, 10 per Strip	EA	500
CB052	ACC	6304	Ty-Wrap, 15"	EA	3,500
CB053	ACC	6302	Ty-Wrap, 8"	EA	2,500
CB054	ACC	6301	Ty-Wrap, 4"	EA	1,000
CB055			Miscellaneous Consumable HW	LT	1
5th Floor Classified LAN Drops (120 Outlets)					
CB056	Hitachi		Category 5 UTP Cable 1000' Reels	RL	24
CB057	ACC	5101	Box Eliminator	EA	120
CB058	Panduit	MFPD1EL	Face Plate, Simplex, Ivory	EA	120
CB059	Panduit	MUJC588BR	CAT 5 RJ-45 Jack, Red	EA	120
CB060	ACC	6314	Cable Label, Self Laminating	EA	240
CB061	ACC	4003	Clip Mounting, CC27	EA	5,000
CB062	ACC	4001	Booster, Red Shot, 10 per Strip	EA	500
CB063	ACC	6304	Ty-Wrap, 15"	EA	3,500
CB064	ACC	6302	Ty-Wrap, 8"	EA	2,500
CB065	ACC	6301	Ty-Wrap, 4"	EA	1,000
CB066			Miscellaneous Consumable HW	LT	1

5.7.1.2 Riser Cable Plant

The riser cable plant consists of the cabling components used to provide connectivity between workgroup concentrators and facility concentrators when these concentrators are not collocated. These components include the fiber optic jumper cables used to connect concentrators to the cable plant, fiber optic cabling, and FO terminating equipment. The fiber optic cable plant will use 62.5/125 multi-mode fiber optic cable terminated with 'ST' type connectors. The cable plant will be installed in a physical star with the location of the facility concentrator forming the apex of the star.

5.7.1.2.1 Pentagon Facility

The Pentagon does not require any riser system at this time.

5.7.1.2.2 Annex Facility

The Annex has a planned riser from the 12th floor to the 10th floor, 12th floor to the 8th floor, and 12th floor to 5th floor.

5.7.1.2.3 Riser Bill of Materials

The components allocated to the riser system include:

BMDO DESIGN AND IMPLEMENTATION PLAN

TABLE 5-2 RISER BILL OF MATERIALS

ITEM	MFGR	PART#	DESCRIPTION	UNIT	QTY
RISER SYSTEM (CRYSTAL CITY) 3 FLOORS					
RS001	COMM/L		2" RIGID CONDUIT	FT	100
RS002	COMM/L		2" RIGID COUPLING	EA	10
RS003	COMM/L		2" RIGID CONNECTOR	EA	24
RS004	ACC	3005	2" EMT CONDUIT	FT	100
RS005	ACC	3205	2" COMPRESSION COUPLER	EA	10
RS006	ACC	3719	2" KINDORF STRAP	EA	84
RS007	CROUSE	BLB-7/BG68	2" CONDULET WITH COVER	EA	9
RS008	ACC	3105	2" COMPRESSION CONNECTOR	EA	10
RS009	ACC	3506	2" PLASTIC BUSHING	EA	10
RS010	ACC	3404	2" RIGID LOCKNUT	EA	24
RS011	ACC	6203	JETLINE	EA	1
RS012	HOFFMAN	1A24X24X6	EMI/RFI LOCKABLE BOX	EA	3
RS013	ACC	4004	1/4" DROP-IN ANCHOR	EA	500
RS014	ACC	4102	1/4-20X1 PAN HEAD SCREW	EA	500
RS015	ACC	4402	1/4" FLAT WASHER	EA	1,000
RS016	ACC		1/4" LOCK WASHER	EA	500
RS017	ACC	4201	1/4-20 HEX NUT	EA	500
RS018	ACC	3013	UNISTRUT CHANNEL	FT	120
RS019	ACC	3010	1/4" THREADED ROD	FT	100
RS020	ACC	4106	1/4"X3" TOGGLE BOLT	EA	100
RS021	ACC	6314	CABLE LABEL	EA	32
RS022	SEICOR	2K51-31141-24	DUPLEX FO CABLE, RISER	FT	1,200
RS023	AMP	504032-1	ST CONNECTOR	EA	48
RS024	TECHNET	K1	FIBER SPOOL (U/W SERVICE LOOPS)	EA	20
RS025	HOFFMAN	1A-12N126	NEMA GREY JUNCTION BOXES	EA	3
RS026	ACC	6212	FIRE STOP, CERAMIC FIBER	EA	16
RS027	ACC	6213	FIRE STOP, PUTTY	EA	16
RS028			MISC. CONSUMABLE MATERIALS	LT	1

5.7.2 NETWORK SUBSYSTEM

The BMDO IS requires an upgrade to the NOS on the Classified LAN and new NOSs for the Unclassified LAN, a Graphics User Interface (GUI), integrated office software application suite (word processor, spreadsheet, database, graphics, electronic mail), hardware and software components to fully implement connectivity and support functional and operational requirements for a mandatory 455 workstations with capability for expansion to over 700 workstations. The salient characteristics of the proposed solution include:

TABLE 5-3 NETWORK SUBSYSTEM CHARACTERISTICS

SOW Requirement	Proposed Equipment
<p>Network Servers</p> <ul style="list-style-type: none"> • Minimum of 80586/90 Pentium configuration. • Network servers shall be distributed. 	<ul style="list-style-type: none"> • HP NetServer LH Pentium/100 w/32 MB RAM • Workgroup Servers distributed with workgroups • Common resource servers centrally located in existing computer room.

BMDO DESIGN AND IMPLEMENTATION PLAN

SOW Requirement	Proposed Equipment
Network Operating System (NOS)	<ul style="list-style-type: none"> • Microsoft NT Advanced Server 3.51
Network Interface Cards (NICs) <ul style="list-style-type: none"> • Ethernet EISA or PCI 32 bit NICs for network servers. 	<ul style="list-style-type: none"> • DEC PCI 32 bit 100Mbps FDDI NIC
Network CD-ROM	<ul style="list-style-type: none"> • Procomm Tower 21 with 14 CD-ROM Drives (expandable to 21 CD-ROM Drives)
Uninterruptable Power Supplies (UPS)	<ul style="list-style-type: none"> • APC Matrix 5000VA and 3000VA Systems
Secure Gateway (Firewall)	<ul style="list-style-type: none"> • Secure Computing - Sidewinder 2.X
World Wide Web/FTP Server	<ul style="list-style-type: none"> • Microsoft NTAS • Purveyor WWW for NT Server
Workgroup Concentrators	Unclassified LAN <ul style="list-style-type: none"> • Cabletron MMAC-M8FNB w/ <ul style="list-style-type: none"> • UTP 24 Port Ethernet Segments Modules • 6 Port Ethernet/FDDI Switch • FDDI Connectivity to Server(s) • FDDI or T-1 Connectivity to Facility Classified LAN <ul style="list-style-type: none"> • Cabletron MMAC-M8FNB w/ <ul style="list-style-type: none"> • FOIRL 18 Port Ethernet Modules • FDDI Connectivity to Servers • FDDI Connectivity to Facility
Facility Concentrators	<ul style="list-style-type: none"> • Cabletron MMAC-Plus w/ <ul style="list-style-type: none"> • FDDI Connectivity to Workgroup • FDDI or T-1 Connectivity to WAN • Upgradable to ATM

The Secure Gateway and WWW/FTP server in the above table is only applicable the BMDO UNCLASSIFIED LAN. INTERNET/MILNET (DDN X.25) access at the workstation level for all workstations will be provided on the BMDO UNCLASSIFIED LAN. Each workstation will have the capability to access Transmission Control Protocol/Internet Protocol (TCP/IP) services to permit INTERNET processing. In addition, BMDO IS will utilize Microsoft Mail as the enterprise-wide mail system. A Simple Mail Transfer Protocol (SMTP) gateway will be provided to link the MS Mail to the INTERNET mail system.

The network subsystem provides the architecture for providing workgroup and facility application, file and print services and connectivity concentrators to couple the network users to the network services. The network subsystem consists of hardware and software components organized into workgroup and facility modules. The distribution of facility and workgroup modules is as follows:

TABLE 5-4 WORKGROUP - FACILITY DISTRIBUTION

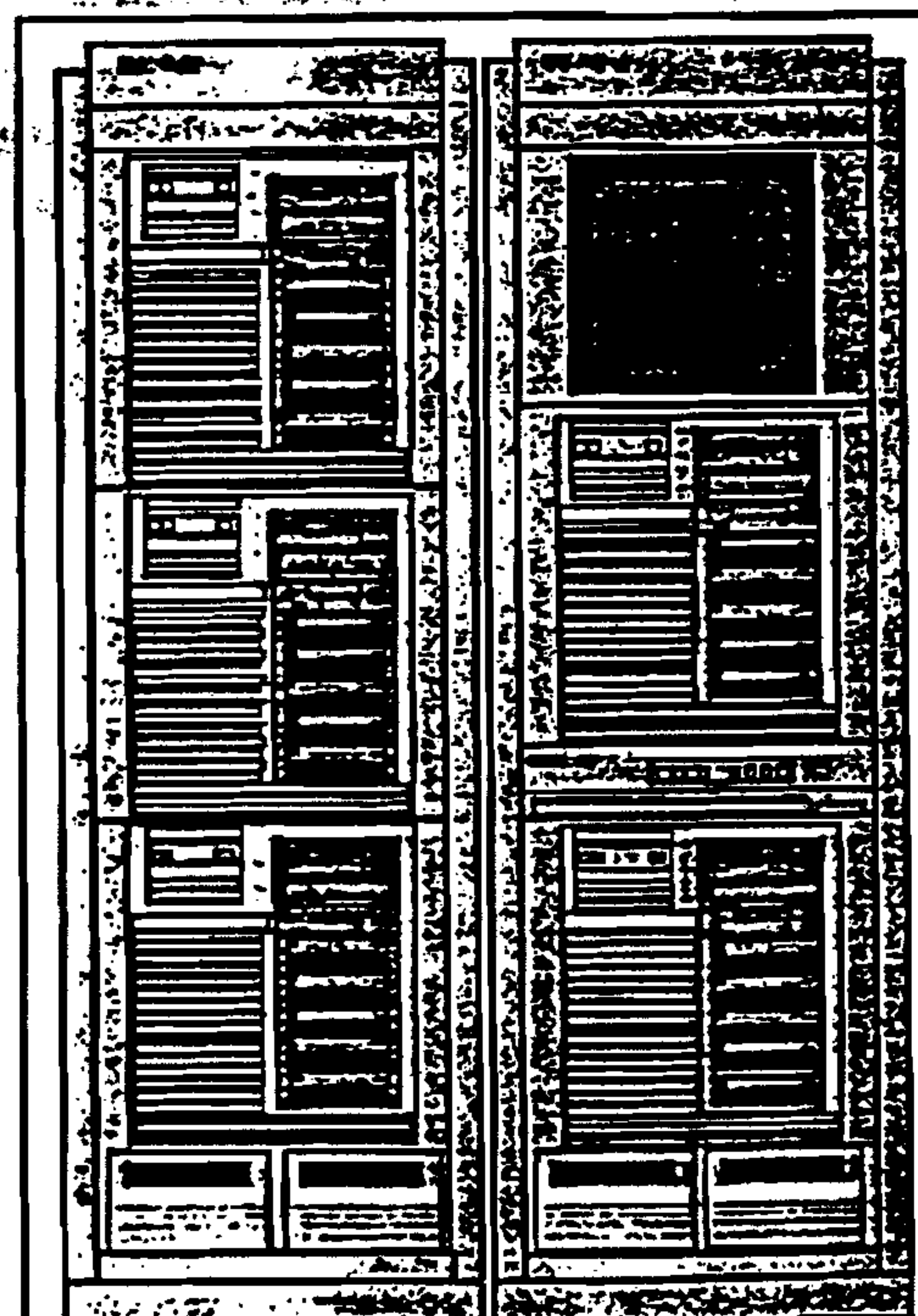
Location	Unclassified LAN		Classified LAN	
	Workgroup Module	Facility Module	Workgroup Module	Facility Module
Pentagon	2	1	2	1
Annex 12 th Floor	2	1	2	1
Annex 10 th Floor	1		1	
Annex 5 th Floor	1		1	

Workgroup modules support up to 100 users organized in a user workgroup. A user workgroup is usually geographically collocated in a common area such as a single floor, wing, or contiguous office space. The workgroup module consists of a network server and concentrator provided in a rack mount configuration.

Facility modules support workgroup modules by providing network resources common to all users, i.e. CD-ROM services, and connectivity between workgroups and other facility modules. The number of workgroups is limited only to the available bandwidth. The MMAC-Plus can support the ATM 2.5 Gbps switching backplane which equates to 25 workgroup concentrators using a 155 Mbps path between the facility and workgroup concentrator.

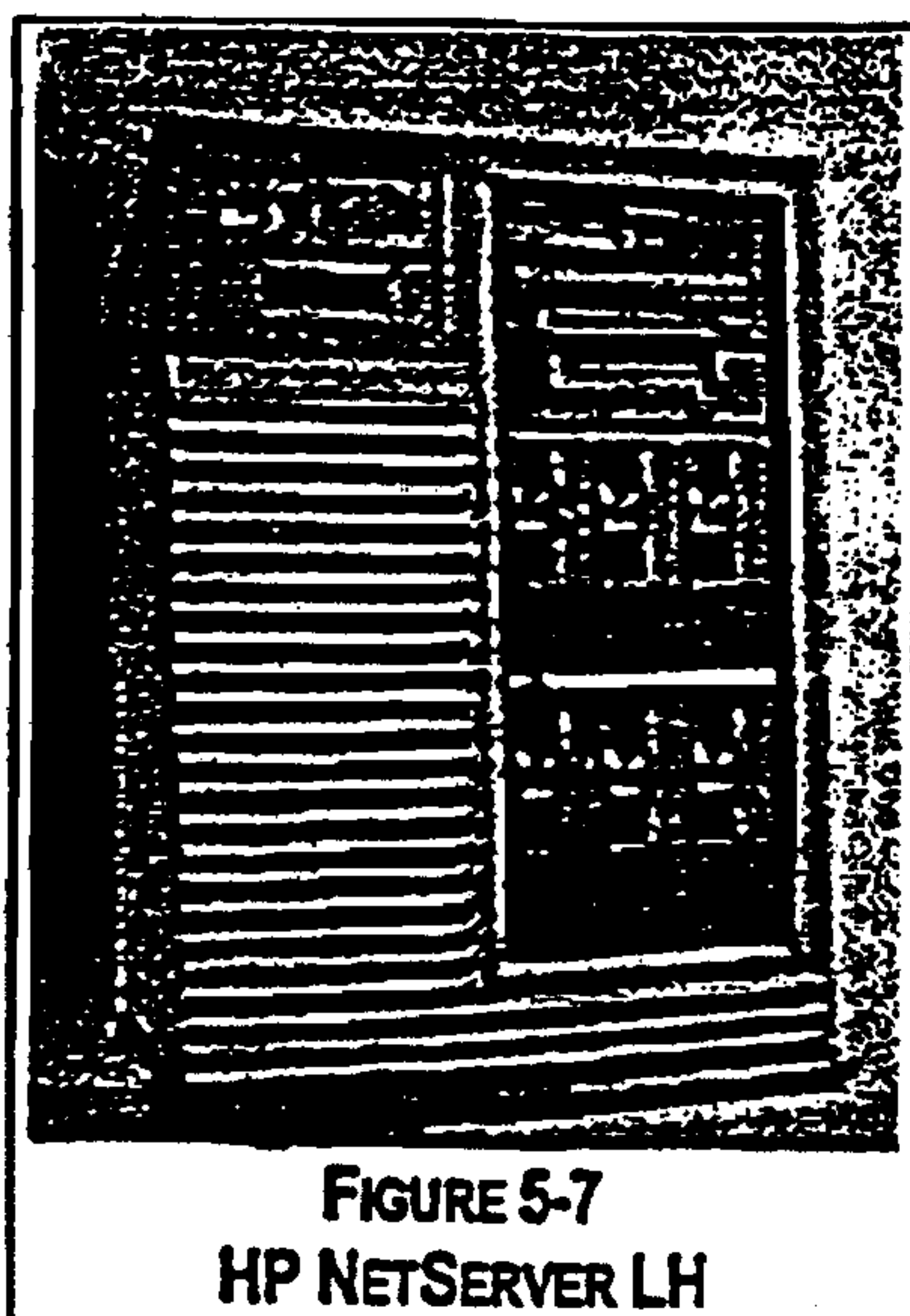
5.7.2.1 Workgroup Modules

The workgroup modules include the workgroup servers, workgroup concentrators, and uninterruptible power supplies (UPS). These components will be rack mounted to conserve space and facilitate administration and maintenance at the workgroup level. The figure to the right illustrates a typical multi-workgroup rack installation where the servers are rack mounted and a single video switch box is used for console interface. The actual rack configurations for the BMDO LANs will also include the workgroup concentrators which are not depicted in the figure. An additional component of the workgroup module, also not shown, is the UTP patch panels which link the cable plant outlets to the workgroup concentrator. The BMDO CLASSIFIED LAN will use existing fiber optic patch panels. The following paragraphs detail the major workgroup components used in the BMDO IS design.



**FIGURE 5-6
NETSERVER RACK LAYOUTS**

5.7.2.1.1 Workgroup Servers



**FIGURE 5-7
HP NETSERVER LH**

The basic workgroup server for the BMDO UNCLASSIFIED LAN will be the HP NetServer LH. A typical HP NetServer LH is depicted in Figure 5-7. These servers are the primary interface with the users. The workgroup server will be collocated with each workgroup concentrator. The link metrics, from the workstation perspective, will rely on the first application server found for communications support, user authentication and common network services. Each application server will be a Pentium/100 with 32 MB of RAM and a hardware disk array controller. Three 1 GB Hot Swap fast SCSI-2 hard drives will be installed in a RAID 5 configuration which will provide 2 GB of disk storage space for workgroup support. Each server will provide network based application and printer services for the user base assigned

to the server. The network operating system will be Microsoft's New Technology Advanced Server (NTAS) 3.51.

The BMDO CLASSIFIED LAN will use the existing GFE Zenith Pentium servers. The existing Novell network operating system will be replaced Microsoft's NTAS 3.51. The conversion from Novell 3.11 to NTAS 3.51 will occur after users have been configured for Windows 95 on their workstations. A maintenance float server will be used to facilitate the conversion without any impact to the users.

TABLE 5-5 WORKGROUP SERVER BILL OF MATERIALS

ITEM	MFGR	PART #	DESCRIPTION	UNIT	QTY
12TH FLOOR (UNCLASSIFIED LAN) WORKGROUP SERVER					
WS001	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	2
WS002	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	2
WS003	PEPCO	RD1977BCR	REAR DOOR	EA	2
WS004	PEPCO	ACPS45	POWER STRIP	EA	2
WS005	PEPCO	TP19362P	TOP PANEL, VENTED	EA	2
WS006	PEPCO	CBNT2FAN	FAN UNIT	EA	2
WS007	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS008			MISC. MOUNTING HARDWARE	LT	1
WS009	HP	D3358A	HP NETSERVER LH 5/100	EA	2
WS010	HP	D3581A	1 GB HOT SWAP SCSI DRIVES	EA	6
WS011	HP	D3592A	16 MB MEMORY SIMM	EA	2
WS012	HP	D2804A	14" VGA MONITOR	EA	1
WS013	HP	C3751A	HP MOUSE	EA	1
WS014	HP	E4473A	HP MONITOR RACK MOUNT KIT	EA	1
WS015	HP	J1451A	HP 4 PORT CONSOLE SWITCH	EA	1
WS016	HP	J2131A	KEYBOARD MOUNT	EA	1
WS017	HP	J1451A	SERVER RACK MOUNT KIT	EA	2
WS018	DEC	DEFFA-AA	FDDI PCI CONTROLLER	EA	2
WS019			FDDI FSD-FSD JUMPER CABLE	EA	2

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MEGR	PART#	DESCRIPTION	UNIT	QTY
WS020	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	2
12TH FLOOR (CLASSIFIED LAN) WORKGROUP SERVER					
WS021	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	2
WS022	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	2
WS023	PEPCO	RD1977BCR	REAR DOOR	EA	2
WS024	PEPCO	ACPS45	POWER STRIP	EA	2
WS025	PEPCO	TP19362P	TOP PANEL, VENTED	EA	2
WS026	PEPCO	CBNT2FAN	FAN UNIT	EA	2
WS027	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS028			MISC. MOUNTING HARDWARE	LT	1
WS029	ZENITH		GFE FILE SERVERS	EA	2
WS030	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1
WS031	HP	12131A	KEYBOARD MOUNT	EA	1
WS032	HP	J1451A	SERVER RACK MOUNT KIT	EA	2
WS033	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	2
WS034			FDDI FSD-FSD JUMPER CABLE	EA	2
WS035	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	2
10TH FLOOR (UNCLASSIFIED LAN) WORKGROUP SERVER					
WS036	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
WS037	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
WS038	PEPCO	RD1977BCR	REAR DOOR	EA	1
WS039	PEPCO	ACPS45	POWER STRIP	EA	1
WS040	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
WS041	PEPCO	CBNT2FAN	FAN UNIT	EA	1
WS042	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS043			MISC. MOUNTING HARDWARE	LT	1
WS044	HP	D3358A	HP NETSERVER LH 5/100	EA	1
WS045	HP	D3581A	1 GB HOT SWAP SCSI DRIVES	EA	3
WS046	HP	D3592A	16 MB MEMORY SIMM	EA	1
WS047	HP	D2804A	14" VGA MONITOR	EA	1
WS048	HP	C3751A	HP MOUSE	EA	1
WS049	HP	E4473A	HP MONITOR RACK MOUNT KIT	EA	1
WS050	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1
WS051	HP	12131A	KEYBOARD MOUNT	EA	1
WS052	HP	J1451A	SERVER RACK MOUNT KIT	EA	1
WS053	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	1
WS054			FDDI FSD-FSD JUMPER CABLE	EA	1
WS055	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1
10TH FLOOR (CLASSIFIED LAN) WORKGROUP SERVER					
WS056	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
WS057	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
WS058	PEPCO	RD1977BCR	REAR DOOR	EA	1
WS059	PEPCO	ACPS45	POWER STRIP	EA	1
WS060	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
WS061	PEPCO	CBNT2FAN	FAN UNIT	EA	1
WS062	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS063			MISC. MOUNTING HARDWARE	LT	1
WS064	ZENITH		GFE FILE SERVERS	EA	1
WS065	HP	E4473A	HP MONITOR RACK MOUNT KIT	EA	1
WS066	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFGR	PART #	DESCRIPTION	UNIT	QTY
WS067	HP	12131A	KEYBOARD MOUNT	EA	1
WS068	HP	J1451A	SERVER RACK MOUNT KIT	EA	1
WS069	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	1
WS070			FDDI FSD-FSD JUMPER CABLE	EA	1
WS071	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1
5TH FLOOR (UNCLASSIFIED LAN) WORKGROUP SERVER					
WS072	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
WS076	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
WS074	PEPCO	RD1977BCR	REAR DOOR	EA	1
WS075	PEPCO	ACPS45	POWER STRIP	EA	1
WS076	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
WS077	PEPCO	CBNT2FAN	FAN UNIT	EA	1
WS078	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS079			MISC. MOUNTING HARDWARE	LT	1
WS080	HP	D3358A	HP NETSERVER LH 5/100	EA	1
WS081	HP	D3581A	1 GB HOT SWAP SCSI DRIVES	EA	3
WS082	HP	D3592A	16 MB MEMORY SIMM	EA	1
WS083	HP	D2804A	14" VGA MONITOR	EA	1
WS084	HP	C3751A	HP MOUSE	EA	1
WS085	HP	E4473A	HP MONITOR RACK MOUNT KIT	EA	1
WS086	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1
WS087	HP	12131A	KEYBOARD MOUNT	EA	1
WS088	HP	J1451A	SERVER RACK MOUNT KIT	EA	1
WS089	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	1
WS090			FDDI FSD-FSD JUMPER CABLE	EA	1
WS091	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1
5TH FLOOR (CLASSIFIED LAN) WORKGROUP SERVER					
WS092	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
WS093	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
WS094	PEPCO	RD1977BCR	REAR DOOR	EA	1
WS095	PEPCO	ACPS45	POWER STRIP	EA	1
WS096	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
WS097	PEPCO	CBNT2FAN	FAN UNIT	EA	1
WS098	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS099			MISC. MOUNTING HARDWARE	LT	1
WS100	ZENITH		GFE FILE SERVERS	EA	1
WS101	HP	E4473A	HP MONITOR RACK MOUNT KIT	EA	1
WS102	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1
WS103	HP	12131A	KEYBOARD MOUNT	EA	1
WS104	HP	J1451A	SERVER RACK MOUNT KIT	EA	1
WS105	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	1
WS106			FDDI FSD-FSD JUMPER CABLE	EA	1
WS107	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1
PENTAGON (UNCLASSIFIED LAN) WORKGROUP SERVER					
WS108	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	2
WS109	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	2
WS110	PEPCO	RD1977BCR	REAR DOOR	EA	2
WS111	PEPCO	ACPS45	POWER STRIP	EA	2
WS112	PEPCO	TP19362P	TOP PANEL, VENTED	EA	2
WS113	PEPCO	CBNT2FAN	FAN UNIT	EA	2

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFGR	PART #	DESCRIPTION	UNIT	QTY
WS114	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS115			MISC. MOUNTING HARDWARE	LT	1
WS116	HP	D3358A	HP NETSERVER LH 5/100	EA	2
WS117	HP	D3581A	1 GB HOT SWAP SCSI DRIVES	EA	6
WS118	HP	D3592A	16 MB MEMORY SIMM	EA	2
WS119	HP	D2804A	14" VGA MONITOR	EA	1
WS120	HP	C3751A	HP MOUSE	EA	1
WS121	HP	E4473A	HP MONITOR RACK MOUNT KIT	EA	1
WS122	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1
WS123	HP	12131A	KEYBOARD MOUNT	EA	1
WS124	HP	J1451A	SERVER RACK MOUNT KIT	EA	2
WS125	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	2
WS126			FDDI FSD-FSD JUMPER CABLE	EA	2
WS127	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	2
PENTAGON (CLASSIFIED LAN) WORKGROUP SERVER					
WS128	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	2
WS129	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	2
WS130	PEPCO	RD1977BCR	REAR DOOR	EA	2
WS131	PEPCO	ACPS45	POWER STRIP	EA	2
WS132	PEPCO	TP19362P	TOP PANEL, VENTED	EA	2
WS133	PEPCO	CBNT2FAN	FAN UNIT	EA	2
WS134	PEPCO	SP7736NTP	SIDE PANELS	EA	2
WS135			MISC. MOUNTING HARDWARE	LT	1
WS136	ZENITH		GFE FILE SERVERS	EA	2
WS137	HP	J1461A	HP 4 PORT CONSOLE SWITCH	EA	1
WS138	HP	12131A	KEYBOARD MOUNT	EA	1
WS139	HP	J1451A	SERVER RACK MOUNT KIT	EA	2
WS140	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	2
WS141			FDDI FSD-FSD JUMPER CABLE	EA	2
WS142	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	2

5.7.2.1.2 Workgroup Concentrators

The BMDO workgroup concentrators employ Cabletron's MMAC-M8FNB multi-media hubs which are currently in use in the BMDO LAN. Each workgroup hub is expected to support up to approximately 100 nodes. The concentrators also provide connectivity from the workgroup segments to the 100 MBps FDDI server port. Connectivity to the facility concentrators will be provided through a router port on the Ethernet Management Modules in the Annex and through a dual FDDI bridge module in the Pentagon.

BMDO DESIGN AND IMPLEMENTATION PLAN

5.7.2.1.2.1 Pentagon Facility

(b)(2) The Pentagon workgroup hubs will use the existing hubs in both the Unclassified and Classified LANs. Currently the Pentagon has six (6) MMAC-M8FNB hubs of which five (5) are currently in use on the existing Classified LAN. In the final configuration, each LAN, classified and unclassified will have three (3) MMAC-M8FNBs assigned as workgroup hubs. Each hub will have five (5) FOMIM-18 interface cards and one (1) EMME Ethernet Management card. Each MMAC will have a FDDMIM-04 FDDI Bridge/Management and 4 Port Concentrator module added. The FDDMIM will provide FDDI connection for the workgroup servers and a FDDI DAS connection for the backbone. Figure 5-9 illustrates a typical workgroup MMAC layout in the Pentagon.

5.7.2.1.2.2 Annex Facility

(b)(2) The Annex workgroup hubs will use new Cabletron MMAC-M8FNB hubs in both the Unclassified and Classified LANs. The 12th floor will have two (2) workgroup hubs on each of the Classified and Unclassified LANs. All the other floors are expected to use only one (1) MMAC hub on each of the LANs (Classified/Unclassified). Figure 5-9 illustrates a typical MMAC layout. Each hub will have four (4) 24 port TPRMIMs (Twisted Pair Repeater), a ESWMIM (Ethernet Switching), and an EMM-E6 (6 Port Bridge and Management) module. In this configuration, each TPRMIM acts as a standalone 24 port Ethernet segment. Each TPRMIM is connected to the Ethernet Switch Module which also provides a FDDI BRIM port for a server connection. The EMM-E6 card will be equipped with a FDDI BRIM on the 12th floor and a CRBRIM for all other floors. The CRBRIM provides 2 high speed serial ports (up to 2048 KBps) for connection to the facility concentrator through the DES encryption equipment.

BMDO DESIGN AND IMPLEMENTATION PLAN

5.7.2.1.2.3 Workgroup Concentrator Bill of Materials

The workgroup concentrators include the components listed in the following table.

TABLE 5-6 WORKGROUP CONCENTRATOR BILL OF MATERIALS

ITEM	MFR	PART #	DESCRIPTION	UNIT	QTY
12TH FLOOR (UNCLASSIFIED 192 DROPS) WORKGROUP CONCENTRATOR					
WC001	ORTRONICS	EMPMME7	EQUIPMENT RACK, 19" X 84"	EA	1
WC002	ORTRONICS	OR-851004836	96 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	4
WC003	DC CONN	DCJSN-CF5-3F	PATCH PANEL JUMPERS (BLUE)	EA	192
WC004	PANDUIT	SL4X4LG6	4X4 SLOTTED DUCT	FT	24
WC005			MISC. MOUNTING HARDWARE	LT	1
WC006	CABLETRON	MMAC-M8FNB	8 SLOT MMAC W/ FLEXIBLE NETWORK BUS, 2 PSM SLOTS	EA	2
WC007	CABLETRON	M8PSM-E	POWER SUPPLY MODULE FOR MMAC-M8FNB, HIGH POWER	EA	4
WC008	CABLETRON	EMM-E6	ENHANCED MANAGEMENT MODULE - ETHERNET W/ 6 PORT BRIDGE	EA	2
WC009	CABLETRON	ESXMIM	6-PORT 10BASE-T, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	2
WC010	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	4
WC011	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	4
WC012	CABLETRON	TPRMIM-36	MULTI-CHANNEL ETHERNET REPEATER 10BASE-T 24 PORT WITH EPIM SLOT	EA	8
WC013	CABLETRON	EPIM-T	ETHERNET PORT INTERFACE MODULE - 10BASE-T	EA	8
12TH FLOOR (CLASSIFIED 192 DROPS) WORKGROUP CONCENTRATOR					
WC014	ORTRONICS	EMPMME7	EQUIPMENT RACK, 19" X 84"	EA	1
WC015	ORTRONICS	OR-851004836	96 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	4
WC016	DC CONN	DCJSN-CF5-3F	PATCH PANEL JUMPERS (RED)	EA	192
WC017	PANDUIT	SL4X4LG6	4X4 SLOTTED DUCT	FT	24
WC018			MISC. MOUNTING HARDWARE	LT	1
WC019	CABLETRON	MMAC-M8FNB	8 SLOT MMAC W/ FLEXIBLE NETWORK BUS, 2 PSM SLOTS	EA	2
WC020	CABLETRON	M8PSM-E	POWER SUPPLY MODULE FOR MMAC-M8FNB, HIGH POWER	EA	4
WC021	CABLETRON	EMM-E6	ENHANCED MANAGEMENT MODULE - ETHERNET W/ 6 PORT BRIDGE	EA	2
WC022	CABLETRON	ESXMIM	6-PORT 10BASE-T, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	2
WC023	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	4
WC024	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	4
WC025	CABLETRON	TPRMIM-36	MULTI-CHANNEL ETHERNET REPEATER 10BASE-T 24 PORT WITH EPIM SLOT	EA	8
WC026	CABLETRON	EPIM-T	ETHERNET PORT INTERFACE MODULE - 10BASE-T	EA	8
10TH FLOOR (UNCLASSIFIED 120 DROPS) WORKGROUP CONCENTRATOR					
WC027	ORTRONICS	EMPMME7	EQUIPMENT RACK, 19" X 84"	EA	1
WC028	ORTRONICS	OR-851004836	96 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC029	ORTRONICS	OR-851044265	24 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC030	DC CONN	DCJSN-CF5-3F	PATCH PANEL JUMPERS (BLUE)	EA	120
WC031	PANDUIT	SL4X4LG6	4X4 SLOTTED DUCT	FT	24
WC032			MISC. MOUNTING HARDWARE	LT	1
WC033	CABLETRON	MMAC-M8FNB	8 SLOT MMAC W/ FLEXIBLE NETWORK BUS, 2 PSM SLOTS	EA	1

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MPGR	PART #	DESCRIPTION	UNIT	QTY
WC034	CABLETRON	M8PSM-E	POWER SUPPLY MODULE FOR MMAC-M8FNB, HIGH POWER	EA	2
WC035	CABLETRON	EMM-E6	ENHANCED MANAGEMENT MODULE - ETHERNET W/ 6 PORT BRIDGE	EA	1
WC036	CABLETRON	ESXMIM	6-PORT 10BASE-T, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	1
WC037	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	1
WC038	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	2
WC039	CABLETRON	TPRMIM-36	MULTI-CHANNEL ETHERNET REPEATER 10BASE-T 24 PORT WITH EPIM SLOT	EA	5
WC040	CABLETRON	EPIM-T	ETHERNET PORT INTERFACE MODULE - 10BASE-T	EA	5
WC041	CABLETRON	CRBRIM-W/E	CISCO ROUTER MODULE	EA	1
WC042	CABLETRON	9380132	BRIM V.35 CABLE DCE	EA	1
10TH FLOOR (CLASSIFIED 120 DROPS) WORKGROUP CONCENTRATOR					
WC043	ORTRONICS	EMPMME7	EQUIPMENT RACK, 19" X 84"	EA	1
WC044	ORTRONICS	OR-851004836	96 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC045	ORTRONICS	OR-851044265	24 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC046	DC CONN	DCJSN-CF5-3F	PATCH PANEL JUMPERS (RED)	EA	120
WC047	PANDUIT	SL4X4LG6	4X4 SLOTTED DUCT	FT	24
WC048			MISC. MOUNTING HARDWARE	LT	1
WC049	CABLETRON	MMAC-M8FNB	8 SLOT MMAC W/ FLEXIBLE NETWORK BUS, 2 PSM SLOTS	EA	1
WC050	CABLETRON	M8PSM-E	POWER SUPPLY MODULE FOR MMAC-M8FNB, HIGH POWER	EA	2
WC051	CABLETRON	EMM-E6	ENHANCED MANAGEMENT MODULE - ETHERNET W/ 6 PORT BRIDGE	EA	1
WC052	CABLETRON	ESXMIM	6-PORT 10BASE-T, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	1
WC053	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	1
WC054	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONNECTION	EA	2
WC055	CABLETRON	TPRMIM-36	MULTI-CHANNEL ETHERNET REPEATER 10BASE-T 24 PORT WITH EPIM SLOT	EA	5
WC056	CABLETRON	EPIM-T	ETHERNET PORT INTERFACE MODULE - 10BASE-T	EA	5
WC057	CABLETRON	CRBRIM-W/E	CISCO ROUTER MODULE	EA	1
WC058	CABLETRON	9380132	BRIM V.35 CABLE DCE	EA	1
5TH FLOOR (UNCLASSIFIED 120 DROPS) WORKGROUP CONCENTRATOR					
WC059	ORTRONICS	EMPMME7	EQUIPMENT RACK, 19" X 84"	EA	1
WC060	ORTRONICS	OR-851004836	96 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC061	ORTRONICS	OR-851044265	24 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC062	DC CONN	DCJSN-CF5-3F	PATCH PANEL JUMPERS (BLUE)	EA	120
WC063	PANDUIT	SL4X4LG6	4X4 SLOTTED DUCT	FT	24
WC064			MISC. MOUNTING HARDWARE	LT	1
WC065	CABLETRON	MMAC-M8FNB	8 SLOT MMAC W/ FLEXIBLE NETWORK BUS, 2 PSM SLOTS	EA	1
WC066	CABLETRON	M8PSM-E	POWER SUPPLY MODULE FOR MMAC-M8FNB, HIGH POWER	EA	2
WC067	CABLETRON	EMM-E6	ENHANCED MANAGEMENT MODULE - ETHERNET W/ 6 PORT BRIDGE	EA	1
WC068	CABLETRON	ESXMIM	6-PORT 10BASE-T, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	1
WC069	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	1

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFG	PART	DESCRIPTION	UNIT	QTY
WC070	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	2
WC071	CABLETRON	TPRMIM-36	MULTI-CHANNEL ETHERNET REPEATER 10BASE-T 24 PORT WITH EPIM SLOT	EA	5
WC072	CABLETRON	EPIM-T	ETHERNET PORT INTERFACE MODULE - 10BASE-T	EA	5
WC073	CABLETRON	CRBRIM-W/E	CISCO ROUTER MODULE	EA	1
WC074	CABLETRON	9380132	BRIM V.35 CABLE DCE	EA	1
5TH FLOOR (CLASSIFIED 120 DROPS) WORKGROUP CONCENTRATOR					
WC075	ORTRONICS	EMPMME7	EQUIPMENT RACK, 19" X 84"	EA	1
WC076	ORTRONICS	OR-851004836	96 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC077	ORTRONICS	OR-851044265	24 PORT CAT 5 HIGH DENSITY PATCH PANEL	EA	2
WC078	DC CONN	DCJSN-CF5-3F	PATCH PANEL JUMPERS (RED)	EA	120
WC079	PANDUIT	SL4X4LG6	4X4 SLOTTED DUCT	FT	24
WC080			MISC. MOUNTING HARDWARE	LT	1
WC081	CABLETRON	MMAC-M8FNB	8 SLOT MMAC W/ FLEXIBLE NETWORK BUS, 2 PSM SLOTS	EA	1
WC082	CABLETRON	M8PSM-E	POWER SUPPLY MODULE FOR MMAC-M8FNB, HIGH POWER	EA	2
WC083	CABLETRON	EMM-E6	ENHANCED MANAGEMENT MODULE - ETHERNET W/ 6 PORT BRIDGE	EA	1
WC084	CABLETRON	ESXMIM	6-PORT 10BASE-T, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	1
WC085	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	1
WC086	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONNECTION	EA	2
WC087	CABLETRON	TPRMIM-36	MULTI-CHANNEL ETHERNET REPEATER 10BASE-T 24 PORT WITH EPIM SLOT	EA	5
WC088	CABLETRON	EPIM-T	ETHERNET PORT INTERFACE MODULE - 10BASE-T	EA	5
WC089	CABLETRON	CRBRIM-W/E	CISCO ROUTER MODULE	EA	1
WC090	CABLETRON	9380132	BRIM V.35 CABLE DCE	EA	1
PENTAGON UNCLASSIFIED HUB UPGRADE					
WC091	CABLETRON	FDDMIM-04	FDDI ETHERNET BRIDGING AND 4 PORT MODULE	EA	3
WC092	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	2
WC093	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	4
PENTAGON CLASSIFIED HUB UPGRADE					
WC094	CABLETRON	FDDMIM-04	FDDI ETHERNET BRIDGING AND 4 PORT MODULE	EA	3
WC095	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	2
WC096	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	4

BMDO DESIGN AND IMPLEMENTATION PLAN

5.7.2.1.3 Uninterruptible Power Supplies (UPS)

The BMDO workgroup backup power employs APC's new Matrix UPS system. These units will provide line protection against surges, brown outs, noise and spikes. The battery power will be capable of sustaining server and hub operation for up to 30 minutes during power outages. These units have been listed in Microsoft's hardware compatibility list and are certified by Cabletron. The units will be manageable from APC's Power Chute for Windows NT and the SNMP network management system. In addition, the units will monitor power voltages, room temperatures and will provide dry contacts for connection to server room alarms. Alarms resulting from irregular power conditions, excessively high or low room temperatures and room alarms will be transmitted over the LAN to designated network management workstations which, in-turn can call a designated pager with an alarm message.

These UPS units will be installed in the workgroup server cabinets and will provide power distribution outlets to all racks and cabinets associated with the workgroup equipment. The uninterruptible power supplies include the components listed in the following table.

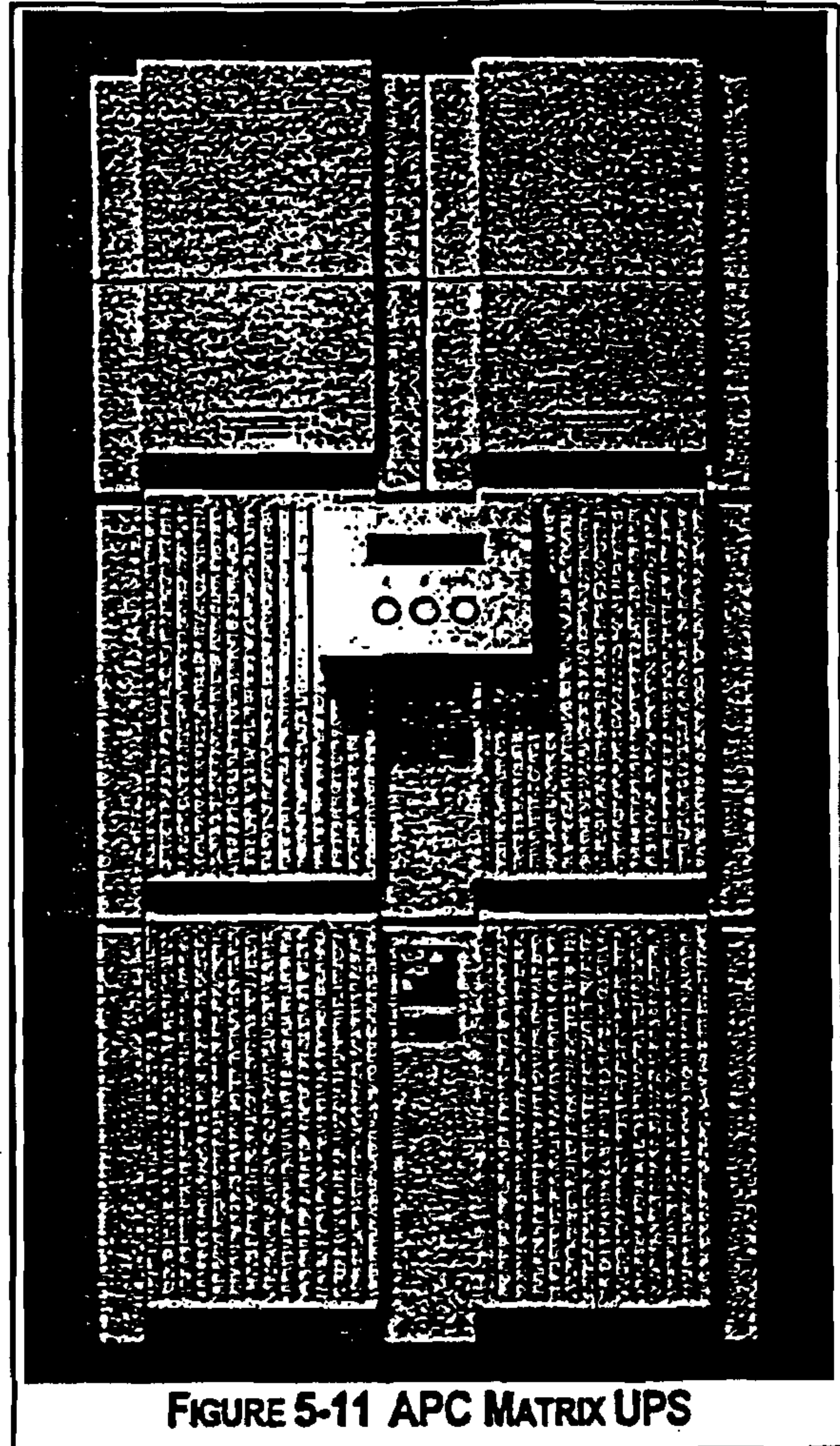


FIGURE 5-11 APC MATRIX UPS

TABLE 5-7 WORKGROUP UPS BILL OF MATERIALS

ITEM	MFGR	PART#	DESCRIPTION	UNIT	QTY
12TH FLOOR (UNCLASSIFIED) UPS					
UP001	APC	MX5000	MATRIX 5000VA UPS	EA	1
UP002	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP003	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP004	APC	AP9207	SHARE UPS	EA	1
UP005	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP006	APC	940-0020	INTERFACE CABLE	EA	2
UP007	APC	AP909	POWER CHUTE FOR WIN NT	EA	1
UP008	APC	AP9401	SNMP MANAGER	EA	1
UP009	APC	AP9503	MEASURE-UPS	EA	1
UP010			MISCELLANEOUS MOUNTING MATERIALS	LT	1
12TH FLOOR (CLASSIFIED) UPS					
UP011	APC	MX5000	MATRIX 5000VA UPS	EA	1
UP012	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFGR	PART#	DESCRIPTION	UNIT	QTY
UP013	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP014	APC	AP9207	SHARE UPS	EA	1
UP015	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP016	APC	940-0020	INTERFACE CABLE	EA	2
UP017	APC	AP909	POWER CHUTE FOR WIN NT	EA	1
UP018	APC	AP9401	SNMP MANAGER	EA	1
UP019	APC	AP9503	MEASURE-UPS	EA	1
UP020			MISCELLANEOUS MOUNTING MATERIALS	LT	1
10TH FLOOR (UNCLASSIFIED) UPS					
UP021	APC	MX3000	MATRIX 3000VA UPS	EA	1
UP022	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP023	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP024	APC	AP9207	SHARE UPS	EA	1
UP025	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP026	APC	940-0020	INTERFACE CABLE	EA	2
UP027	APC	AP9503	MEASURE-UPS	EA	1
UP028			MISCELLANEOUS MOUNTING MATERIALS	LT	1
10TH FLOOR (CLASSIFIED) UPS					
UP029	APC	MX3000	MATRIX 5000VA UPS	EA	1
UP030	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP031	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP032	APC	AP9207	SHARE UPS	EA	1
UP033	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP034	APC	940-0020	INTERFACE CABLE	EA	2
UP035	APC	AP9503	MEASURE-UPS	EA	1
UP036			MISCELLANEOUS MOUNTING MATERIALS	LT	1
5TH FLOOR (UNCLASSIFIED) UPS					
UP037	APC	MX3000	MATRIX 3000VA UPS	EA	1
UP038	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP039	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP040	APC	AP9207	SHARE UPS	EA	1
UP041	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP042	APC	940-0020	INTERFACE CABLE	EA	2
UP043	APC	AP9503	MEASURE-UPS	EA	1
UP044			MISCELLANEOUS MOUNTING MATERIALS	LT	1
5TH FLOOR (CLASSIFIED) UPS					
UP045	APC	MX3000	MATRIX 5000VA UPS	EA	1
UP046	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP047	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP048	APC	AP9207	SHARE UPS	EA	1
UP049	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP050	APC	940-0020	INTERFACE CABLE	EA	2
UP051	APC	AP9503	MEASURE-UPS	EA	1
UP052			MISCELLANEOUS MOUNTING MATERIALS	LT	1
PENTAGON (UNCLASSIFIED) UPS					
UP053	APC	MX5000	MATRIX 5000VA UPS	EA	1
UP054	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP055	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP056	APC	AP9207	SHARE UPS	EA	1
UP057	APC	AP9206	POWERNET SNMP MODULE	EA	1

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFGRC	PART#	DESCRIPTION	UNIT	QTY
UP058	APC	940-0020	INTERFACE CABLE	EA	2
UP059	APC	AP909	POWER CHUTE FOR WIN NT	EA	1
UP060	APC	AP9401	SNMP MANAGER	EA	1
UP061	APC	AP9503	MEASURE-UPS	EA	1
UP062			MISCELLANEOUS MOUNTING MATERIALS	LT	1
PENTAGON (CLASSIFIED) UPS					
UP063	APC	MX5000	MATRIX 5000VA UPS	EA	1
UP064	APC	SMARTCELL	ADDITIONAL BATTERY PACK	EA	2
UP065	APC	MXA101	POWER DISTRIBUTION UNIT	EA	2
UP066	APC	AP9207	SHARE UPS	EA	1
UP067	APC	AP9206	POWERNET SNMP MODULE	EA	1
UP068	APC	940-0020	INTERFACE CABLE	EA	2
UP069	APC	AP909	POWER CHUTE FOR WIN NT	EA	1
UP070	APC	AP9401	SNMP MANAGER	EA	1
UP071	APC	AP9503	MEASURE-UPS	EA	1
UP072			MISCELLANEOUS MOUNTING MATERIALS	LT	1

5.7.2.2 Facility Modules

The BMDO IS is composed of two facilities, one in the Pentagon and the other in the Crystal City Annex. In the Pentagon, the core of the facility module equipment will be located in the existing computer room. At the annex, the 12th floor server room will home the core of the facility module equipment. The facility modules include the

BMDO DESIGN AND IMPLEMENTATION PLAN

facility servers, facility concentrators, CD-ROM drive banks and support for the network management system. These components will be rack mounted to conserve space and facilitate administration and maintenance at the facility level. An additional component of the workgroup module, also not shown, is the digital patch panels which link the E1 workgroup links to the facility concentrator.

Figure 5-12 illustrates the connectivity and relationship between the facility concentrator, workgroup modules, network management subsystem, and WAN communications. The following paragraphs discuss the major components of the facility module.

5.7.2.2.1 Facility Servers

The basic facility server for the BMDO UNCLASSIFIED LAN will be the HP NetServer LH. This is the same server discussed in Section 5.7.2.1.1, Workgroup Servers. These servers are the primary interface with the users. The facility server will be collocated with the workgroup concentrator on the 12th floor in the annex and in the computer room in the Pentagon. Each application server will be a Pentium/100 with 32 MB of RAM and a hardware disk array controller. Three 2 GB Hot Swap fast SCSI-2 hard drives will be installed in a RAID 5 configuration which will provide 4 GB of disk storage space for workgroup support. Each server will provide network based application and printer services for the user base assigned to the server. The network operating system will be Microsoft's New Technology Advanced Server (NTAS) 3.51.

The BMDO CLASSIFIED LAN will use the existing GFE Zenith Pentium servers. The existing Novell network operating system will be replaced Microsoft's NTAS 3.51. The conversion from Novell 3.11 to NTAS 3.51 will occur after users have been configured for Windows 95 on their workstations. A maintenance float server will be used to facilitate the conversion without any impact to the users. The facility servers include the components listed in the following table.

TABLE 5-8 FACILITY SERVER BILL OF MATERIALS

ITEM	MFGR	PART#	DESCRIPTION	UNIT	QTY
12TH FLOOR (UNCLASSIFIED LAN) FACILITY SERVER					
FS001	PEPCO	IP1300	EQUIPMENT CABINET, 19" X 84"	EA	1
FS002	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
FS003	PEPCO	RD1977BCR	REAR DOOR	EA	1
FS004	PEPCO	ACPS45	POWER STRIP	EA	1
FS005	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
FS006	PEPCO	CBNT2FAN	FAN UNIT	EA	1
FS007	PEPCO	SP7736NTP	SIDE PANELS	EA	2
FS008			MISC. MOUNTING HARDWARE	LT	1
FS009	HP	D3358A	HP NETSERVER LH 5/100	EA	1
FS010	HP	D3582A	2 GB HOT SWAP SCSI DRIVES	EA	3
FS011	HP	D3592A	16 MB MEMORY SIMM	EA	1
FS012	HP	J1451A	SERVER RACK MOUNT KIT	EA	1
FS013	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	1
FS014			FDDI FSD-FSD JUMPER CABLE	EA	1
FS015	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM #	MFGR	PART #	DESCRIPTION	UNIT	QTY
12TH FLOOR (CLASSIFIED LAN) FACILITY SERVER					
FS021	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
FS022	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
FS023	PEPCO	RD1977BCR	REAR DOOR	EA	1
FS024	PEPCO	ACPS45	POWER STRIP	EA	1
FS025	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
FS026	PEPCO	CBNT2FAN	FAN UNIT	EA	1
FS027	PEPCO	SP7736NTP	SIDE PANELS	EA	1
FS028			MISC. MOUNTING HARDWARE	LT	1
FS029	ZENTH		GFE FILE SERVERS	EA	1
FS032	HP	J1451A	SERVER RACK MOUNT KIT	EA	2
FS033	DEC	DEPPA-AA	FDDI PCI CONTROLLER	EA	2
FS034			FDDI FSD-FSD JUMPER CABLE	EA	2
FS035	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	2
PENTAGON (UNCLASSIFIED LAN) FACILITY SERVER					
FS036	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
FS037	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
FS038	PEPCO	RD1977BCR	REAR DOOR	EA	1
FS039	PEPCO	ACPS45	POWER STRIP	EA	1
FS040	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
FS041	PEPCO	CBNT2FAN	FAN UNIT	EA	1
FS042	PEPCO	SP7736NTP	SIDE PANELS	EA	2
FS043			MISC. MOUNTING HARDWARE	LT	1
FS044	HP	D3358A	HP NETSERVER LH 5/100	EA	1
FS045	HP	D3582A	2 GB HOT SWAP SCSI DRIVES	EA	3
FS046	HP	D3592A	16 MB MEMORY SIMM	EA	1
FS047	HP	J1451A	SERVER RACK MOUNT KIT	EA	1
FS048	DEC	DEPPA-AA	FDDI PCI CONTROLLER	EA	1
FS049			FDDI FSD-FSD JUMPER CABLE	EA	1
FS050	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1
PENTAGON (CLASSIFIED LAN) FACILITY SERVER					
FS051	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	1
FS052	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	1
FS053	PEPCO	RD1977BCR	REAR DOOR	EA	1
FS054	PEPCO	ACPS45	POWER STRIP	EA	1
FS055	PEPCO	TP19362P	TOP PANEL, VENTED	EA	1
FS056	PEPCO	CBNT2FAN	FAN UNIT	EA	1
FS057	PEPCO	SP7736NTP	SIDE PANELS	EA	1
FS058			MISC. MOUNTING HARDWARE	LT	1
FS059	ZENTH		GFE FILE SERVERS	EA	1
FS060	HP	J1451A	SERVER RACK MOUNT KIT	EA	2
FS061	DEC	DEPPA-AA	FDDI PCI CONTROLLER	EA	2
FS062			FDDI FSD-FSD JUMPER CABLE	EA	2
FS063	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	2

5.7.2.2.2 CD-ROM Servers

Each facility module will provide CD-ROM and multimedia support through a CD-ROM tower add-on to the facility server. The CD-ROM support will be provided

BMDO DESIGN AND IMPLEMENTATION PLAN

through Procom Technology's CD-ROM Tower 21 Plus. This tower unit will be configured with 14 CD-ROM 4.4X speed drives at delivery and is expandable to 21 CD-ROM drives. The CD drives comply with CD-XA, CD-I, Video CD and Multisession Photo CD formats. Each group of seven drives will appear as a single logical drive to the users of the network. Each CD appears as a sub-directory within the drive letter reference. Each seven drives of the tower attach to the facility server through a dedicated SCSI-2 PCI controller card. The CD-ROM towers include the components listed in the following table.

TABLE 5-9 CD-ROM SERVER BILL OF MATERIALS

Item	Migr	Part #	Description	Unit	Qty
CD-ROM Tower 21 'Plus' Family					
OP.21	Procom	CDT21P-4X-P14	21 Bay Plus Tower w/14 Quad 125ms/660Kb Drives	EA	2
OP.22	Procom	CDTSW-NT	CD-ROM Tower Network Software	EA	2
OP.23	Procom	BT946C-PCI	SCSI Controller for CPU Module	EA	2

5.7.2.2.3 Facility Concentrators

The BMDO LAN architecture employs a high speed facility concentrator which interconnects workgroups, WAN connectivity, asynchronous communications, remote facilities, file servers, and administration and management equipment. These high speed concentrators are capable of supporting a throughput rate of over 750,000 packets per second on each slot. Migration paths include direct ATM switching at speeds up to 155 MBps per ATM port.

The connection between the BMDO main facility and annex is protected by network encryption systems for the CLASSIFIED and UNCLASS LANs. In the annex facilities, DES encryption for the sensitive LAN connections between floors can be implemented. The DES encryption primarily protects the sensitive data between floors in the annex and is required for compatibility in the main facility. The NES encryption devices are NSA Type I encryption devices which can protect data with classifications through TOP SECRET. The continued use of KG-94 bulk encryption devices is recommended since DES encryption is used to provide protection for only the sensitive data.

The Facility Concentrators include the components listed in the following table. The facility concentrator equipment includes the hardware to connect the riser subsystem discussed in Section 5.7.1.2, Riser Cable Plant in the Annex.

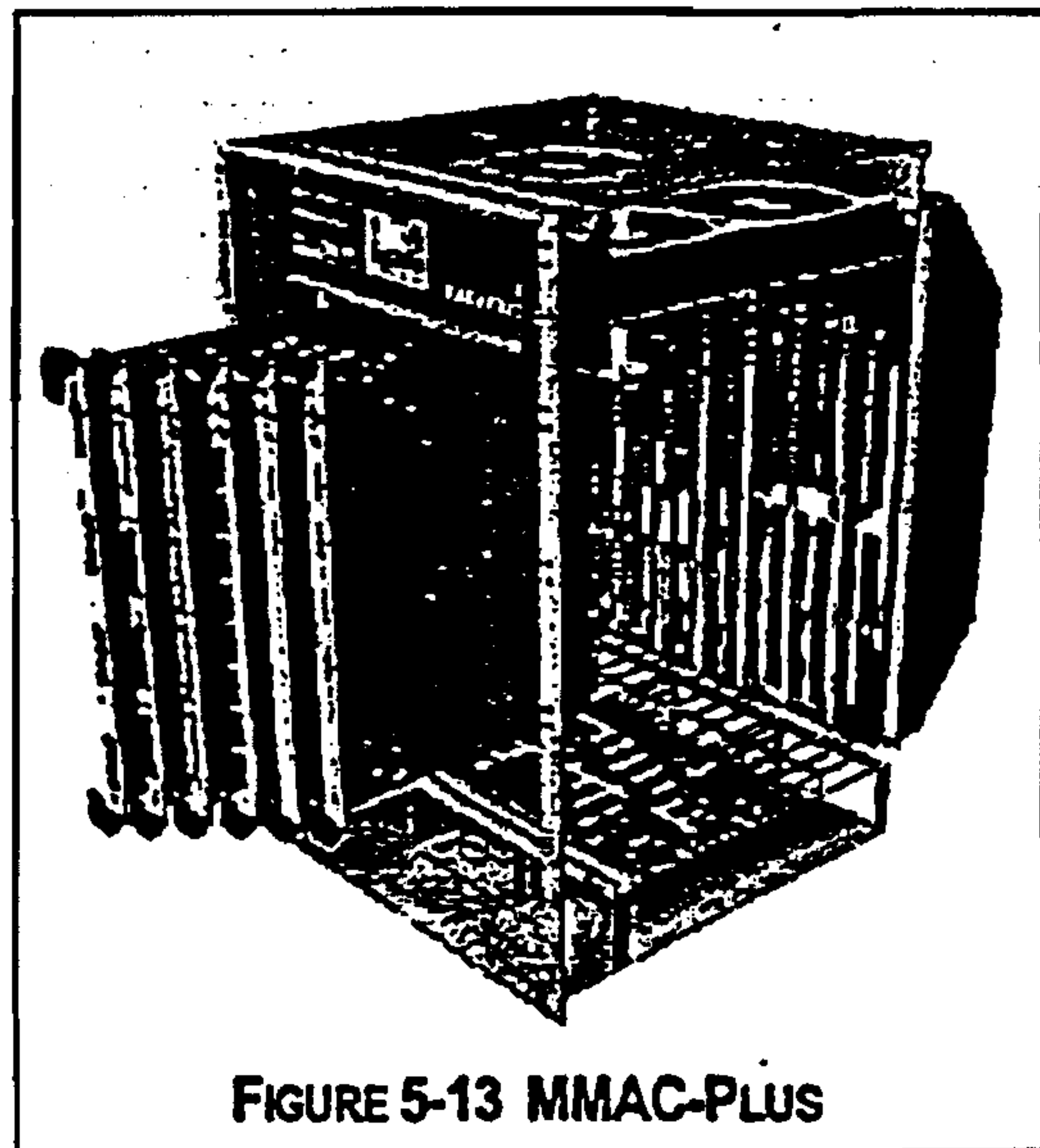


FIGURE 5-13 MMAC-PLUS

BMDO DESIGN AND IMPLEMENTATION PLAN

TABLE 5-10 FACILITY CONCENTRATOR BILL OF MATERIALS

ITEM	MFG	PART #	DESCRIPTION	UNIT	QTY
FACILITY CONCENTRATOR (PENTAGON AND ANNEX) UNCLASSIFIED					
WN001	CABLETRON	9C114	14 SLOT MMAC-PLUS CHASSIS	EA	2
WN002	CABLETRON	9C300-1	MMAC-PLUS ENVIRONMENTAL MODULE	EA	2
WN003	CABLETRON	9C214-1	MMAC-PLUS POWER SUPPLY MODULE (100-250 VAC)	EA	4
WN004	CABLETRON	9W111-08	WIDE AREA NETWORK ROUTER MODULE (FNB TO 8 CISCO MINI)	EA	2
WN005	CABLETRON	9F120-08	FDDI MICROLAN MODULE (8 PORT MM FIBER)	EA	2
WN006	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	2
WN007	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	2
WN008	PEPCO	RD1977BCR	REAR DOOR	EA	2
WN009	PEPCO	ACPS45	POWER STRIP	EA	2
WN010	PEPCO	TP19362P	TOP PANEL, VENTED	EA	2
WN011	PEPCO	CBNT2FAN	FAN UNIT	EA	2
WN012	PEPCO	SP7736NTP	SIDE PANELS	EA	4
WN013			MISC. MOUNTING HARDWARE	LT	2
UNCLASSIFIED LAN INTERCONNECTION (PENTAGON AND ANNEX 12TH, 10TH, XTH FLOORS) UNCLASSIFIED					
WN014	RACAL	DC64HS T1	DES ENCRYPTION UNIT - PUBLIC KEY MODEL	EA	8
WN015	RACAL	DC64-KC	KEY MANAGEMENT CENTER	EA	2
WN016	BlkBox	RQ-MT612A-ST	T1 FIBER OPTIC LINE DRIVER	EA	8
WN017	BlkBox	RQ-MT100A-530	CSU/DSU	EA	8
WN018	BlkBox	RQ-IC483A	RS-422/V.35 CONVERTER - HIGH SPEED	EA	8
FACILITY CONCENTRATOR (PENTAGON AND ANNEX) CLASSIFIED					
WN019	CABLETRON	9C114	14 SLOT MMAC-PLUS CHASSIS	EA	2
WN020	CABLETRON	9C300-1	MMAC-PLUS ENVIRONMENTAL MODULE	EA	2
WN021	CABLETRON	9C214-1	MMAC-PLUS POWER SUPPLY MODULE (100-250 VAC)	EA	4
WN022	CABLETRON	9W111-08	WIDE AREA NETWORK ROUTER MODULE (FNB TO 8 CISCO MINI)	EA	2
WN023	CABLETRON	9F120-08	FDDI MICROLAN MODULE (8 PORT MM FIBER)	EA	2
WN024	PEPCO	P1300	EQUIPMENT CABINET, 19" X 84"	EA	2
WN025	PEPCO	PG1977B	PLEXIGLAS DOOR	EA	2
WN026	PEPCO	RD1977BCR	REAR DOOR	EA	2
WN027	PEPCO	ACPS45	POWER STRIP	EA	2
WN028	PEPCO	TP19362P	TOP PANEL, VENTED	EA	2
WN029	PEPCO	CBNT2FAN	FAN UNIT	EA	2
WN030	PEPCO	SP7736NTP	SIDE PANELS	EA	4
WN031			MISC. MOUNTING HARDWARE	LT	2
UNCLASSIFIED LAN INTERCONNECTION (PENTAGON AND ANNEX 12TH, 10TH, XTH FLOORS) CLASSIFIED					
WN032	RACAL	DC64HS T1	KG-94 ENCRYPTION DEVICE (GFE)	EA	8
WN033	BlkBox	RQ-MT612A-ST	T1 FIBER OPTIC LINE DRIVER	EA	8
WN034	BlkBox	RQ-MT100A-530	CSU/DSU	EA	8
WN035	BlkBox	RQ-IC483A	RS-422/V.35 CONVERTER - HIGH SPEED	EA	8

5.7.3 CLIENT SUBSYSTEM

The client subsystem in the BMDO architecture consists of all user workstations and network printers. Network printers are included as clients because they must log into the network operating system before they become available network resources. This login by the printers is automatically accomplished through the JetDirect interface cards installed in the printers.

BMDO DESIGN AND IMPLEMENTATION PLAN

5.7.3.1 Workstations

The client subsystem consists of the GFE workstations which are Intel 486DX2-66 CPUs with 17" SVGA Monitors, 8 MB of RAM, removable hard drives, and Ethernet network interface cards. The total number of workstations to be configured under this project is 455. Each workstation will have an additional 8 MB of RAM added, a Remote Procedure Load (RPL) EPROM added to the NIC, and the graphical user interface (GUI) upgraded to Windows 95. The components included in the workstation materials are listed in Table 5-12 Printer Component Bill of Material.

Some workstations may be require connectivity to both the BMDO Classified LAN and BMDO Unclassified LAN. When required, these workstations will utilize a switch box to provide connectivity to either the Classified or Unclassified LANs. Simultaneous connectivity to both LANs is not permitted under the current security policy for the BMDO IS. Section 7.1, Workstation Security, explains the operation and functionality of the workstations equipped with network switch boxes.

TABLE 5-11 WORKSTATION COMPONENT BILL OF MATERIAL

ITEM	MEGR	PART#	DESCRIPTION	UNIT	QTY
ALL WORKSTATIONS					
WS001	EAGLE	833-002906-001	BOOT PROM FOR EAGLE EP2000 NIC	EA	125
WS002	SMC	ROMRPL	BOOT PROM FOR SMC NIC	EA	250
WS003	3COM	3C5-TRIROM	BOOT PROM FOR 3C509 NIC	EA	100
WS004	MS	207S650V3BLPB	WIN95 UPGRADE MOLP-B	EA	455
WS005	MS		NT CLIENT LICENSE	EA	455
WS006	MS		SMS CLIENT LICENSE	EA	455
WS007	SYMANTEC	TBD	ANTI-VIRUS FOR WIN 95	EA	455
ANNEX WORKSTATIONS					
WS008	BLKBOX	RQ-SW061A	ETHERNET RJ-45 4 TO 1 SWITCH BOX	EA	150
WS009	DC CONN	DCJSN-CF5-10F	WORKSTATION JUMPER (SWITCH-WRKSTA)	EA	450
WS010	DC CONN	DCJSN-CF5-3F	WORKSTATION JUMPER (SWITCH-WRKSTA)	EA	150
PENTAGON WORKSTATIONS					
WS011	BLKBOX	RQ-SW046A	ETHERNET DB-15 4 TO 1 SWITCH BOX	EA	150
WS012	CABLETRON	FOT-F24	FO TRANSCEIVER W/12" AUI	EA	150
WS013	DC CONN		AUI CABLE 24"	EA	150

5.7.3.2 Printers

All network printers are GFE. The printer models include HP LaserJet IIIs and LaserJet 4Si and LaserJet 4s. A HP JetDirect card will be added to each designated network printer. The JetDirect cards install in the MIO slots of the printers and provide direct Ethernet connectivity from the network to the printers. Print jobs are spooled by the Windows 95 print manager on the workstations to the NTAS print queues on the workgroup and facility servers. Access to the print queues by users is controlled by the NTAS security agent through an access control list which can only be modified by network administrators.

TABLE 5-12 PRINTER COMPONENT BILL OF MATERIAL

ITEM	MFR	PART	DESCRIPTION	UNIT	QTY
PRINTER INTERFACES					
WS013	HP	C2071B#ABA	JETDIRECT FOR HP III, III D	EA	8
WS014	HP	J2550A#ABA	JETDIRECT FOR HP4Si, 4, 4PLUS, 4M, III Si	EA	36

5.7.4 NETWORK MANAGEMENT SUBSYSTEM

Network management and administration will be performed through Microsoft's Server Management System (SMS) which is part of the Back Office product. The SMS will allow administrators to remotely administer and manage any MS product in the network, including Windows 95 workstations. In addition the SMS provides a method for the centralized control of application software to include the automatic installation of upgrades as they are received. Centralized back-up will also be performed through the NMS.

5.7.4.1 NMS Workstations

Workstations designated as network administrator workstations will run Microsoft NT Workstation software as the operating system and graphical user interface. The multi-tasking capabilities will allow the administration workstations to perform normal office automation functions while monitoring the network for alarms and activity. The NMS workstation hardware will be GFE. The GFE workstations will be upgraded to NT workstation and the existing network interface cards will be replaced with FDDI interface cards.

5.7.4.2 SNMP Software

The SNMP software for the network management function will be Cabletron's Remote LANView for windows. The SNMP software will monitor all SNMP devices like the concentrators, routers and gateways. In addition to SNMP functionality, the Remote LANView product support RMON and DLM protocols which are used in the MMAC-M8FNB and MMAC-Plus management modules.

5.7.4.3 Tape Back-up Units

The tape backup unit will be a twin drive ADIC 8mm Tape Changer with a total storage capacity of 120 GB. The five tape cartridge trays will provide for archiving a years worth of data in the tape management database. The backup software will be Cheyenne's ARC Serve 5.X for Windows NT. This backup software supports purging and pruning where, as part of the backup process, files older than a designated age will be removed from the hard drives after the information has been stored to tape. The backup software allows all servers in the network to be backed up to the same tape unit. This tape unit will be collated with the network administrator workstations to provide centralized backup for the entire network.

BMDO DESIGN AND IMPLEMENTATION PLAN

5.7.4.4 Server Management Service

As part of the network management subsystem, Microsoft's Server Management Service will be implemented to provide centralized control of user workstation configurations and software licensing. In addition the SMS will provide configuration management support through reports that detail the workstation configurations. Coupled with the SNMP support, any machine in the network can be identified and located down to a port on the workgroup hubs, which in turn, are related to specific office outlets in the network. Another feature of the SMS is the bulk update and upgrade of user software. Coupled with the policy features of Windows 95, administrators can prevent users from making permanent changes to their configuration files. When a user logs into the network, the workstation configuration is checked with the configuration identified in the SMS database. If the configuration differs, the workstation configuration is restored to the configuration in the database.

5.7.4.5 Consolidated Bill of Materials

The following table provides a consolidated bill of materials for the network management subsystem.

TABLE 5-13 NETWORK MANAGEMENT BILL OF MATERIALS

ITEM	MFR	PART #	DESCRIPTION	UNIT	QTY
UNCLASSIFIED NETWORK MANAGEMENT SYSTEM					
NMS01	CABLETRON	ESXMIM	6-PORT 10BASET, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	2
NMS02	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	2
NMS03	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	2
NMS04	DEC	DEPPA-AA	FDDI PCI CONTROLLER	EA	4
NMS05			FDDI FSD-FSD JUMPER CABLE	EA	4
NMS06			GFE ADMINISTRATOR WORKSTATIONS	EA	4
NMS07	MICROSOFT		WINDOWS NT WORKSTATION V3.51 MQLP-B	EA	4
NMS08	CABLETRON	NCM-PCOV	REMOTE LANVIEW FOR WINDOWS	EA	2
NMS09	CABLETRON	RLW PAGER	REMOTE LANVIEW FOR WINDOWS	EA	2
NMS10			EXCESS GFE ZENITH SERVERS	EA	2
NMS11	MICROSOFT	227R075V350LPB	WINDOWS NT SERVER V3.51 MQLP-B	EA	2
NMS12	MICROSOFT	228-075V421	SQL SERVER FOR NT	EA	2
NMS13	MICROSOFT	271-274V100	SERVER MANAGEMENT SERVER FOR WINDOWS	EA	2
NMS14	ADIC	99-5108	VLS 8MM DUAL DRIVE XL 120GB AUTOCHANGER	EA	1
NMS15	ADIC	93-3027-01	TAPE CARTRIDGES	EA	5
NMS16	CHEYENNE	N3-AS50-AC201	ARCSERVE CHANGER OPTION - WINDOWS	EA	1
NMS17	CHEYENNE	NT-AS10	ARCSERVE FOR NTAS - UNLIMITED	EA	2
NMS18	APC	MATRIX 3000	3000VA/2250W UPS RACK MOUNT	EA	1
NMS19	APC	SMARTCELL	ADD-ON BATTERY PACK	EA	1
NMS20	APC	AP9206	MATRIX INTERNAL POWERNET SNMP	EA	1
NMS21	APC	AP9207	SHARE UPS SERVER SHUTDOWN MODULE	EA	1
NMS22	APC	940-0020	INTERFACE CABLE FOR WINDOWS NT	EA	5

BMDO DESIGN AND IMPLEMENTATION PLAN

ITEM	MFGR	PART#	DESCRIPTION	UNIT	QTY
CLASSIFIED NETWORK MANAGEMENT SYSTEM					
NMS23	CABLETRON	ESXMIM	6-PORT 10BASET, RJ45 FAST PACKET SWITCH W/ 1 BRIM SLOT, 1 EPIM SLOT	EA	2
NMS24	CABLETRON	BRIM-F6	DAS FDDI BRIDGE/ROUTER INTERFACE MODULE W/ 2 FPIM PORTS	EA	2
NMS25	CABLETRON	FPIM-00	FDDI PORT INTERFACE MODULE - MMF-PMD W/ MIC FIBER OPTIC CONN	EA	2
NMS26	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	4
NMS27			FDDI FSD-FSD JUMPER CABLE	EA	4
NMS28			GFE ADMINISTRATOR WORKSTATIONS	EA	4
NMS29	MICROSOFT		WINDOWS NT WORKSTATION V3.51 MOLP-B	EA	4
NMS30	CABLETRON	NCM-PCOV	REMOTE LANVIEW FOR WINDOWS	EA	2
NMS31	CABLETRON	RLW PAGER	REMOTE LANVIEW FOR WINDOWS	EA	2
NMS32			EXCESS GFE ZENITH SERVERS	EA	2
NMS33	MICROSOFT	227R075V350LPB	WINDOWS NT SERVER V3.51 MOLP-B	EA	2
NMS34	MICROSOFT	228-075V421	SQL SERVER FOR NT	EA	2
NMS35	MICROSOFT	271-274V100	SERVER MANAGEMENT SERVER FOR WINDOWS	EA	2
NMS36	ADIC	99-5108	VLS 8MM DUAL DRIVE XL 120GB AUTOCHANGER	EA	1
NMS37	ADIC	93-3027-01	TAPE CARTRIDGES	EA	5
NMS38	CHEYENNE	N3-AS50-AC201	ARCSERVE CHANGER OPTION - WINDOWS	EA	1
NMS39	CHEYENNE	NT-AS10	ARCSERVE FOR NTAS - UNLIMITED	EA	2
NMS40	APC	MATRIX 3000	3000VA/2250W UPS RACK MOUNT	EA	1
NMS41	APC	SMARTCELL	ADD-ON BATTERY PACK	EA	1
NMS42	APC	AP9206	MATRIX INTERNAL POWERNET SNMP	EA	1
NMS43	APC	AP9207	SHARE UPS SERVER SHUTDOWN MODULE	EA	1
NMS44	APC	940-0020	INTERFACE CABLE FOR WINDOWS NT	EA	5

5.7.5 COMMUNICATIONS SUBSYSTEM

WAN connectivity is defined in this plan as the communications interface between the BMDO Main Facility Sensitive LAN to the OSD backbone for access to the MILNET and INTERNET. Connectivity to the MILNET/INTERNET will be provided through the OSD LAN. It is expected that the point of connection into the OSD LAN will require device that can provide border gateway protocol services. For the preliminary design, a CISCO 4000 has been proposed, but a CISCO 3000 series can also provide the interconnection service. Also required for BMDO LAN will be a Class C IP address block for configuration of TCP/IP services, network management through SNMP, and SMTP mail gateway functionality. Internally, the BMDO Unclassified LAN will use a non-routed Class B address.

The FTP/WWW/SMTP Gateway, located outside the AIS, can be used to provide access for unclassified (general public) personnel to a BMDO FTP server, World Wide Web (WWW) server and as the SMTP gateway for E-Mail services outside the BMDO LAN. Connectivity to the Unclassified LAN is protected by an secure gateway capable of providing an equivalent trusted computer security base class B3 level of trust.

For the secure network server, Secure Computing Corporation's Sidewinder is being recommended. Several secure firewalls were evaluated as part of this design. In

BMDO DESIGN AND IMPLEMENTATION PLAN

general, it was found the price/performance was pretty much equal between the various secure server manufacturers including Eagle's Raptor. The Sidewinder product has been recommended because its development was sponsored under the NSA MISSI program. Under this program, the future interoperability of the secure network server with other NSA developed security products is assured.

The Communications Server provides both Dial-In and Dial-Out access at the UNCLASS Non-Sensitive side of the secure network server (8 ports) and again on the UNCLASS Sensitive side of the secure network server (8 ports). Security is provided through Microsoft's Remote Access Services (RAS) and Secure Dynamics ACM4/200 and SecureID.

5.7.5.1 Consolidated Bill of Materials

TABLE 5-14 COMMUNICATION SUBSYSTEM BILL OF MATERIALS

ITEM	MFGR	PART #	DESCRIPTION	UNIT	QTY
CC001	HP	D3358A	HP NETSERVER LH 5/100	EA	1
CC002	HP	D3582A	2 GB HOT SWAP SCSI DRIVES	EA	3
CC003	HP	D3592A	16 MB MEMORY SIMM	EA	1
CC004	HP	D2802A	SVGA 14" DISPLAY 800X600 256 COLOR	EA	1
CC005	HP	C1413A	HP MINI-DIN MOUSE	EA	1
CC006	DEC	DEFPA-AA	FDDI PCI CONTROLLER	EA	1
CC007			FDDI FSD-FSD JUMPER CABLE	EA	1
CC008	MICROSOFT	227R075V350LPB	WINDOWS NT ADVANCED SERVER V3.51 MOLP-B	EA	1
CC009	APC	MATRIX 3000	3000VA/2250W UPS RACK MOUNT	EA	1
CC010	APC	AP9206	MATRIX INTERNAL POWERNET SNMP	EA	1
CC011	APC	940-0020	INTERFACE CABLE FOR WINDOWS NT	EA	1
CC012	CICSO SYS	4000	MODULAR MULTIPROTOCOL ROUTER, AC POWER SUPPLY	EA	1
CC013	CICSO SYS	NP-2E	2 ETHERNET PORTS NP MODULE	EA	1
CC014	CICSO SYS	MEM-NP4S	3 MB ADDITIONAL SHARED MEMORY	EA	1
CC015	CICSO SYS	ACS-NPRM	RACK MOUNT KIT	EA	1
CC016	PURVEYOR		PURVEYOR WWW SERVER SOFTWARE	EA	1
CC017	MICROSOFT	227-075V350	NTAS BACKOFFICE CD-ROM VERSION	EA	1
CC018	MICROSOFT	068-099-126	MAIL GATEWAY SMTP	EA	1
CC019	SECURECO	SIDEWINDER	SECURE NETWORK SERVER	EA	1
CC020	DIGIBOARD	70000840	EISA/8EM 8 PORT INTELLIGENT ADAPTERS	EA	4
CC021	US ROBOTICS	000938-0	MP/8 V.34 14.4/28.8 w/8 MODEMS	EA	4
CC022	SD	ACM/400	4 PORT 200 USER ACCESS CONTROL MODULE	EA	8
CC023	SD		ACE/CLINET FOR NTAS/RAS	EA	8
CC024	SD		SECURE ID	EA	100

ANNEX E

CURRENT BMDO SOFTWARE MAINTENANCE CONTRACTS

Frye Computer Systems Inc

Software Maintenance for NetWare management
Software Maintenance for NetWare Early Warning System
Software Maintenance for LAN Directory

Executive Software

I/O Express for VAX/VMS v2.2 Annual Support/Update
I/O Express for VAX/VMS v2.2 TK 50 Cluster Update

Project Software Development (Project/2 Software)

Schedule Manager Maintenance
Cost Manager Maintenance
Graphics Manager Maintenance
Oracle Interface Maintenance

Network General Corporation

Software Support Services for Sniffer Network Analyzer
(Support services include software updates, toll free support, BBS services, NIC Card and software)

United Communications Group

Site License for the CBD Express Data base Management Software/Communications Software
(Site license includes software maintenance, updates, telephone support, documentation)

TGV, Inc

Multinet Support, Micro VAX 3100
Multinet Support, VAX 8820
NFS Client Support, VAX 8820
NFS Server Support, VAX 8820

Visual Numerics, Inc

PicSure Plus w/ Textpro Update Subscription
CalComp 5800 Plotter Device Driver Service

Postscript Device Driver Service
Tektronix 4105 Device Driver Service

SVI Training Products

PC training courseware on disk, full reproduction and customization rights, free upgrades, new titles, participant manuals, instructor guides, overhead transparency masters, and data files.

Oracle Corporation

CPU: DEC VAX VMS 8820

Standard technical support for SQL*Forms/Menu
Standard technical support for SQL *Graph
Standard technical support for SQL *ReportWriter
Standard technical support for SQL *Calc
Standard technical support for Oracle for 1-2-3- Datalens
Standard technical support for SQL *Plus
Standard technical SQL *Net TCP/IP
Standard technical support for Pro *C
Standard technical support for RDBMS
Standard technical support for SQL *Net
Standard technical support for Pro Ada

CPU: DEC VAX VMS VAXSTATION 3100

Standard technical support for SQL *Net DECnet
Standard technical support for Pro *C
Standard technical support for RDBMS
Standard technical support for SQL *Forms/Menu
Standard technical support for SQL *ReportWriter
Standard technical support for SQL *Net

Digital Equipment Corporation

OpenVMS/V Base SSS MVAX3180
DN/OSI ES V/V LPS
DEC Rdb Rt V/V LPS
VMS SSS VAX 8820
DECSVR 200/VMS SSS/OS 0020
PrintServer SW
DEC Ada LPS

VAX C LPS
DEC Fortran LPS
DECPS DC-VMS LPS
DECPS CP-VMS LPS
OVMS VAX St+Op MDDS VAX 88xx
DEC Ada MDDS 16MT9
VAX C MDDS 16MT9
DECSVR 200/VMS
DEC Fortran MDDS 16MT9
Lotus 1-2-3 VMS MDDS 16MT9
Poly NW 400 V/V LPS

MSS Services Contractor
SPIMS/MSS Maintenance

PERSONNEL QUALIFICATIONS

AIS SUPPORT SERVICES

HQ0006-97-C-0001

March 20, 1996

Prepared by

BALLISTIC MISSILE DEFENSE ORGANIZATION

DESIGNATION OF KEY PERSONNEL AND MAINTENANCE OF QUALIFICATIONS

The Contractor shall notify the Contracting Officer and COTR prior to making any changes in key personnel. Key personnel are defined as follows:

a. As a minimum: the Facility Program Manager, AIS Facility Task Manager, Network Task Manager, Computer Information Center (CIC) Task Manager and the Acquisition Specialist.

b. Personnel identified in the proposal as key individuals to be assigned for participation in the performance of the contract.

c. Individuals who are designated as key personnel by agreement of the Government and Contractor during negotiations.

Key personnel shall not be replaced unless the Contractor has demonstrated to the satisfaction of the Contracting Officer and Contracting Officer's Technical Representative that: (1) replacement personnel are equal to or better than the qualifications of the personnel being replaced; or (2) the qualifications of the proposed added personnel are equal to or better than the Personnel Qualification, Attachment 2, of this contract.

QUALIFICATIONS

TABLE

<u>Labor Category</u>	<u>Educ</u>	<u>Gen</u>	<u>Experience</u>	
			<u>Spc</u>	<u>Supr</u>
Facility Program Manager	Bach	10	6	5
AIS Facility Task Manager	Bach	8	3	3
Network Task Manager	Bach	8	2	0
CIC Task Manager	Bach	8	2	0
Acquisition Specialist	Bach	6		

EXPLANATIONS

Educ Education

Bach Bachelor's Degree with emphasis in educational disciplines relevant to SOW performance; or equivalent education and training as described in the Guideline Table of Education Equivalencies.

Relevant educational disciplines include: Computer Science, Information Systems, Engineering, Business and related scientific or technical disciplines.

--- Experience

Gen General -- Years of increasing responsibility in performance of effort(s) relevant to that of the SOW.

Spc Specialized -- Years in the performance of a technical discipline directly related to that required for SOW performance. (May be included within Gen)

FACILITY PROGRAM MANAGER:

Demonstrated expertise in the area of managing a similar type of project to include experience with computer facility operation and management of several computer systems operating on a multiple shift basis; helpdesk operation and management; continuity of operations (disaster recovery) experience; demonstrated experience with LANs/WANs; experience in the area of computer systems software. Demonstrated experience in the development and administration of configuration management plans and procedures and the maintenance of CM documentation control systems.

AIS FACILITY TASK MANAGER:

Demonstrated experience with computer facility operation and management to include overall technical direction for all systems; experience with computer systems software to include VMS and NT and experience with VAX equipment; experience in troubleshooting and problem resolution of system and user problems; experience with configuration management; LAN/WAN experience and the ability to prioritize computer facility tasks.

NETWORK TASK MANAGER:

Demonstrated expertise in the area of local and wide area network operation and management to include the

identification and resolution of complex network hardware, circuit and transmission problems; demonstrated experience with the NT network operating system (NOS); experience with the operation and management of E-Mail systems. Demonstrated experience with implementing enhancements and upgrades to networks. Telecommunications and computer security experience.

CIC TASK MANAGER:

Demonstrated expertise in the area of helpdesk operation and management to include tracking of all ADP related problems; knowledge of the features and capabilities of the software listed in the RFP; experienced with providing technical advice on personal computers and LAN usage; demonstrated experience with inventory management and demonstrated hardware and software troubleshooting experience. Experience as an interface between users and operations staffs and maintenance providers. Ability to review and prioritize all user questions and problems about computer hardware and software for resolution.

ACQUISITION SPECIALIST:

Demonstrated knowledge of government acquisition strategies; demonstrated expertise in the ADP acquisition field; demonstrated knowledge of life cycle management; experience in the preparation and maintenance of acquisition documentation; experience in directing the activities of purchasing, handling controlling, transporting equipment and the inventory of parts and supplies.

Supr Supervisory -- Years in supervising work related to that of the SOW. (May be included within Gen)

Relevant supervisory experience for the AIS Facility Manager includes three years as Facility Manager or Assistant Facility Manager on multi-task contracts of the type, size, and complexity described in the Statement of Work (SOW).

GUIDELINE TABLE OF EDUCATION EQUIVALENCIES

TABLE

Equivalency
by: Basis, plus Education, or Experience, or Combined

For:

Bachelor's Degree	High School Degree	4 years	4 years	4 years
----------------------	-----------------------	---------	---------	---------

Where:

Education -- Academic years at accredited education facility that normally requires a high school diploma or equivalent for admission with emphasis in relevant discipline leading to degree for which equivalency being determined.

Experience -- Years experience in discipline relevant to proposed position.

Combined -- Years education plus experience.

DEFINITIONS

Academic Year =

Graduate level -- Successful completion of 18 semester hours or 27 quarter hours.

Undergraduate level -- Successful completion of 30 semester hours or 45 quarter hours.

Technical schools -- Successful completion of 36 weeks (20+ classroom hours per week).

Note: Credit toward an academic year for other education (e.g., home study or correspondence courses, academic credit for work experience, military education, continuing education units) is applicable where:

- credit for home study courses has been granted by a post-secondary institution accredited by the National Home Study Council, or
- accepted for college-level credit by an accredited education facility.

Accredited Education Facility = U.S. college, university or other educational institution that has been accredited by one of the accrediting agencies or associations recognized by the Secretary, U.S. Department of Education, or other institutions determined to be equivalent for this purpose.

High School Degree = High School diploma or equivalent certification.

NOTES

- Where equivalent academic years of school plus other education effort are equal to years of experience, greater relative weight goes to experience.
- Years of experience used for equivalency to meet the personnel qualifications education factors may not be used to satisfy the experience factors.

CONTRACT SECURITY CLASSIFICATION SPECIFICATION

AIS SUPPORT SERVICES

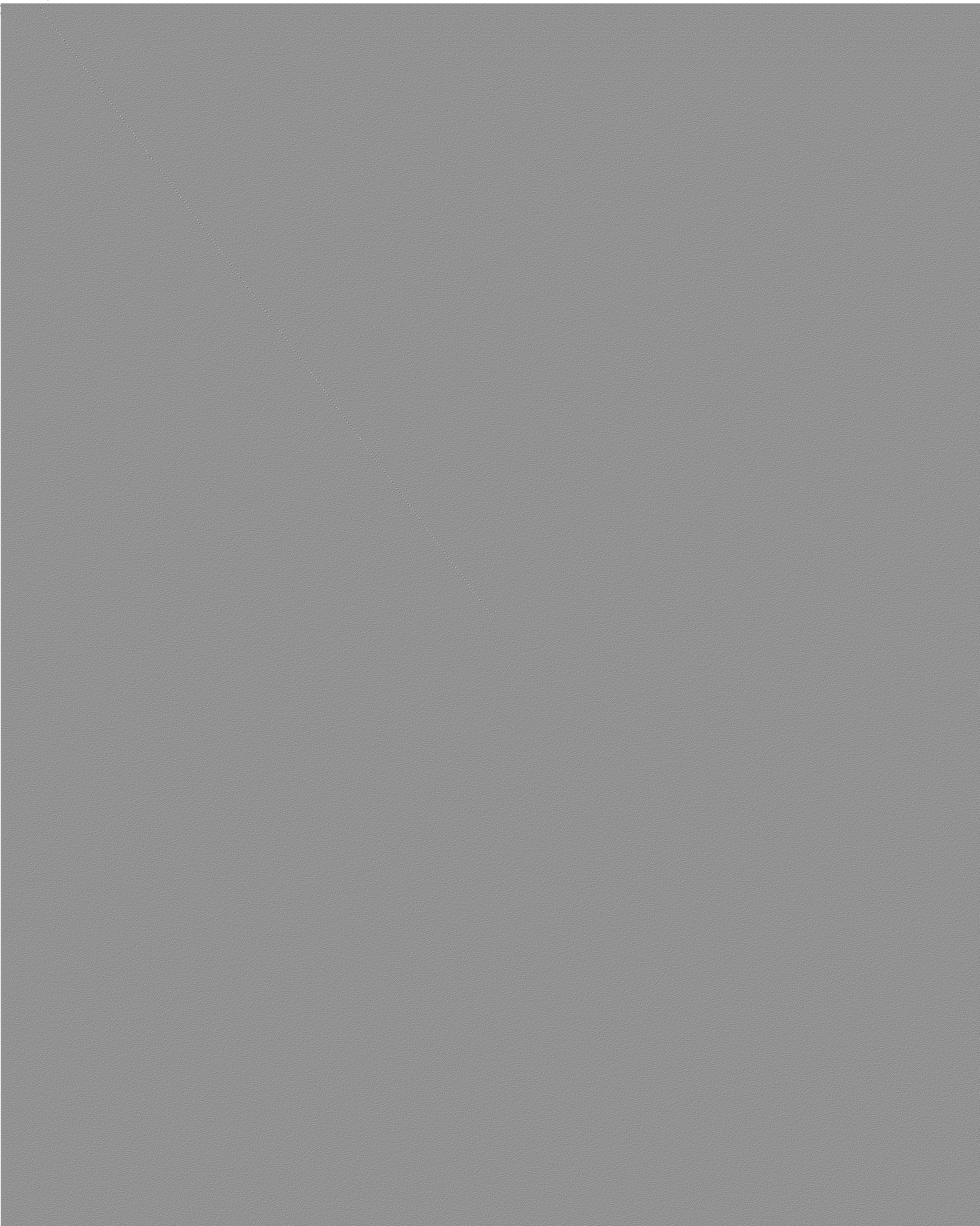
HQ0006-97-C-0001

MARCH 20, 1996

Prepared by

BALLISTIC MISSILE DEFENSE ORGANIZATION

(b)(2)



(b)(2)

**ORGANIZATIONAL CONFLICT OF INTEREST (OCI)
ANALYSIS/DISCLOSURE FORM**

OCI ANALYSIS/DISCLOSURE FOR

1. Contract Number HQ0006-97-C-0001	2. Program Title Automated Information System (AIS) Support Services	
3. Contractor Name and Address	4. Telephone Number and POC	
5. Type of work to be performed under this solicitation: (a) Providing Systems Engineering and Technical Direction () (b) Preparing Specifications or Work Statements () (c) Providing Technical Evaluation or Advisory and Assistance Services (X)		
Other BMDO or BMD-related work requiring analysis and determination:	6. Contract Number and Program Title	
7. Brief Summary/Description of work performed under Block 6 action:		
8. Relationship between requirements of Block 1 action and work performed under Block 6 action (If None, State Why):		
9. Offeror/Contractor OCI Evaluation and Assessment (If either answer is yes, attach a copy of the SOW and complete Block 10): (a) Does Actual OCI exist? () Yes () No (b) Does Potential OCI exist? () Yes () No		
10. Summary of actual/potential OCI, including actions planned to avoid, neutralize, or mitigate conflict or potential conflict:		
11. Typed Name of Responsible Official	12. Signature	13. Date
14. Typed Name of Contracting Officer Stephen M. Moss, BMDO/DCTT	15. Approval Signature	16. Date

INSTRUCTIONS FOR COMPLETING OCI ANALYSIS/DISCLOSURE FORM

Blocks 3 and 4: Self explanatory.

Block 6: Fill in the number and the short, official title by which the contract or subcontract requiring analysis and determination is formally known. This is work that has already been awarded, is being performed by your company, and requires a comparison with that work described in Blocks 1-5. **NOTE:** One OCI Analysis/Disclosure Form shall be submitted for EACH BMD or BMD-related contract or subcontract currently being performed.

Block 7: Provide a brief, but specific, narrative summary of the SOW and work performed on the contract or subcontract listed in Block 6, including the period of performance and the value.

Block 8: Provide a brief, but specific, narrative summary of ANY relationship between the work to be performed under the action listed in Block 1 and the previous work performed under the action listed in Block 6. Please be as specific as possible by citing the specific RFP/SOW paragraph where possible.

Block 9: Place an "X" in the appropriate () for your responses.

Block 10: If you answer yes either to 9(a) or to 9(b), provide a summary of the actual or potential OCI.

Blocks 11, 12, and 13: Provide the name of your company official with responsibility for and/or authority to discuss and commit the company on matters relating to OCI issues. That official should then sign and date each form.

Attachment 5
HQ0006-97-C-0001

PPBS NON-DISCLOSURE AGREEMENTS
[SDIO FORM 99]

000134

PLANNING, PROGRAMMING, & BUDGETING SYSTEM

SDI-related PPBS data: Current or future Planning, Programming, and Budgeting System (PPBS) data regarding any activity relating to the SDI Program or any of its projects regardless of the funding source or date of the document. *Planning data* defines the national military strategy; integrates the military forces necessary to accomplish that strategy; prioritizes the resources for effectively accomplishing the mission; and provides decision options. *Programming data* reflects the systematic analysis of missions and objectives to be achieved, alternative methods, and effective allocation of limited resources. *Budgeting data* are detailed financial estimates of the SDI Program or any of its related projects.

CERTIFICATION

The undersigned understands, acknowledges, and agrees:

- a. To read and comply with the applicable provisions of the "Contractor Access to Planning, Programming, and Budgeting System (PPBS) Data" clause of the contract indicated below.
- b. That any SDI-related PPBS information entrusted to you ONLY shall be used in accordance with applicable DoD and SDIO governing regulations, for the purpose for which it is provided, and within the contract Statement of Work/task order(s) under which you are employed.
- c. Not to divulge SDI-related PPBS data (obtained directly or indirectly in the performance of the contract indicated below unless directed by the Contracting Officer) to any individual, except Government personnel whom you know to have a need-to-know and non-Government persons whom you know to have SDIO authorization. Even though data becomes part of the public domain, you are bound by the provisions of this agreement not to confirm or deny questions regarding SDI-related PPBS data. Inquiries by unauthorized persons should be referred to the Contracting Officer's Technical Representative or the Contracting Officer. (Verification of companies authorized to maintain SDI-related PPBS data and individuals who have signed agreements can be obtained from the *SDIO Contracting Officer or the Director, Financial Management [POF], SDIO.)
- d. Not to transport (by any medium), process, or maintain SDI-related PPBS material outside a Government facility unless the removal or preparation of such data at the facility is accomplished in accordance with a company's plan approved by the SDIO. (A plan is not required for personnel who have a fully executed agreement to transport, process, or maintain such data at a Government or an SDIO-approved Contractor facility.)
- e. Not to accept any portion of any document which is described on the reverse side of this agreement, unless the portion of the document contains ONLY SDI-related PPBS data.
- f. To notify the *SDIO Contracting Officer or Director, POF, SDIO, promptly if any non-Government person(s) or company(s) requests access to SDI-related PPBS data.

Violation of this agreement may result in adverse contractual actions and/or criminal prosecution.

(Signature of Individual Requiring Access to PPBS Data)

(Prime Contractor Name)

(Print or Type Name - Last, First, MI)

(Prime Contract Number(s))

(Date Signed)

(Contract Period of Performance)

(Print or Type Name of Employer)

(Primary Task Order, if applicable)

Briefly describe the activities which require your access to SDI-related PPBS data: _____

AUTHORIZATION

COTR/Government Employee Sponsor:

(Signature)

(Print or Type Last Name)

(Date)

Director, Financial Management (POF),
SDIO: (Check one box below)

(Signature)

(Print or Type Last Name)

(Date)

PPBS Access Approved

PPBS Access Denied

*Contracts awarded or managed by SDIO.

**PLANNING, PROGRAMMING, & BUDGETING SYSTEM
PPBS NON-DISCLOSURE AGREEMENT (Continued)**

Non-government personnel may be given access to SDI-related PPBS data derived or extracted from the following documents; however, the documents in their entirety may not be released to any non-government personnel, unless the document contains ONLY SDI-related PPBS data and the individual has received approval from the SDIO:

PLANNING

- Defense Planning Guidance

PROGRAMMING

- Fiscal Guidance (when separate from Defense Planning Guidance)
- Program Objective Memoranda (POM)
- POM Defense Program (formerly FYDP) documents--(POM Defense Program, Procurement & RDT&E Annexes)
- Program Review Proposals
- Issue Papers (e.g., Major Issue Papers, Tier II Issue Papers, Cover Briefs)
- Proposed Military Department Program Reductions (or Program Offsets)
- Tentative Issue Decision Memoranda
- Program Decision Memoranda (PDM)

BUDGETING

- Defense Program (formerly FYDP) documents for September Budget Estimate Submission (BES) & President's BES including Procurement (P-1), RDT&E (R-1), & Construction (C-1) Program Annexes
- Classified P-1, R-1, & C-1 Program Annexes
- Program Budget Decisions (PBD)/Defense Management Review Decisions
- Reports Generated by the Automated Budget Review System (BRS)
- DD Form 1414 Base for Reprogramming
- DD Form 1416 Report of Programs
- Contract Award Reports
- Congressional Data Sheets
- Congressional Descriptive Summary

Source: DoD Directive 7045.14