MINICOMPUTER OPERATIONS

GROUP (MOG)

OPERATIONAL REVIEW

PROCEDURES

CONTENTS

1. GENERAL

This practice provides procedures to conduct an operational review and overall performance evaluation of the Minicomputer Operations Group (MOG) and/or an individual site operations group at clustered or nonclustered minicomputer site locations.

This practice is being reissued to reflect changes due to divestiture.

This practice is a guideline and is one in a series of practices to be used to conduct operational reviews of the minicomputer operations and maintenance functions. References to specific vendors are not intended to be an endorsement. They are cited only for illustrative purposes.

2. INTRODUCTION

This practice is divided into the following five sections.

- Section 1. General

- Section 2. Introduction

- Section 3. General Instructions

- Section 4. Outline of Evaluation

- Section 5. Operational Review Checklist

2.01 Principal Features of the Review

Section 3 explains the methods employed in the review and post-review procedures.

Section 4 contains a basic outline of the areas covered in the review checklist, along with remarks on the key points in each area.

Section 5 contains an exhibit of the Operational Review Checklist, including the Summary Statement and the Problems and Recommendations Log.

This review is intended to evaluate a full MOG application and/or an individual site operations group at clustered and nonclustered site locations. It is not intended to evaluate Minicomputer Maintenance Groups (MMGs) or vendor maintenance of minicomputer systems.

The checklist items listed in this practice are intended to indicate what is to be reviewed rather than to limit the scope of the review. Additional items may be considered in the review even though they are not specifically covered in the printed questions. These additional items may be used in later evaluations for company-wide benefit. Furthermore, if the reviewer discovers a unique method of handling some particular problem or procedure, the reviewer may (and should) ask additional questions to bring out details for possible use of the idea in other minicomputer site locations.

2.02 Application and Use of Results

Review results may be used by appropriate levels of management to identify the following:

- Effectiveness of the minicomputer operations effort as administered by the MOG or individual site operations group

- Performance and efficiency of the MOG or individual site operations group

- Force efficiency and administration

• Need for policy changes.

The overall view gained in this relatively short study should permit one of the following decisions to be made:

(a)   No specific action is needed at this time.

(b)   Certain activities are indicated and action should be taken without further evaluation.

(c)   Further study of the situation is required to determine the extent of problems indicated by the initial survey and the total corrective program necessary.

2.03 Purpose of Review

The MOG operational review is designed to yield an overall view of the performance and effectiveness of the MOG and/or site operations group. The objective of this review is to **identify problem areas and provide a vehicle for administering corrective action rather than for rating performance.** It also serves as an excellent tool for self-review to indicate weak spots.

2.04 Background

A point system is not used in this review; it provides an overall look at the MOG and/or individual site operations group relative to the objective of an MOG. The review helps identify areas that need improvement. The feedback meeting results in a list of recommendations to improve weak areas with assignment of responsibility for corrective action and target dates for completing the recommendations. Allowance is made for final summary statements by the reviewer. Follow-up meetings are used to review the status of implementing the recommendations.

The primary objective of the MOG is to ensure that the task of operating minicomputers hardware under its jurisdiction, deployed throughout a company, is accomplished in the most complete and efficient manner possible.

2.05 Sensitive Areas

It is essential that the reviewer be aware of certain areas of minicomputer operations. Important functions which help determine whether or not the operations group is performing the operations job satisfactorily on the systems in its jurisdiction include the following:

• Minimum system downtime

• Expedient reporting and processing of trouble conditions

• Knowledge and respect for system priority within a given operating telephone company

• Concern for security of systems, media, and site locations

• Proper processing of media

• Sensitivity to environmental and operational alarms

• Good operations rapport with the user.

Part L, Visual Inspection of Processor and Computer Room Peripherals, of the Operational Review Checklist must be done with the local operations group supervisor on hand. Some of these checks require access to computer cabinets. This must be arranged with the local supervisor. The reviewer makes a visual inspection only, looking for obvious problems. If a defect is found or suspected, the reviewer records the defect and refers it to the Minicomputer Support Group (MSG) for a more detailed inspection at an opportune time least critical to system operation or when the system is down for

preventive maintenance (PM) routines.

These guidelines for sensitive areas should not be construed as deflating the importance of the other portions of the operational review or other areas of responsibility of the operations group. All facets of an operations group must fit together to yield an effective operation. If certain functions are not performed efficiently and effectively, the MOG work force may spend excessive time and effort on these functions to the detriment of other functions.

2.06 References

The primary references for this operational review are:

- Practice 007-550-302
- Practice 007-550-303
- RL 80-03-002
- RL 80-08-245.

3. GENERAL INSTRUCTIONS

A method for evaluating the performance and effectiveness of the MOG and/or an individual site operations group is provided in this section of this practice. Although size and scope of operation will vary from operations group to operations group and clustered and nonclustered sites, the major objectives of the MOG apply, and an evaluation can be made in light of these objectives. Responsibility for corrective action must be established at a feedback (district-level) meeting.

3.01 Evaluation

The specific procedure for performing the evaluation is contained in Section 4 of this practice. There are more than 100 questions in the review. These questions place emphasis on areas of minicomputer operations which impact the ability of the operations group to fulfill its objectives. Therefore, more emphasis is placed on the end results than on the means to achieve the end results.

The vehicle for evaluation is the MOG Operational Review Checklist (Figure 1). The **Review Item** column on the checklist contains the individual question to be addressed. If applicable, references to Bellcore Practices (BRs) are included for the individual questions. The **Yes/No Data** column is used by the reviewer to designate compliance with the item and/or to expand upon deviation or discrepancies. Certain items may not be applicable to a given operations group. These items should be noted as **NA** on the checklist.

An overall review summary statement and a list of problem items (Part N of checklist) should be prepared by the reviewer for use in the post-evaluation review meeting.

3.02 Post-Evaluation Review Meeting

A post-evaluation review meeting to discuss evaluation results with local supervision and higher levels of management is essential. Results of the review are intended for use primarily as a guideline to improve minicomputer operations. The review should **not** be used as a means of personnel evaluation or appraisal. The review meeting and summary statement can be constructively used as a tool to point up weak spots and problem areas and to offer suggestions for corrective action. The district-level manager should determine responsibilities for corrective action and establish schedules for completion at the review meeting.

The place and time of the review meeting should be established prior to the performance of the review and should be made known to management up to and including the division-level manager. The feedback meeting should follow as soon as possible after the review.

The formal review summary statement and list of problem review items should be prepared by the reviewer and distributed to appropriate parties in keeping with local company practices.

A follow-up review should be scheduled for items found to need corrective action.

4. OUTLINE OF EVALUATION

The basic outline of the operational review evaluation is divided into the following 14 parts:

(1) **A. Organization and Administration:** This contains background information which addresses the organizational structure and environment of an MOG and/or individual site operations group in terms of available personnel, coverage periods, systems operated, and criticality of the systems. This part may be sent to the field prior to the review to be filled out and returned so the reviewer can analyze the background material before starting the review.

(2) **B. Personnel:** This addresses adequacy of personnel, including training information (formal and on the job), work evaluation procedures, work schedules, safety, and proper rapport with the users.

(3) **C. Maintenance Activity Reports (MARs):** This addresses the preparation and submitting of MARs, flow of trouble reports, and trouble analysis.

(4) **D. Operator Procedures:** This addresses provision of guidelines for operator responsibility and training in operation and restoration of the systems and peripherals under the operational jurisdiction of the group being reviewed.

(5) **E. Operational Recovery From Catastrophe:** This addresses system prioritization for recovery procedures, classification of various types of disasters and disruption, provision of backup facilities, and disaster recovery audits. (See TM ISD-001431.)

(6) **F. Security:** This addresses security for computer room site locations, dial-up access ports, data base passwords, and data and general audits.

(7) **G. New System Installation and Coordination:** This addresses the operations group supervisor involvement in new system planning, site selection, floor space layout, and operations force requirements based on new system growth.

(8) **H. Housekeeping:** This addresses the general appearance of the individual computer site location, documentation storage, and floor space layout.

(9) **I. Environmental Controls:** This addresses environmental conditions at the individual site locations, provision of environmental control alarms, procedures for system shutdown in the event of environmental failure, fire detection and protection, and uninterrupted power source provision.

(10) **J. System Operational Alarms:** This addresses operations group functions in handling system operational alarms and performing emergency system shutdown procedures at the individual site locations.

(11) **K. Preventive Maintenance (PM):** This addresses the provision of a PM schedule for individual site location operations group PM items, completion of the scheduled items, and queries system operations problems with respect to PM performed by the MMG or by the vendor.

(12) **L. Visual Inspection of Processor and Computer Room Peripherals:** This provides a visual inspection checklist of items relative to the individual site location processors and computer room peripherals. **Visual checks should be made only by the reviewer.** Suspected deficiencies should be referred to the MSG for technical inspection at a time least critical to system operation.

(13) **M. User Interview:** This gives the user management an opportunity to express its view of the service performed by the operations group.

(14) **N. Summary Statement, Problems and Recommendations Log:** This allows for all areas and aspects of an MOG and/or individual site operations group to be addressed by the reviewer(s) in a summary statement to provide a complete picture of the operations group reviewed. This should be used to develop a list of problem review items, recommendations for improvement, and commitments to perform the recommendations.

5. OPERATIONAL REVIEW CHECKLIST

An exhibit of the Operational Review Checklist is provided in this section of the practice.

MINICOMPUTER OPERATIONS GROUP (MOG)

OPERATIONAL REVIEW

CHECKLIST INDEX

PART   DESCRIPTION

A.   ORGANIZATION AND ADMINISTRATION

B.   PERSONNEL

C.   MAINTENANCE ACTIVITY REPORTS (MARs)

D.   OPERATOR PROCEDURES

E.   OPERATIONAL RECOVERY FROM CATASTROPHE

F.   SECURITY

G.   NEW SYSTEM INSTALLATION AND COORDINATION

H.*   HOUSEKEEPING

I.*   ENVIRONMENTAL CONTROLS

J.*   SYSTEM OPERATIONAL ALARMS

K.*   PREVENTIVE MAINTENANCE (PM)

L.*   VISUAL INSPECTION OF PROCESSOR AND COMPUTER ROOM PERIPHERALS

M.*   USER INTERVIEW

N.   SUMMARY STATEMENT, PROBLEMS AND RECOMMENDATIONS LOG

* These checklist items are applicable to site locations and should be used to review each site under the jurisdiction of the operations group being reviewed whether clustered or nonclustered.

Figure 1. Exhibit of Operational Review Checklist (Sheet 1 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS

A. ORGANIZATION AND ADMINISTRATION
 	
 A.1 How may systems/processors receive operational support from the MOG, i.e., Digital Equipment Corporation (DEC™), Hewlett-Packard (HP), International Business Machines (IBM), other?
 	
     VENDOR   SYSTEMS   PROCESSORS
     DEC _____ _____
     HP _____ _____
     IBM _____ _____
     OTHER _____ _____		

Additional Comments:		

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Figure 1. Exhibit of Operational Review Checklist (Sheet 2 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS

A. ORGANIZATION AND ADMINISTRA-TION (Contd)
 	
A.2 How is the MOG staffed? Secure an organizational chart of the group. List total management by level:
 	
   • 2nd level _____
 	
   • 1st level _____
 	
List total craft by title.		

Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 3 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
A. ORGANIZATION AND ADMINISTRA-TION (Contd) A.3 What is the hourly coverage for each business day? • AM _____ • PM _____ A.4 What is the hourly coverage for weekends? • SAT _____ AM _____ PM • SUN _____ AM _____ PM		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 4 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
A. ORGANIZATION AND ADMINISTRA-TION (Contd)		
A.5 List critical systems operated by this MOG. (Refer to Practices 007-560-304 and 007-590-302.)		
A.6 Has a company system priority restoral list been developed? If yes, attach a copy of the restoral list to this sheet.		
A.7 Are the critical systems in the proper priority?		
A.8 Have call-out procedures been established to service critical systems during periods of light or no coverage?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 5 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
A. ORGANIZATION AND ADMINISTRA-TION (Contd)		
A.9 How long has this MOG been operational?		
A.10 Is accounting code information available in this MOG for coding of labor and supplies?		
A.11 Have there been any accounting errors in the last quarter?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 6 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS

B. PERSONNEL
 	
B.1 Is the MOG force large enough to provide adequate business day and weekend coverage?
 	
B.2 Examine the overtime objective and 6 months actual results for this group. Do overtime levels exceed the objective (6-month average OT/individual/week)?
 	
  • Objective _____
  • Actual _____
 	
B.3 Are employee training records available in the MOG?
 	
B.4 Does the MOG supervisor have a current copy of training classes available? (Refer to BR 007-555-353.)		

Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 7 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
B. PERSONNEL (Contd)		
B.5 Are MOG work and responsibility schedules posted?		
B.6 Have MOG personnel received adequate training for their assigned responsibility?		
B.7 Has the MOG supervisor identified training needs and have appropriate training courses been requested?		
B.8 Have work evaluation procedures been established for this MOG?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 8 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
B. PERSONNEL (Contd)		
B.9 Are work inspections performed and documented?		
B.10 Have procedures been established to follow up and correct substandard work performance?		
B.11 Is there an employee safety plan used in this MOG?		
B.12 Are operations personnel trained for proper communication and interface with the users?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 9 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
C. MAINTENANCE ACTIVITY REPORTS (MARs)		
C.1 Does the MOG keep a trouble report log?		
C.2 If yes, is it a log on each individual system or a common master log?		
C.3 Does the log contain a list of all MARs?		
C.4 Have MARs been submitted for all system failures?		
C.5 Make a sample comparison of the operation group MARs to the Minicomputer Maintenance Group (MMG) trouble report list. Are MARs forwarded to the MMG in a timely manner?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 10 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
C. MAINTENANCE ACTIVITY REPORTS (MARs) (Contd)		
C.6 Have control procedures been established to ensure that a MAR is submitted for all system turndowns and outages including preventive maintenance (PM) routines?		
C.7 Are MAR data analyzed by the MOG?		
C.8 Does analysis cover:		
• Quality control		
• Uncovering intermittent problems		
• Incorrect trouble reporting		
• Potential software problems?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 11 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
D. OPERATOR PROCEDURES D.1 Has a set of guidelines of operator system responsibility been established? (See practice 007-505-330, Guidelines to Produce Service Agreements for Minicomputer-Based Systems.) D.2 Have all of the operators in this MOG received training in the following categories on the various systems under their jurisdiction? • Formal • On-the-job • Follow-up • Daily routines • Restorations.		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 12 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
D. OPERATOR PROCEDURES (Contd) D.3 Are there manuals and procedures on hand for each system covering the following? • Operation • Restoration. D.4 For systems under their operational jurisdiction, have all operators received training on care and handling of the following: • All disk drives • All tape drives • Printers • Magnetic media, including disk and tape? D.5 Are trouble reporting numbers for MMG, MSG, or vendor readily available?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 13 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
E. OPERATIONAL RECOVERY FROM CATASTROPHE		
E.1 Have systems under the jurisdiction of this MOG been prioritized for recovery procedures, first to last? (See TM ISD-001431.)		
E.2 Have various types of disasters been classified and the types of disruption which would occur? (See practices 007-590-200, 007-590-300 through 304, and 007-590-400.)		
E.3 Has a backup site or system been determined? • Are there machines the programs can be transferred to full or part time? • Are there locations with suitable machine backup data link facilities?		
E.4 Has a disaster recovery audit been completed in the last 6 months?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 14 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS

F. SECURITY
 	
COMPUTER ROOM SITE LOCATION
    SECURITY
 	
F.1   Are computer room doors kept locked?
 	
F.2   What lock arrangement is used?
 	
    • Key or coded?
 	
    • Is the list of personnel-issued keys or cards available?
 	
    • Is the key or coded lock changed periodically?
 	
F.3 How is access to the computer room by non-company employees and unauthorized company employees controlled?		

Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 15 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
F. SECURITY (Contd) DIAL-UP PORT SECURITY F.4 Are make busy features provided for dial-up ports? F.5 Are make busy features normally activated? F.6 Is management approval required for dial-up port access or release of make busy feature? F.7 Is a dial-up port access request log kept? F.8 Are routine checks of idle ports made to verify that they are made busy after requested use is complete?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 16 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
F. SECURITY (Contd)		
DATA BASE PASSWORDS		
F.9 How are data base passwords protected?		
F.10 Are super-user passwords changed routinely?		
DATA AND GENERAL MEDIA		
F.11 Are backup copies of data, generic, and general media stored in an approved manner?		
• In a separate tape library, in a different fire zone, or at an off-site location?		
• In a fire protected storage vault in same area as computer equipment?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 17 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
F. SECURITY (Contd)		
DATA AND GENERAL MEDIA (Contd)		
F.12 Are updates of data base performed in a timely manner?		
• For local on-site copies		
• For backup off-site copies		
F.13 Is there an adequate supply of disk and tape on hand to provide backup and perform daily routines?		
F.14 Are there means to transport media, on and off site, which are safe to both people and the media?		
F.15 Are all the media labeled in a logical and understandable way?		
F.16 Is there space for media record administration in the media library or storage vault?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 18 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
F. SECURITY (Contd)		
DATA AND GENERAL MEDIA (Contd)		
F.17 Does this MOG transport media containing revenue information, i.e., Automatic Message Accounting Recording Center (AMARC)?		
F.18 If revenue media are transported, is a definite sign-off transaction carried out when media are delivered to its destination?		
F.19 Is the MOG responsible for storage of non-clustered system backup media? If so:		
• Is there a formal sign-off transaction procedure?		
• Does the MOG monitor the incoming system backup media and ensure it is received in a timely manner?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 19 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
G. NEW SYSTEM INSTALLATION AND COORDINATION		
G.1 Does the MOG supervisor become involved in the planning effort for new system proposals?		
G.2 Is the MOG supervisor involved in site location selection and floor space layout to ensure that a satisfactory operational effort will be possible? (See BR 007-560-310, Test and Acceptance Procedures for Minicomputer Systems.)		
G.3 Does the MOG supervisor have a plan to accommodate expected operations activity based on projected system growth?		
G.4 Are service agreements facilitated prior to the installation of a new system? (See BR 007-505-330, Guidelines to Produce Service Agreements for Minicomputer-Based Systems)		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 20 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
H. HOUSEKEEPING		
H.1 Is the general appearance of the computer site orderly?		
H.2 Inspect both floors and cabinets for dust. Is the computer site clean?		
H.3 Is the on-site documentation kept in a specific location and is this material easily found?		
H.4 Is the material orderly?		
H.5 Is the floor layout conducive to easy operation and maintenance?		
H.6 Are on-site documents and storage cabinets conveniently located?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 21 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
I. ENVIRONMENTAL CONTROLS		
I.1 Is this a controlled environment site location?		
I.2 Is an environmental alarm system installed to monitor temperature and humidity?		
I.3 Is the alarm system tested on a regular basis?		
I.4 Are there any obvious discrepancies with the location of alarm detectors?		
I.5 When the computer site is not covered by a regular shift, where are the environmental alarms transferred?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 22 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
I. ENVIRONMENTAL CONTROLS (Contd)		
I.6 Is the alarm transfer site covered 24 hours a day?		
I.7 Is the alarm transfer feature tested on a regular basis?		
I.8 Has the temperature or humidity system failed during noncovered shifts?		
• If so, did the alarm transfer?		
• Was response timely?		
I.9 Are environmental alarms set in accordance with vendor-recommended guidelines?		
I.10 Are the environmental controls on stand-by power?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 23 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
I. ENVIRONMENTAL CONTROLS (Contd)		
I.11 Has a procedure been established for system shutdown in the event of environmental failure?		
I.12 What means are provided for fire detection and protection?		
I.13 What fire fighting techniques are available at this site?		
I.14 Are MOG employees knowledgeable in fire reporting and fire fighting procedures?		
I.15 Is an uninterrupted power source (UPS) recommended for any systems at this site location?		
I.16 Has UPS been provided?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 24 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
J. SYSTEM OPERATIONAL ALARMS		
J.1 What minicomputer systems at this location are equipped to generate an operational alarm upon system failure?		
J.2 Where are the alarms transferred during non-coverage hours?		
J.3 Is the alarm transfer site covered 24 hours a day?		
J.4 Is the alarm transfer feature tested on a regular basis?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 25 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
J. SYSTEM OPERATIONAL ALARMS (Contd)		
J.5 Are transferred alarms acted upon in a reasonable time frame?		
J.6 Are emergency system shutdown procedures on hand and readily available?		
J.7 Are all MOG personnel knowledgeable in carrying out these procedures?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 26 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
K. PREVENTIVE MAINTENANCE (PM)		
K.1　Site management guides, if provided by the vendor, or equivalent documentation should be on hand for use. Is a sufficient number of site management guides or equivalent documentation available for effective administration by the MOG?		
K.2　Does the guide include a PM schedule section?		
K.3　Is a PM schedule on hand for all systems at this site location?		
K.4　Are operations group PMs defined and scheduled?		

Additional Comments:

Figure 1. Exhibit of Operational Review Checklist (Sheet 27 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
K. PREVENTIVE MAINTENANCE (PM) (Contd)		
K.5 Have the operations group routines been completed as scheduled?		
K.6 Is recording of completed MOG routines up to date?		
K.7 Are PM schedules performed by the MMG negotiated and scheduled with the MOG?		
K.8 Are MMG or vendor PMs complete up to the current date? (May require checking MMG or vendor records.)		
K.9 Has PM application caused any system operations problems? If so, what steps have been taken by the MMG or vendor to avoid recurrence of the problem?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 28 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
L. VISUAL INSPECTION OF PROCESSOR AND COMPUTER ROOM PERI-PHERALS		
L.1 The reviewer must read and be familiar with paragraph 1.16 and subparagraph 3.01(12) of BR 007-550-309 before performing the checks outlined in this part.		
L.2 Visually check for the following and record any discrepancies:		
• Organization of on-site media.		
• Loose cables.		
• Worn cables (UNIBUS* System).		
• Bent backplane pins.		
• Loose or misaligned circuit packs.		
• Broken connectors.		
• Loose or broken external parts.		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 29 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
L. VISUAL INSPECTION OF PROCESSOR AND COMPUTER ROOM PERIPHERALS (Contd) • Poorly placed cables, bunched cables, etc. • Excessive vibration in fans and motors. • Missing or defective lights, lamps, or indicators. • Dirt dust contamination of machine area. • Alignment of tape drives. • Obvious wear on mechanical components. • Loose or damaged floor tiles that could cause an accident on a raised floor. • At the ac circuit breaker panel, check for logical identification of circuit breaker assignments. • Are unused circuit breaker slots properly covered both on the ac panel and on the rear of processor hardware?		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 30 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
L. VISUAL INSPECTION OF PROCESSOR AND COMPUTER ROOM PERIPHERALS (Contd) L.3 Verify with the operations groups that the following items are checked during PM routines performed by the MMG or the vendor: • Power supply voltage • Contamination of disk heads • Wear on disk and tape heads • Brushes and belts on motor drives.		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 31 of 34)

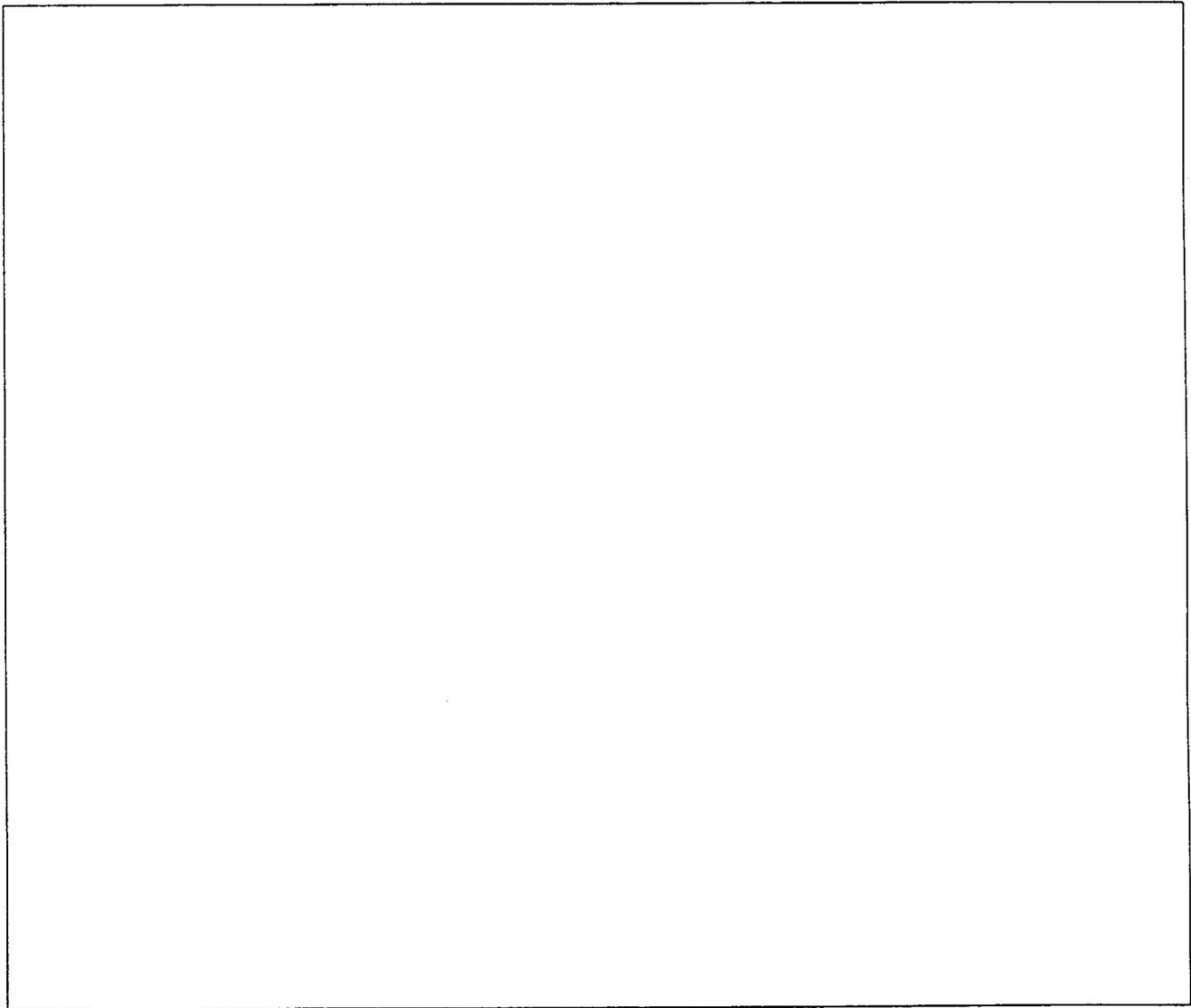OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER OPERATIONS GROUP (MOG)

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	YES/NO DATA	REMARKS/FINDINGS
M. USER INTERVIEW M.1 Is the user management satisfied with the system operation service performed by the MOG being reviewed? M.2 If not, specifically state why not and give examples.		
Additional Comments:		

Figure 1. Exhibit of Operational Review Checklist (Sheet 32 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER MAINTENANCE GROUP (MOG)

PART N. SUMMARY STATEMENT

LOCATION _____ DATE _____ REVIEWER _____

Figure 1. Exhibit of Operational Review Checklist (Sheet 33 of 34)

OPERATIONAL REVIEW CHECKLIST

MINICOMPUTER MAINTENANCE GROUP (MOG)

PART N. PROBLEMS AND RECOMMENDATIONS LOG

LOCATION _____ DATE _____ REVIEWER _____

REVIEW ITEM	RECOMMENDATIONS	COMMITMENT (WHO/WHEN)

Figure 1. Exhibit of Operational Review Checklist (Sheet 34 of 34)