

ADMINISTRATIVE AND TECHNICAL OPERATIONAL REVIEW
NETWORK MAINTENANCE MANAGEMENT PLAN (NMMP)
NETWORK SWITCHED SERVICES
NO. 5 CROSSBAR

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1. GENERAL

1.01 This practice is one of a series of documents referred to as the Network Maintenance Management Plan (NMMP). This section provides the guidelines and operational review checklists needed to perform reviews of No. 5 crossbar central offices. All No. 5 crossbar operational reviews should be conducted in accordance with this section and the general guidelines contained in Section 201-020-511. The checklists contained in this section may be used by operating company staff organizations or local management to determine the extent to which approved practices and policies are being used and their effectiveness. The review is divided into two parts, administrative and technical. Each part of the review may be performed independently, or both parts may be performed concurrently to check the operational aspects of central office

management. If the central office is controlled by an electromechanical switching control center (EM-SCC), only the technical portion of this review will be performed at the central office. The administrative review will be conducted at the EM-SCC. See paragraph 2.01 Note.

1.02 Whenever this section is reissued, the reason for reissue will be stated in this paragraph.

1.03 The administrative operational review is directed primarily at the review of central office management, records and record keeping, administrative procedures, personnel development policies, and verification of data used in performance measurement plans. The technical operational review consists principally of a detailed physical check of the condition of central office equipment, including an inspection of completed work, inventory of test equipment, and verification of local records relating to central office equipment.

Note: Some questions are duplicated in the technical and administrative review checklists; however, these questions need only be reviewed once if both the reviews (administrative and technical) are conducted simultaneously.

1.04 Recommendations for changes, additions, or deletions to this section should be made as specified in Section 000-010-015.

2. REVIEW GUIDELINES

2.01 The administrative operational review checklist, contained in this document, is divided into eight major parts/categories. The technical operational review checklist is comprised of six major parts/categories. See Table A for an outline of the administrative and technical portions of the No. 5 crossbar operational reviews.

NOTICE

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Note: If the central office is under the control of an electromechanical switching control center (EM-SCC), only the technical operational review (Part 2 of the review) should be conducted. The items contained in the administrative operational review (Part 1 of the review) will be evaluated as a part of the EM-SCC Operational Review, Section 190-130-145. Both the administrative and technical checklists contained in this section will be used to review those central offices that are not SCC controlled.

2.02 Each category of the operational review consists of a series of related questions requiring an individual rating of either satisfactory or exception. Questions not relating to a given review should be marked NA (not applicable). A space is also allocated for comments. Some questions on the checklist will be referenced to applicable Bell System Practices, or similar standard system documentation. These references will be found at the end of the question and will be prefixed by a bullet (●). Items that are not in full compliance with the cited reference material should be checked as an exception. Items with no specific reference are recommended maintenance procedures that should be followed in all No. 5 crossbar offices and are subject to review. The reviewer must comment on all checklist items which are found to be exceptions; however, comments may also be necessary or useful on satisfactory items. Exception items commented on should contain sufficient details regarding discrepancies so that the responsible management personnel can effect corrective measures.

2.03 The operational review checklists (see Part 3) reflect minimum acceptable standards and are intended to indicate those items which are to be evaluated. Space has also been provided on the checklists to add questions that reflect local policies or practices.

2.04 Ratings for individual categories and for the overall review will be expressed in one of the four bands listed below:

Band H—High

Band O—Objective

Band L—Low

Band U—Unsatisfactory

Table B and C detail the point versus band relationship for the categories and the overall administrative and technical reviews. Refer to Section 201-020-511 for complete details of the rating system. Items which do not apply to a particular office, such as AMA Administration, Coin, etc, will have their point values deducted from the total. The new total will be used as maximum points for those offices. The band rating (H, O, L, U) will have to be calculated at 90%, 80% and 70% of the new total.

2.05 Several major items on the checklist, determined by their importance to proper system operation, will be indicated by a pound (#) sign. When an exception is indicated against any of these items, the rating for the category including the item itself will not be higher than Band U.

2.06 General procedures to be used in performing the operational review (preliminary procedures, post review feedback meetings, etc) are specified in Section 201-020-511. This section also contains the standard forms to be used. These forms may be reproduced locally, as required.

3. OPERATIONAL REVIEW CHECKLISTS

3.01 The operational review is to be conducted utilizing the format and guidelines specified by the attached checklists. All of the evaluative material required to perform the operational review is contained in these checklists.

3.02 These checklists are to be used and completed during the actual review of the administrative and technical items associated with each office. The checklists are prefaced by the band rating summary forms (administrative and technical) which are to be completed upon the conclusion of the reviews in order to summarize the results of the review.

3.03 The checklists to be used in the operational review are divided into two parts:

- Part 1 - Administrative Review
- Part 2 - Technical Review

The checklists and specific items to be reviewed are included in the back of this section.

TABLE A
ADMINISTRATIVE AND TECHNICAL OPERATIONAL REVIEW
NO. 5 CROSSBAR
CATEGORIES AND POINT VALUES

ITEM NO.	ADMINISTRATIVE CATEGORY	POINT VALUE
1.0	Network Switching Performance Measurement Plan	15
2.0	Corrective Maintenance	15
3.0	Preventive Maintenance	10
4.0	Trunking	10
5.0	AMA Administration	10
6.0	Force Control	15
7.0	Personnel Development	15
8.0	Miscellaneous (Traffic Indicators, Service Observing, Installation Items, Network Cost Results Plan)	10
	TOTAL	100
ITEM NO.	TECHNICAL CATEGORY	POINT VALUE
1.0	Equipment Condition	25
2.0	Documentation, Testing, Test Equipment, and Tools	15
3.0	Trouble Procedures	15
4.0	Coin Service	10
5.0	Environmental Control	10
6.0	Power	25
	TOTAL	100

TABLE B
 ADMINISTRATIVE OPERATIONAL REVIEW
 NO. 5 CROSSBAR
 POINTS VERSUS BAND RELATIONSHIP

ITEM NO.	LOWER LIMITS OF BANDS				AUTOMATIC BAND U POINTS LOST
	H	O	L	U	
1.0	13.5	12.0	10.5	Below 10.5	6.0
2.0	13.5	12.0	10.5	Below 10.5	6.0
3.0	9.0	8.0	7.0	Below 7.0	4.0
4.0	9.0	8.0	7.0	Below 7.0	4.0
5.0	9.0	8.0	7.0	Below 7.0	4.0
6.0	13.5	12.0	10.5	Below 10.5	6.0
7.0	13.5	12.0	10.5	Below 10.5	6.0
8.0	9.0	8.0	7.0	Below 7.0	4.0
Total Review	90.0	80.0	70.0	Below 70.0	

TABLE C
 TECHNICAL OPERATIONAL REVIEW
 NO. 5 CROSSBAR
 POINTS VERSUS BAND RELATIONSHIP

ITEM NO.	LOWER LIMITS OF BANDS				AUTOMATIC BAND U POINTS LOST
	H	O	L	U	
1.0	22.5	20.0	17.5	Below 17.5	8.0
2.0	13.5	12.0	10.5	Below 10.5	6.0
3.0	13.5	12.0	10.5	Below 10.5	6.0
4.0	9.0	8.0	7.0	Below 7.0	3.5
5.0	9.0	8.0	7.0	Below 7.0	3.5
6.0	22.5	20.0	17.5	Below 17.5	8.0
Total Review	90.0	80.0	70.0	Below 70.0	

**PART 1 – ADMINISTRATIVE OPERATIONAL REVIEW
NO. 5 CROSSBAR
BAND RATING SUMMARY**

COMPANY _____ REVIEWER _____
 DIVISION _____ DATE _____
 DISTRICT _____ PRESENT RATING _____
 BUILDING LOCATION _____ PREVIOUS RATING _____

CATEGORIES REVIEWED		POINTS	BAND
ITEM NO.	ITEM		
1.0	Network Switching Performance Measurement Plan		H O L U
2.0	Corrective Maintenance		H O L U
3.0	Preventive Maintenance		H O L U
4.0	Trunking		H O L U
5.0	AMA Administration		H O L U
6.0	Force Control		H O L U
7.0	Personnel Development		H O L U
8.0	Miscellaneous		H O L U
Overall Rating – Part 1			H O L U

Re-review (check one)

- Required
- Not Required

**PART 2 – TECHNICAL OPERATIONAL REVIEW
NO. 5 CROSSBAR
BAND RATING SUMMARY**

COMPANY _____ REVIEWER _____
 DIVISION _____ DATE _____
 DISTRICT _____ PRESENT RATING _____
 BUILDING LOCATION _____ PREVIOUS RATING _____

CATEGORIES REVIEWED		POINTS	BAND
ITEM NO.	ITEM		
1.0	Equipment Condition		H O L U
2.0	Documentation, Test Equipment, and Tools		H O L U
3.0	Trouble Procedures		H O L U
4.0	Coin Service		H O L U
5.0	Environmental Control		H O L U
6.0	Power		H O L U
Overall Rating – Part 2			H O L U

Re-review (check one)

- Required
- Not Required

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	NETWORK SWITCHING PERFORMANCE MEASUREMENT PLAN (NSPMP)			
1.01	<p>General Procedures</p> <p>(a) Are the supervisor and craft personnel aware of the overall objectives of the plan?</p> <p>(b) Other than the indicators in the plan itself, is a sensitivity shown to other indicators (report rate, code 7s, etc.)?</p> <p>(c) Does the supervisor have a plan to check these other indicators?</p> <p>(d) Are all register indications, forms, records, trouble tickets, and administrative data sheets used in the preparation of results data retained according to retention schedules?</p> <ul style="list-style-type: none"> • Section 218-020-005 • Section 218-020-510 			
1.02	<p>Performance Indicators</p> <p>(a) Are there any performance indicators missing? Why?</p> <ul style="list-style-type: none"> • Section 218-020-005 			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	<u>NETWORK SWITCHING PERFORMANCE MEASUREMENT</u>			
	<u>PLAN (NSPMP) (Contd)</u>			
1.02	(Contd)			
#	<p>(b) Are any deductions being taken in accordance with the plan? Are deductions taken valid?</p> <ul style="list-style-type: none"> • Form E-6420A <p>(c) Is equipment outage time computed properly?</p> <ul style="list-style-type: none"> • Section 201-020-030 <p>(d) Is the equipment outage log up-to-date and are all outages recorded?</p> <ul style="list-style-type: none"> • Form E-4256 <p>(e) Has any equipment been out of service for more than 24 hours without proper maintenance action being taken (dispatched or priority established)?</p> <p>(f) If a performance indicator appeared as a "softspot" in the past six months, was it an exception?</p> <p>(g) Are threshold levels observed for indicated softspots?</p>			

**OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE**

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
1.0	NETWORK SWITCHING PERFORMANCE MEASUREMENT PLAN (NSPMP) (Contd)									
1.03	<p>Measured Components</p> <p>(a) Review E-6420A forms for past three months. Are failure totals reported on E-6420A in agreement with control records?</p> <p>(b) Are any measured components missing? Why?</p> <p># (c) Are any deductions being taken in accordance with the plan? Are deductions taken valid?</p> <p>(d) Are Band L and U components observed as indicators for action to be taken?</p> <ul style="list-style-type: none"> • Section 218-020-005 			<table border="1" data-bbox="1402 1334 1829 1481"> <thead> <tr> <th data-bbox="1409 1339 1583 1419">AVAILABLE POINTS</th> <th data-bbox="1583 1339 1715 1419">ACTUAL POINTS</th> <th data-bbox="1715 1339 1822 1419">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1409 1419 1583 1481"></td> <td data-bbox="1583 1419 1715 1481"></td> <td data-bbox="1715 1419 1822 1481"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
AVAILABLE POINTS	ACTUAL POINTS	BAND								

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>CORRECTIVE MAINTENANCE</u>			
2.01	<p>Trouble Tickets</p> <p>(a) Are trouble tickets written for all trouble reports and indications?</p> <ul style="list-style-type: none"> • Section 218-020-510 <p>(b) Check 25 tickets. Are they legible and do they contain adequate information?</p> <p>(c) Are coding and filing of trouble tickets correct?</p> <p>(d) Are clearing and work time entries made on all tickets and is the time reasonable?</p> <p>(e) Has the supervisor checked all of the tickets in the sample?</p> <p>(f) Are memo tickets issued to cover pending work operations resulting from closed out trouble reports?</p> <ul style="list-style-type: none"> • Section 218-020-510 • Form E-5479 			
2.02	<p>Central Office Log</p> <p>(a) Are all tickets posted?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>CORRECTIVE MAINTENANCE (Contd)</u>			
2.02	(Contd) (b) Are all entries accurate and complete? <ul style="list-style-type: none"> • Section 218-020-510 • Form E-5457 (c) Does the supervisor know the reason for carried over tickets from the previous day? (d) Does the supervisor use the log to monitor the daily status of his/her office?			
2.03	Control Record (a) Are complete entries made on the control record daily? <ul style="list-style-type: none"> • Form E-5480 • Section 218-020-510 (b) Compare entries for five consecutive days with source documents. Are figures accurately recorded? (c) Have objectives been posted for each of the indicators which are components of the Service Results Plan?			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>CORRECTIVE MAINTENANCE (Contd)</u>			
2.03	(Contd)			
	(d) Are the objectives meaningful and attainable?			
	(e) Are items with established objectives entered on a cumulative basis?			
	(f) Have remarks been entered on the control record to explain significant deviations from normal?			
#	(g) Has effective action been taken when objectives are exceeded?			
2.04	Ticket File			
	(a) Are bins designated by equipment groups and stuck sender groups?			
	• Section 218-020-510			
	(b) Are tickets filed in a three month moving (rolling) file?			
	(c) Are there MEMO, HOLD FOR REPAIR, and PENDING bins?			
	(d) Are trouble tickets in equipment group bins filed sequentially by equipment number?			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>CORRECTIVE MAINTENANCE (Contd)</u>			
2.04	(Contd) (e) Are special study bins used when needed?			
2.05	Analysis File (a) Are analysis files presently in use (Trouble Recorder Cards, ATA records)? (b) Is the file located where it is readily available for reference and study? (c) Are records separated into meaningful groups? • Section 218-020-510 (d) Are the results of the analysis file productive?			
2.06	Stuck Sender Records (a) Is a stuck sender program in effect in this office? (b) Is data accumulated with tickets and tally sheets?			

**OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE**

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
2.0	<u>CORRECTIVE MAINTENANCE (Contd)</u>									
2.06	(Contd) (c) Are tickets filed in a separate section of the ticket file? <ul style="list-style-type: none"> • Section 218-020-510 (d) Is prompt action taken if sender performance falls below objective? (e) Have 10 and 20 day objectives been set for the number of senders to be traced?			<div data-bbox="1444 1321 1864 1468" style="border: 1px solid black; width: 100%; height: 100%; text-align: center;"> <table border="1"> <thead> <tr> <th data-bbox="1444 1321 1621 1398">AVAILABLE POINTS</th> <th data-bbox="1621 1321 1751 1398">ACTUAL POINTS</th> <th data-bbox="1751 1321 1864 1398">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1444 1398 1621 1468"></td> <td data-bbox="1621 1398 1751 1468"></td> <td data-bbox="1751 1398 1864 1468"></td> </tr> </tbody> </table> </div>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
AVAILABLE POINTS	ACTUAL POINTS	BAND								

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
3.0	<u>PREVENTIVE MAINTENANCE</u>			
3.01	<p>Equipment Test Lists</p> <ul style="list-style-type: none"> • Section 010-300-011 • Section 218-001-011, etc. • Form E-5450 <ul style="list-style-type: none"> E-5451 E-5452 E-5453 E-5454 E-5455 <p>(a) Is the ETL in use the most recent issue?</p> <p>(b) Has a schedule been established for all applicable tests?</p> <p>(c) Has the supervisor estimated the time on all test and inspection summaries?</p> <p>(d) Does the supervisor ascertain the reason for all significant deviations from estimated time?</p> <p>(e) Are the time estimates adjusted to actual time used?</p> <p>(f) Are time estimates used to balance the work schedule with the available manpower?</p> <p>(g) Are mandatory review routines reviewed and scheduled by a supervisor?</p> <p>(h) Are routines which may cause service interruptions scheduled for light traffic periods?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
3.0	<p><u>PREVENTIVE MAINTENANCE (Contd)</u></p> <p>3.01 (Contd)</p> <p>(i) Have routines been established for equipment items not included in the ETLs when analysis determines a need?</p> <p>(j) Are test failures properly documented?</p> <ul style="list-style-type: none"> • Form E-6420A <p>(k) Are deferred hours reported correctly?</p> <p>(l) Are the deferred preventive maintenance hours that have accumulated less than the average monthly amount?</p> <p>3.02 Scientific Sampling</p> <p>(a) Is scientific sampling used? Is it effective?</p> <p>(b) Have routines been established as a result of sampling?</p> <p>(c) Are Forms E-5451, E-5452, E-5453 and E-5454 prepared properly?</p>			<table border="1" data-bbox="1428 1234 1848 1380"> <thead> <tr> <th data-bbox="1428 1234 1606 1315">AVAILABLE POINTS</th> <th data-bbox="1606 1234 1732 1315">ACTUAL POINTS</th> <th data-bbox="1732 1234 1848 1315">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1428 1315 1606 1380"></td> <td data-bbox="1606 1315 1732 1380"></td> <td data-bbox="1732 1315 1848 1380"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
AVAILABLE POINTS	ACTUAL POINTS	BAND								

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
4.0	<u>TRUNKING</u>			
4.01	<p>Trunk Connects/Disconnects/Rearrangements</p> <p>(a) Are all trunk orders logged on the trunk order log?</p> <p>(b) Are all trunk orders completed by the due date?</p> <p>(c) Is there a trunk order file showing current and past due orders?</p> <p>(d) Were all the required tests made?</p>			
4.02	<p>Trunk Testing</p> <p>(a) Is there evidence that trunk troubles are tested promptly?</p> <p>(b) Has any craft person been assigned to trunk analysis on a real time basis?</p> <p>(c) Are call thru tests scheduled and being performed where required? (Operator, Information, Repair Service, etc.)</p> <p>(d) Is the automatic outgoing trunk test frame on a scheduled basis?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
4.0	<u>TRUNKING (Contd)</u>			
4.03	Trunk Transmission Maintenance Index			
	(a) Does the TTMI meet area or company objectives?			
	<ul style="list-style-type: none"> • Section 660-403-011 • Section 660-402-300 			
#	(b) Has prompt corrective action been taken to correct deviations?			
	(c) Is the E-5910 form updated when required to reflect trunk additions and disconnects?			
4.04	Trunk Service Results Summary			
	(a) Is the inventory of controlled trunks complete and up-to-date? Verify several trunk groups.			
	<ul style="list-style-type: none"> • Section 660-400-010 • Form E-3994 			
	(b) Are inventoried trunks classified correctly?			
	<ul style="list-style-type: none"> • Section 795-400-100 			
	(c) Do totals reported on E-3994 form agree with the Trunk Out-of-Service Log?			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
4.0	<u>TRUNKING (Contd)</u>			
4.05	Trunks Out-of-Service			
	(a) Is the trunk outage log being used?			
	• Section 660-400-010			
	• Form E-4255			
	(b) Is the trunk outage log in agreement with the trunks out of service?			
#	(c) Is trunk outage time computed properly?			
	(d) Are comparisons made daily to determine if any trunks continually appear out of service?			
	(e) Is action taken on incoming trunk troubles?			
4.06	CAROT			
	(a) Is CAROT in use, if provided?			
	• Section 190-130-110			
	(b) Are Q2 reports processed and faulty trunks made busy promptly?			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
4.0	<u>TRUNKING (Contd)</u>									
4.06	(Contd) (c) Are efforts made to have troubles cleared and the trunks returned to service by the busy hour in high capacity trunk groups? • Section 190-130-110			<table border="1" data-bbox="1402 1242 1827 1388"> <thead> <tr> <th data-bbox="1402 1242 1583 1323">AVAILABLE POINTS</th> <th data-bbox="1583 1242 1711 1323">ACTUAL POINTS</th> <th data-bbox="1711 1242 1827 1323">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1402 1323 1583 1388"></td> <td data-bbox="1583 1323 1711 1388"></td> <td data-bbox="1711 1323 1827 1388"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
AVAILABLE POINTS	ACTUAL POINTS	BAND								

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
5.0	<u>AMA ADMINISTRATION</u>			
5.01	<p>AMA Tape</p> <p>(a) Has an E-5233 or E-4104 form been prepared for each recording period?</p> <ul style="list-style-type: none"> • Section 034-310-301 • Section 034-311-301 <p>(b) Are copies of the forms retained for 190 days?</p> <p>(c) Are tape shipping containers in good condition?</p> <p>(d) Are trouble reports from Data Processing or EBAC acted on promptly?</p>			

AVAILABLE POINTS	ACTUAL POINTS	BAND

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>FORCE CONTROL</u>			
6.01	Budget (a) Is the supervisor aware of R and M hour budget objectives? (b) Are R and M budget objectives being met? # (c) Does a review of completed work indicate that work is charged to proper accounts? • Form E-6843A (d) Are time charges checked each day by a supervisor? • Form E-6843A (e) Do charges to unmeasured and C accounts seem reasonable? (f) Have overtime controls been established and are they effective?			
6.02	Work Assignments (a) Are work assignment lists posted? • Section 190-130-130 • Form E-5848			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
6.0	<p><u>FORCE CONTROL (Contd)</u></p> <p>6.02 (Contd)</p> <p>(b) Is a specific job assigned to each craft person?</p> <p>(c) Do work assignments indicate that all craft personnel are efficiently utilized for the full tour?</p> <p>(d) Are the craft personnel working on their assigned duties?</p> <p>(e) Is there a program to identify and eliminate roadblocks as a result of the supervisor's work observations?</p>			<table border="1" data-bbox="1392 1255 1812 1398"> <thead> <tr> <th data-bbox="1398 1260 1570 1336">AVAILABLE POINTS</th> <th data-bbox="1570 1260 1703 1336">ACTUAL POINTS</th> <th data-bbox="1703 1260 1812 1336">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1398 1336 1570 1398"></td> <td data-bbox="1570 1336 1703 1398"></td> <td data-bbox="1703 1336 1812 1398"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
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OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
7.0	<u>PERSONNEL DEVELOPMENT</u>			
7.01	<p>Work Evaluation</p> <p>(a) Have the required work evaluations per month been made on every craft person during the previous 6 months?</p> <p>(b) Do the number of evaluations vary according to the craft person's experience?</p> <p>(c) Are evaluations evenly divided between work inspections and work observations?</p> <p>(d) Are work evaluations conducted as required by BSP or other applicable instructions?</p> <p>(e) Do all evaluation records contain remarks about quality and productivity.</p> <p>(f) Has additional training been scheduled when evaluations or inspections have shown weakspots?</p> <p>(g) Have each of the evaluations on a craft person been discussed with that craft person?</p> <p>(h) Have any deviations been found and has the supervisor taken corrective action?</p> <p>(i) If no deviations are found, does the office performance reflect this high quality of work?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
7.0	<u>PERSONNEL DEVELOPMENT (Contd)</u>									
7.02	<p>Training</p> <p>(a) Are both formal and on-the-job training documented on the training record?</p> <ul style="list-style-type: none"> • Form E-5491 <p>(b) Is the training keeping pace with the introduction of new features and equipment?</p> <p>(c) Have enough personnel been trained to handle the normal work volume?</p> <p>(d) Is formal training followed with on-the-job training and evaluation?</p> <p>(e) Has a training program been established for each individual?</p> <ul style="list-style-type: none"> • Form E-5459 <p># (f) Are absence and tardiness records kept on each employee?</p> <p>(g) If there are any absence or tardiness problems, has reasonable corrective action been taken?</p>			<table border="1" data-bbox="1415 1268 1837 1414"> <thead> <tr> <th data-bbox="1415 1268 1591 1352">AVAILABLE POINTS</th> <th data-bbox="1591 1268 1724 1352">ACTUAL POINTS</th> <th data-bbox="1724 1268 1837 1352">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1415 1352 1591 1414"></td> <td data-bbox="1591 1352 1724 1414"></td> <td data-bbox="1724 1352 1837 1414"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
AVAILABLE POINTS	ACTUAL POINTS	BAND								

**OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE**

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
8.0	<u>MISCELLANEOUS</u>			
8.01	<p>Traffic Indicators</p> <p>(a) Are the principal traffic indicators at a satisfactory level (dial tone speed, ineffective attempts, etc.)?</p> <p>(b) Does the supervisor know the traffic indicator values and the reason for problems, if any?</p> <p>(c) Does the supervisor work closely with the Network Administrator to maximize switching services?</p>			
8.02	<p>Service Observing</p> <p>(a) Are the service observing loops on the most recent assignments?</p> <p>(b) Are all attachments working properly?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
8.0	<u>MISCELLANEOUS (Contd)</u>			
8.03	<p>Installation Items</p> <p>(a) Was a written MOP properly prepared for the most recent installation job, and was it signed by the proper representatives?</p> <ul style="list-style-type: none"> • Section 201-020-012 <p>(b) If a major modification, was a test and analysis committee established?</p> <p>(c) Were equipment test procedures completed prior to start of addition or modification of work?</p> <p>(d) Are craft persons made aware of installation activity?</p> <p>(e) Has installation activity had any adverse effect on service results? Were problems the result of improper procedures?</p> <p>(f) Are office records and prints updated when newly installed equipment is placed in service?</p> <p>(g) Is there good coordination and a proper working relationship between the switching supervisor and the installation supervisor?</p> <p>(h) Is the Test and Inspection Work Order and Record (E-5452) used to record results of acceptance tests?</p> <ul style="list-style-type: none"> • Section 218-020-510 			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
8.0	<u>MISCELLANEOUS (Contd)</u>			
8.04	<p>Network Cost Results Plan</p> <p>(a) Do the number of trunks shown on E-4417 form vary from quarter to quarter to reflect trunk additions and disconnects?</p> <p>(b) Is E-5214 form used to record completed work items?</p> <ul style="list-style-type: none"> • Network Cost Results Plan • Form E-4419 <p>(c) Are entries on the E-5214 form substantiated by completed trunk orders?</p> <p>(d) Are copies of E-5214 and E-4419 forms retained for one year?</p> <p>(e) Are adequate local records available to justify the amount of service-observing shoe changes recorded on the most recent E-4420 form?</p> <ul style="list-style-type: none"> • Network Cost Results Plan • Form E-4420 <p>(f) Are the number of frames updated after additions to reflect the latest totals?</p> <ul style="list-style-type: none"> • Network Cost Results Plan • Form E-4404, E-4407, E-4410 			

OPERATIONAL REVIEW CHECKLIST
PART 1 – ADMINISTRATIVE

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
8.0	<u>MISCELLANEOUS (Contd)</u>									
8.04	(Contd) (g) Are the number of trunks updated as equipment additions are completed? <ul style="list-style-type: none"> • Network Cost Results Plan • Form E-4417 			<table border="1" data-bbox="1367 1227 1787 1370"> <thead> <tr> <th data-bbox="1367 1227 1541 1312">AVAILABLE POINTS</th> <th data-bbox="1541 1227 1675 1312">ACTUAL POINTS</th> <th data-bbox="1675 1227 1787 1312">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1367 1312 1541 1370"></td> <td data-bbox="1541 1312 1675 1370"></td> <td data-bbox="1675 1312 1787 1370"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
AVAILABLE POINTS	ACTUAL POINTS	BAND								

OPERATIONAL REVIEW CHECKLIST
PART 2--TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	<u>EQUIPMENT CONDITION</u>			
1.01	<p>Frames</p> <p>Inspect markers, line and trunk link frames, trunk equipment, repeaters, traffic registers, translators, OSL, IRL, registers, senders, transverters, recorders, number group frames and connectors.</p> <p><i>Cross-Connections</i></p> <p>(a) Check latest cross-connect order for TUR, etc. Are cross-connections properly wrapped and/or soldered and dressed?</p> <p>(b) Are required tools and cross-connect wire available?</p> <ul style="list-style-type: none"> • Section 069-120-811 • Section 069-130-811 • Section 069-132-811 • Section 069-133-801 • Section 069-140-811 <p><i>Relays and Switches</i></p> <p>Inspect replaced and repaired relays and switches.</p> <p>(c) Are all connections properly wrapped or soldered?</p> <p>(d) Is all wiring properly formed and dressed?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	<u>EQUIPMENT CONDITION (Contd)</u>			
1.01	<p>(Contd)</p> <p>(e) Are proper tools available?</p> <ul style="list-style-type: none"> • Section 040-XXX-XXX • Section 030-7XX-XXX <p>(f) Does a visual inspection of the frames indicate defective relay contacts, select bars, select fingers, etc?</p>			
1.02	<p>Billing</p> <p><i>Perforators</i></p> <p>(a) Is there evidence that cleaning and lubricating routines are being followed?</p> <p>(b) Does a visual inspection indicate defects?</p> <p><i>AMARS</i></p> <p>(c) Are BDTs operating properly?</p> <p>(d) Are maintenance tools and procedures available?</p> <ul style="list-style-type: none"> • Section 201-901-101 <p>(e) Are craft persons familiar with these procedures?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	<u>EQUIPMENT CONDITION (Contd)</u>			
1.02	(Contd) <i>Master Timer</i> (f) Does a check of the master timer indicate the correct time of day?			
1.03	Traffic Measurements <i>Traffic Usage Recorder – Alston Scanner</i> (a) Are there major maintenance problems? (b) Are problems handled efficiently? (c) Does a visual inspection detect any problems? (d) Are TUR cameras clean and free of defects? (e) Do cameras operate at programmed time? (f) Have routines been established as a result of major problems? • Section 252-001-011 <i>Dial Tone Speed</i> (g) Are all components clean and in good condition?			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	<u>EQUIPMENT CONDITION (Contd)</u>			
1.03	(Contd) (h) Do the required tests pass? (i) Are DTS equipment failures reported to dial administrators?			
1.04	Operations Support Systems (TASC, CAROT, EADAS, etc.) (a) Is equipment associated with operations support systems functioning properly? (b) Are backup systems available at all times? (c) Are backup procedures documented and available? (d) Are craft persons familiar with backup procedures? (e) Is spare equipment available? • Section 190-XXX-XXX			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
1.0	<u>EQUIPMENT CONDITION (Contd)</u>			
1.05	<p>General</p> <p>(a) Are all equipment and relay covers in place?</p> <p>(b) Is equipment clean?</p> <p>(c) Do "found" troubles indicate a need for a cleaning program?</p> <ul style="list-style-type: none"> • Section 069-305-301 <p>(d) Are frames stenciled clearly?</p> <p>(e) Are service observing cords in good condition?</p> <p>(f) Are test cords in good condition?</p> <p>(g) Do alarms function properly?</p> <p>(h) Do maintenance center indicators function properly?</p>			

AVAILABLE POINTS	ACTUAL POINTS	BAND

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC.</u>			
2.01	<p>Document Availability</p> <p>(a) Are the following documents readily available to the craft persons and supervisor?</p> <ul style="list-style-type: none"> (1) Schematic Drawings (SDs, FSs) (2) Circuit Descriptions (CDs) (3) Bell System Practices (BSPs) (4) Wiring Diagrams (T) (5) Cross-connect assignment lists <p>(b) Are the documents in good condition and are the latest issues in the office?</p>			
2.02	<p>Security</p> <p>(a) Are the craft personnel and supervisor aware of rules concerning disclosure of proprietary information?</p> <ul style="list-style-type: none"> • Section 000-010-021 <p>(b) Are these documents destroyed in an approved manner?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC. (Contd)</u>			
2.03	Records (a) Are cross-connect records neat and legible? (b) Are records regularly updated to reflect cross-connect changes? (c) On a random sample of 20 items, do the records agree with the equipment verification?			
2.04	Milliwatt Supply (a) Is a 22A milliwatt reference meter or equivalent available? (b) Is the milliwatt generator output correct? (c) Are the ETL routines completed? • Section 103-3XX-XXX			
2.05	MF Supply (a) Are ETL routines completed?			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC. (Contd)</u>			
2.05	(Contd) (b) Does the MF voltage output meet requirements? (c) Do trouble reports indicate a possible MF supply problem (wrong numbers, reorder, etc)?			
2.06	Automatic Test Frames (a) Is a schedule for test frame usage available? (b) Are schedules being followed? Check last 3 months' usage. (c) Check usage registers for automatic test frames. Is full advantage being taken of test frames? (d) When were test frames last calibrated? (e) Was the calibration date recorded? <i>APTT Frame</i> (f) At the APTT frame, is the tape less than 6 months old? Are all applicable test tapes available? Run frame for at least 2 trunk groups. <ul style="list-style-type: none"> • Section 218-220-30X • Section 218-220-50X 			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<p><u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC. (Contd)</u></p> <p>2.06 (Contd)</p> <p><i>Master/Office Test Frame</i></p> <p>(g) At the master test frame, are the trouble recorder cards removed from out bin and analyzed?</p> <p>(h) Do master/office test frame tests function properly?</p> <ul style="list-style-type: none"> • Section 218-103-101 • Section 218-51X-101 <p>Select several recent test and inspection records (Form E-5452) for the master/office test frame and have those tests performed.</p> <ol style="list-style-type: none"> (1) Market tests (2) Register and sender tests (3) Trunk tests (4) Transverter tests (5) Translator tests (6) Pretranslator tests (7) Trouble recorder tests (8) Line verification tests 			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC. (Contd)</u>			
2.06	<p>(Contd)</p> <p>(9) Customer line tests</p> <p>(10) Automatic monitor tests</p> <p><i>Line Insulation Test Frame</i></p> <p>(i) Have tests been scheduled and completed?</p> <p>(j) Check operation of frame.</p> <p>(k) Is test data provided to the LTD?</p> <ul style="list-style-type: none"> • Section 218-770-501 <p><i>Automatic Call Distribution</i></p> <p>(l) Select several test and inspection records (Form E-5452) and have these tests performed.</p> <ul style="list-style-type: none"> • Section 218-005-011 <p>(m) Have trouble indications found on E-5452 been resolved?</p> <p>(n) Have routines been established from local or system found troubles?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC. (Contd)</u>			
2.07	Test Equipment (a) Is portable test equipment in good working condition? (b) Are repair and return and red ball records available and current for all portable test equipment? (c) Are test sets stored to provide protection from damage? (d) Are test sets available when required? (e) Are calibration routines established and followed? (f) Is an inventory of all test sets available? (g) Are obsolete and surplus sets removed and/or transferred? • Section 745-004-000			
2.08	Tools (a) Are required tools in the appropriate quantity available? (b) Are tools in good condition?			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
2.0	<u>DOCUMENTATION, TESTING, TEST EQUIPMENT, TOOLS, ETC. (Contd)</u>			
2.08	(Contd) (c) Are worn or defective tools replaced (screw-drivers, power tools, soldering irons, etc.)?			
2.09	Spare Parts (a) Are storage facilities adequate and orderly? (b) Are spare parts available (relays, switches, etc.)? (c) Is spare plug-in equipment available in the office or from the plug-in coordinator? (d) Are procedures available for obtaining parts in an emergency? (e) Are the supervisor and craft people aware of these procedures?			

AVAILABLE POINTS	ACTUAL POINTS	BAND

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
3.0	<u>TROUBLE PROCEDURES</u>			
3.01	<p>Trouble Reports</p> <p>(a) Are all troubles resolved or referred out within established clearing times?</p> <p>(b) Do referred trouble procedures include follow-up?</p> <p>(c) Select several referred troubles. Has the trouble been rectified?</p> <p>(d) Are referred "in" troubles resolved and reported to the originator?</p>			
3.02	<p>Engineering Complaints</p> <p>(a) Are engineering complaints issued when required?</p> <p>(b) Are proper procedures followed for engineering complaints?</p> <ul style="list-style-type: none"> • Section 010-700-010 • Section 010-700-011 <p>(c) Are general engineering complaints reviewed for application to this office?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
3.0	<u>TROUBLE PROCEDURES (Contd)</u>									
3.03	<p>Emergency Conditions</p> <p>(a) Is an emergency procedure binder available and does it contain current emergency procedures, procedures for obtaining major replacement parts, emergency telephone numbers of supervisors, craft, building maintenance, etc?</p> <p>(b) Are central office maintenance personnel aware of emergency procedures?</p> <p>(c) Do all central office personnel know location of emergency binder?</p> <p>(d) Are all alarms and lights in working condition to indicate trouble conditions?</p> <p>(e) Are procedures available for loss of commercial power?</p> <p>(f) Are telephone numbers of power company personnel available?</p> <p>(g) Are central office personnel aware of line load control (LLC)?</p> <p>(h) Are procedures for use of LLC available?</p>			<table border="1" data-bbox="1367 1240 1789 1386"> <thead> <tr> <th data-bbox="1367 1240 1539 1320">AVAILABLE POINTS</th> <th data-bbox="1539 1240 1675 1320">ACTUAL POINTS</th> <th data-bbox="1675 1240 1789 1320">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1367 1320 1539 1386"></td> <td data-bbox="1539 1320 1675 1386"></td> <td data-bbox="1675 1320 1789 1386"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
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OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
4.0	<u>COIN SERVICE</u>			
4.01	<p>Trouble Rate</p> <p>(a) Does coin trouble rate show improvement?</p> <p>(b) Is coin trouble rate acceptable?</p> <p>(c) Does the control record data indicate adequate attention is given to coin troubles?</p>			
4.02	<p>Maintenance</p> <p>(a) Are all required coin tests and routines scheduled?</p> <p>(b) Is the ETL work completed as scheduled?</p> <p>(c) Is the test schedule adjusted using the coin trouble rate and standard indicators?</p> <p>(d) Do trouble tickets indicate good coin equipment maintenance?</p> <p>(e) Do all circuits pass coin collect and return tests?</p> <ul style="list-style-type: none"> • Section 660-165-038 • Section 201-833-501 			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS

AVAILABLE POINTS	ACTUAL POINTS	BAND

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
5.0	<u>ENVIRONMENTAL CONTROL</u>			
5.01	<p>Security</p> <p>(a) Is the central office supervisor the building security director?</p> <p>(b) Are central office supervisors aware of their security responsibilities?</p> <p># (c) Is access to the central office controlled?</p> <p>(d) Are approved admission procedures followed?</p> <p>(e) Are procedures for admittance to the cable vault being followed?</p> <ul style="list-style-type: none"> • Section 770-120-050 <p>(f) Are any flammable materials stored in or near the cable vault?</p> <p>(g) Are gas detectors installed in the cable vault and cable entrances?</p> <p>(h) Are cable holes leading from the vault (to other switchroom areas) sealed?</p> <ul style="list-style-type: none"> • Section 770-280-502 			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
5.0	<u>ENVIRONMENTAL CONTROL (Contd)</u>			
5.02	Buildings			
#	(a) Is the building temperature and humidity controlled at prescribed levels? (b) Has appropriate action been taken if temperature and/or humidity are out of limits? <ul style="list-style-type: none"> • Section 760-555-150 (c) Are required notices of the Equal Employment Opportunity Commission and the Federal Occupational Safety and Health Act posted on the bulletin board? (d) Are bomb threat instructions and emergency calling list posted or readily available?			
5.03	Fire			
#	(a) Are all necessary fire extinguishers, gloves, and tarpaulins available, properly inspected (inspection tags up to date, etc.) and in satisfactory condition? <ul style="list-style-type: none"> • Section 770-001-011 			
#	(b) Is the switchroom properly equipped with an early warning fire detection system? <ul style="list-style-type: none"> • Section 760-621-150 			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
5.0	<u>ENVIRONMENTAL CONTROL (Contd)</u>			
5.03	(Contd)			
#	(c) Are procedures posted for responding to a fire alarm?			
#	(d) Is an evacuation plan available and are employees aware of their duties under the plan? • Section 760-600-151			
#	(e) Are craft persons knowledgeable about fire alarms and firefighting procedures? • Section 010-105-002 • Section 770-330-XXX			
#	(f) Does the supervisor periodically review fire-fighting procedures with craft persons?			
#	(g) Is the fire alarm tested according to practices?			
#	(h) Is <i>No Smoking</i> posted and enforced in prohibited areas?			
#	(i) Are all combustibles stored properly? • Section 760-600-151			
#	(j) Are cable holes and cable slots closed properly? • Section 760-330-150			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
5.0	<u>ENVIRONMENTAL CONTROL (Contd)</u>			
5.03	(Contd)			
#	(k) Are all stairways and passages free of obstructions?			
#	(l) Are emergency exits clear and plainly marked? • Section 770-340-502			
	(m) Are smoke detection devices routined at scheduled intervals?			
5.04	Safety			
#	(a) Is the Accident Prevention Plan in effect? • Accident Prevention Plan Administration Guide			
	(b) Are environmental reviews conducted semi-annually?			
	(c) Are at least three work observations per month recorded for each craft person?			
	(d) Is the building and surrounding property observed to be free of safety hazards?			
#	(e) Were all craft persons observed by the reviewer working safely?			

OPERATIONAL REVIEW CHECKLIST
PART 2--TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
5.0	<u>ENVIRONMENTAL CONTROL (Contd)</u>			
5.04	(Contd) (f) Is a first aid kit available and completely stocked? <ul style="list-style-type: none"> • Section 010-100-010 # (g) Is eye protection worn by all personnel whenever there is a possibility of injury to the eye? <ul style="list-style-type: none"> • Section 010-100-005 (h) Do ladders and ladder seats pass tests? <ul style="list-style-type: none"> • Section 065-105-501 (i) Are exits clearly marked?			
5.05	Housekeeping (a) Is equipment clean and all covers in place? (b) Are precautions taken not to introduce unnecessary dust or dirt into the central office? (c) Are floors clean? (d) Is it evident that craft personnel practice good housekeeping in their work procedures?			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS						
5.0	<u>ENVIRONMENTAL CONTROL (Contd)</u>									
5.05	(Contd) (e) Are documents and records stored in a neat, tidy, and easily accessible manner? (f) Is adequate space available for the storage of wire, test sets, and plug-in equipment? (g) Are closets and storage rooms orderly? (h) Is furniture clean and free of defects? (i) Are lights turned off in unoccupied areas?			<table border="1" data-bbox="1373 1247 1793 1393"> <thead> <tr> <th data-bbox="1373 1247 1543 1328">AVAILABLE POINTS</th> <th data-bbox="1543 1247 1682 1328">ACTUAL POINTS</th> <th data-bbox="1682 1247 1793 1328">BAND</th> </tr> </thead> <tbody> <tr> <td data-bbox="1373 1328 1543 1393"></td> <td data-bbox="1543 1328 1682 1393"></td> <td data-bbox="1682 1328 1793 1393"></td> </tr> </tbody> </table>	AVAILABLE POINTS	ACTUAL POINTS	BAND			
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OPERATIONAL REVIEW CHECKLIST
PART 2--TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>POWER</u>			
6.01	<p>Batteries 24V, 48V</p> <p>(a) Are the following readings current?</p> <p style="margin-left: 20px;">(1) Specific gravity</p> <p style="margin-left: 20px;">(2) Cell voltages</p> <p style="margin-left: 20px;">(3) Pilot cells</p> <ul style="list-style-type: none"> • Section 157-601-701 • Form E-2003 • Form E-3593 • Form E-3592 <p>(b) Have the above forms been maintained batteries were placed in service?</p> <p>(c) Select one string of batteries, and record readings on that string. How does it compare with the last readings taken on that string?</p> <p>(d) Make visual inspection of all batteries. Check for signs of corrosion.</p> <p>(e) Do any of the batteries show signs of leakage?</p> <p>(f) Are any of the battery connections loose?</p> <p>(g) Is water in the batteries being maintained at the proper level?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2—TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>POWER (Contd)</u>			
6.02	Fuses (a) Are all fuse holders stenciled correctly? (b) Is there a spare fuse for all types of fuses being used in the power room? (c) Does a fuse alarm bring in both visual and audible alarms? (d) Are all sampled fuse temperatures satisfactory and all connections tight?			
6.03	Emergency Engine Operating and Performance Data (a) Have preventive maintenance routines been scheduled and worked? • Section 155-001-012, 013, 014, 015 (b) Are engine operating instructions available within view of starting controls? • Section 155-010-300 (c) Do operating instructions provide simple, clearly defined, step-by-step procedures? (d) Is adequate emergency lighting provided in the engine area?			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	POWER (Contd)			
6.03	<p>(Contd)</p> <p>(e) Are adequate safety devices provided for eye and ear protection?</p> <p>(f) Does the engine run log provide a complete continuing record of engine runs?</p> <ul style="list-style-type: none"> • Section 155-002-010 • Form E-5697 <p>(g) Has the engine been run at prescribed minimum frequency intervals?</p> <p>(h) Does the duration of the engine run meet requirements?</p> <p>(i) Does the performance data indicate the engines are running properly?</p> <ul style="list-style-type: none"> • Form E-5697 <p>(j) Are all of the automatic shutdown and alarm features checked at prescribed frequencies?</p> <ul style="list-style-type: none"> • Section 155-001-012, 155-001-013, 155-001-014, 155-001-015 <p>(k) Is an emergency shutdown switch provided at a safe location?</p> <p>(l) Are adequate instructions provided for guidance should the engine fail to operate?</p>			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>POWER (Contd)</u>			
6.03	(Contd) (m) Are basic emergency tools kept on hand? (n) Are all switching personnel able to start the emergency engine and connect it to the office load? (o) Does the engine run free of serious oil or water leaks?			
6.04	Power Failure BSP (a) Is the power failure routine being performed as specified? • Section 171-120-301 (b) Make test run and transfer the office load. Were any problems encountered?			
6.05	Rectifiers (a) Are any rectifiers shut off because of trouble?			

OPERATIONAL REVIEW CHECKLIST
PART 2--TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>POWER (Contd)</u>			
6.05	(Contd) (b) Force idle rectifiers on line by removing active units. Do all rectifiers pick by the load? (c) Using test load switch, does each rectifier meet the requirements specified in the BSP? (BSP used would depend on type of rectifier used in office.)			
6.06	Safety Equipment <ul style="list-style-type: none"> • Section 157-601-701, 201 • Section 075-141-501 Are the following items available and in good condition? (a) Goggles (b) Aprons (c) Neutralizing agents (d) Fuse pullers (e) Gloves (f) Eye wash			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>POWER (Contd)</u>			
6.06	(Contd)			
	(g) Hydrometer; check for wear			
6.07	Housekeeping			
	Is the condition of the following satisfactory?			
	(a) Floors			
	(b) Walls			
	(c) Storage cabinets			
6.08	Fire			
	(a) Is the storage of oily rags and other combustibles proper?			
	(b) Are fire extinguishers strategically provided?			
	<ul style="list-style-type: none"> • Section 760-660-150 			

OPERATIONAL REVIEW CHECKLIST
PART 2-TECHNICAL

ITEM NO.	ITEM	SAT.	EX.	COMMENTS
6.0	<u>POWER (Contd)</u>			
6.08	(Contd) (c) Are all fire extinguishers currently dated? • Section 770-001-011			
6.09	Are OSHA requirements being complied with?			

AVAILABLE POINTS	ACTUAL POINTS	BAND