

Airport Certification Manual

Minneapolis-St. Paul International Airport (MSP)

Signed by:

JOSEPH HARRIS

3CF55FE4100D3455

Joseph Harris
Vice President,
Management and Operations

Metropolitan Airports Commission

Minneapolis-St. Paul International Airport

4300 Glumack Drive
Suite 3000
St. Paul, MN 55111
Phone: (612) 726-5525
Fax: (612) 726-5527

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List of Exhibits

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Exhibit 303-1 – Organization Chart

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Exhibit 500-1 – LOA, Airport Emergency Services at Minneapolis-St. Paul International Airport (MSP)

Exhibit 500-2 – LOA, Land and Hold Short Operations (LAHSO) Procedures

Exhibit 500-3 – LOA, Movement/Non-movement Areas

Exhibit 500-4 – LOA, Runway Lighting for CAT II and III Approaches

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Exhibit 500-11 – LOA, Minneapolis Airport Traffic Control Tower Contingency Plan - Temporary Tower - Orange Ramp

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Exhibit 500-13 – LOA, Taxiway A and Taxiway B Convergence Taxi and Pushback Procedures

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MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT CERTIFICATION MANUAL**Revision Control Sheet**

Revision Number	Revision Date	Revision Contents and/or Remarks
001	07/01/07	Pages iv - vi, Revision Control Sheet, Distribution List
001	07/01/07	Page 11-2, Declared Distances & Displaced Thresholds
001	07/01/07	Page 11-3, safety areas for Taxiways K & L
001	07/01/07	Page 12-3, 12-4, 12-5, Taxiway reflectors
001	07/01/07	Page 15-1, & 15-2, paragraph a, vehicles 16 & 17
001	07/01/07	Page 16-1, items c & e
001	07/01/07	Page 21-1, 21-2, 21-3, 21-4, 21-5, Pedestrian and Ground Vehicles
001	07/01/07	Page 24-1, item 3.a
001	07/01/07	Exhibit 1, Operations Organization Chart
001	08/15/06	Exhibit 7, Sign Plan
001	07/01/07	Exhibit 9, Snow Plan
001	07/01/07	Exhibit 13, Letters of Agreement
002	01/22/09	Exhibit 7, Updated Sign Plan
003	03/31/09	Exhibit 9, Snow Plan: Added information related to continuous monitoring and crew resource management.
004	10/31/10	Complete update of the entire document.
005	01/01/12	Page 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, Pedestrian and Ground Vehicles
006	03/18/13	Pages i, iv, Table of Contents and Revision Control Sheet. Pages v-vi, Elimination of Document Control Sheet (page renumbering). Page 4-1, Falsification, reproduction, or alteration of applications, certificates, reports, or records. Page 8-1, 8-2 (format), CEO, Personnel. Page 21-2, 21-4, Pedestrians and Ground Vehicles.
007	09/15/13	00 -Table of Contents; Sections 9, 11, 12, 15, 16, 20, 24, 26, 27; Exhibits 1, 2, 4, 5-2, 6, 7, 9-1, 9-2, 10, 11, 13-1, 13-2, 14, 16, 17.
008	07/31/14	00 - Table of Contents, Section 21
009	08/01/14	Table of Contents, Section 13, Exhibit 9
010	03/24/2016	Updates to 00 - Table of Contents and Sections 12, 15, 16, 17, 20, and 26 as well as Exhibits 1, 4, 7, 10, 12, 14, and 15. Addition of Exhibit 18.

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Revision Number	Revision Date	Revision Contents and/or Remarks
011	09/01/2016	Changes to Sections 13, 20, 26 and Exhibit 9 to incorporate Runway Condition Codes (RCCs) and other changes to Airport Condition Reporting methods.
012	02/11/2018	Updates to 00 - Table of Contents, Sections 9 and 12 and Revised Movement/Non-Movement Area Letter of Agreement in Exhibit 13.
013	05/11/2018	Updates to 00 - Table of Contents, Distribution List, Section 21, Exhibit 1, Exhibit 5, and Exhibit 9
014	08/31/2018	Updates to Table of Contents, Section 11-Safety Areas, Section 12-Marking, Signs and Lighting, Section 15-ARFF Equipment and Agents, Section 17-Handling and Storing of Hazardous Substances and Materials, Exhibit 10-ARFF Equipment/Personnel, Exhibit 16-Preventive Maintenance Procedures for PAPIs and Generators, Exhibit 17-Engineered Materials Arresting System (EMAS) Maintenance Program, Exhibit 18-Fuel System Inspection Reports and Exhibit 19 - Corrective Action Form
015	11/09/2018	Updates to Section 19- Airport Emergency Plan and Exhibit 11- Airport Emergency Plan
016	06/01/2019	Entire document reformatting, and reorganization. Updates to Section 317- ARFF: Equipment and Agents, Section 321 -Handling and Storing of Hazardous Substances and Materials, Exhibit 303-1-Organization Chart, Exhibit 313-1-Snow Plan, Exhibit 317-1-ARFF Equipment/Personnel, Exhibit 327-1-Daily Self-Inspection Forms, Exhibit 339-1-NOTAM Information
017	09/27/2019	Updates to Distribution List, Section 323-Air Traffic and Wind Direction Indicators, Exhibit 311-2-Preventive Maintenance Inspection Procedures for PAPIs and Generators, Exhibit 313-1-1-Snow Plan, 321-1-Fuel System Inspection Reports, Exhibit 327-1-Self-Inspection Forms
018	10/01/20	Updates to Distribution List, Section C of Section 321 and replacement of pages 4 and 5 of Exhibit 321-1 with new training form.
019	11/20/20	Updates to Distribution List, Section 309, Section 311, Section 321, Section 323, Exhibit 305-2, Exhibit 311-2, and Exhibit 500-1
020	12/23/20	Updates to the Table of Contents and the Sign Plan in Exhibit 311-1.

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Revision Number	Revision Date	Revision Contents and/or Remarks
020A	06/16/2021	Updates to the Table of Contents, Distribution List, and the Sign Plan in Exhibit 311-1.
021	6/21/2021	Updated Wildlife Hazard Management Plan in Exhibit 337-1.
022	3/25/2022	Updated Table of Contents-Distribution List, Section 303, Section 327, Exhibit 309-1, Exhibit 311-2, and Exhibit 327-1.
023	04/22/2022	Updated Section 311, Section 325, Section 339, Exhibit 325-1 and Exhibit 339-1
024	08/26/2022	Updated Table of Contents, Section 305, Section 311, Exhibit 313-1, Exhibit 321-1, Exhibit 500-1
025	11/18/2022	Updated Table of Contents, Section 301, Section 317, Section 335, Exhibit 101-2, and Exhibit 500-10
026	07/14/2023	Updated Table of Contents, Section 201, Section 311, Section 327, Section 329, and Exhibit 327-1
027	10/06/2023	Updated Table of Contents Distribution List, Section 313 and Exhibit 313-1.
028	10/12/2023	Updated Exhibit 325-1, Airport Emergency Plan - Revision 06
029	12/29/2023	Updated Section 309, Section 317, Section 319, and Exhibit 317-1
030	01/26/2024	Update to the Sign Plan, Exhibit 311-1
031	01/31/2024	Updated Exhibit 325-1, Airport Emergency Plan - Revision 07
032	04/12/2024	Updated Section 337 and Exhibit 337-1, Wildlife Hazard Management Plan
033	05/30/2024	Updated Table of Contents Distribution List, Exhibit 500-6, and added new Exhibit 500-11.
034	07/10/2024	Updated Section 317, Exhibit 317-1, and Exhibit 500-6.
035	09/09/2024	Updated Exhibit 313-1, Snow and Ice Control Plan
036	09/18/2024	Updated Exhibit 325-1, Airport Emergency Plan
037	09/19/2024	Added Sections 401, 403, and Exhibit 500-12
038	11/01/2024	Updated Table of Contents Updated Exhibit 313-1, Snow and Ice Control Plan section 5.7 and Appendices 4, 5, 6, 7, 8, 9, 10, 11 Updated Section 309 page 3 and Exhibit 327-1 page 4
039	11/25/2024	Updated Table of Contents Updated Section 311 Added Exhibit 311-3
040	01/15/2025	Updated Section 317 page 2 and Exhibit 317-1

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041	04/07/2025	Added Exhibit 500-13
042	04/08/2025	Updated Section 317 and Exhibit 317-1
043	04/24/2025	Updated Exhibit 325-1 - Airport Emergency Plan
044	05/01/2025	Updated Section 321 and Exhibit 321-1
045	05/16/2025	Updated Section 301, Section 303, and Section 401, and added Section 402
046	07/08/2025	Updated Section 317, Exhibit 317-1, and Exhibit 500-13
047	09/18/2025	Updated Section 329, Exhibit 305-1, Exhibit 311-1, Exhibit 329-1
048	09/23/2025	Updated Section 309, page 1
049	10/09/2025	Updated Exhibit 313-1, Snow and Ice Control Plan
050	10/23/2025	Updated Exhibit 311-1, Sign Plan Area 5
051	11/12/2025	Updated Exhibit 325-1, Airport Emergency Plan, Section 339, Exhibit 339-1, Section 327, and Exhibit 327-1
052	11/25/2025	Updated Section 317, Exhibit 317-1, and Exhibit 500-3
053	02/05/2026	Updated Exhibit 321-1, Exhibit 500-1, renamed Section 115 to 14 CFR Part 3, completely revised Section 14 CFR Part 3, and updated Table of Contents to reflect the renamed section.
054	03/19/2026	Updated Exhibit 500-3
055	05/18/2026	Updated Exhibit 311-2, Removed Exhibits 500-8 and 500-9 due to LOAs being rescinded.

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Distribution List

1. Original ACM
 2. FAA Airport Certification Inspector
 3. MAC Executive Director/CEO
 4. MAC Chief Operating Officer
 5. MAC Vice President Management and Operations
 6. MAC Director of Integrated Operations
 7. MAC Director of Airport Maintenance and Asset Management
 8. MAC Director of Terminal and Landside Operations
 9. MAC Assistant Director of Field Maintenance
 10. MAC Director of Real Estate and Airline Affairs
 11. MAC Emergency Manager
 12. MAC Airport Police Department
 13. MAC Airport Fire Department
 14. MAC SMS Manager
 15. MAC Trades Department
 16. MAC Field Maintenance Department
 17. MAC Electrical Department
 18. MAC Paint Department
 19. MAC Airport Development Department
 20. MAC Airside Operations Department
 21. MAC Emergency Communications Department
 22. Air Traffic Manager, FAA Air Traffic Control Tower
 23. Manager, FAA Airways Facilities
 24. Minnesota State Department of Transportation
 25. General Manager, Signature Flight Support
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Distribution List

26. Station Manager, Air Canada
27. Station Manager, WestJet Airlines
28. Station Manager, American Airlines
29. Station Manager, Southwest Airlines
30. Station Manager, Delta Air Lines
31. Station Manager, FedEx
32. Station Manager, Frontier Airlines
33. Station Manager, Icelandair
34. Station Manager, UNIFI
35. Station Manager, Skywest Airlines
36. Station Manager, Endeavor Airlines
37. Station Manager, United Airlines
38. Station Manager, Sun Country Airlines
39. Station Manager, Alaska Airlines
40. Station Manager, DHL
41. Station Manager United Parcel Service
42. 934th Air Force Reserve
43. 133rd Air National Guard
44. Swissport
45. Station Manager, Denver Air Connection
46. Station Manager, Air France/KLM
47. Station Manager, Atlas Air
48. Station Manager, Allegiant Airlines
49. Station Manager, Amazon Air
50. Station Manager, Aer Lingus

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51. Station Manager, Discover Airlines

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Exhibit 311-2 - Preventive Maintenance Inspection Procedures for PAPIs and Generators

Precision Approach Path Indicator (PAPI) at Minneapolis-Saint Paul International Airport (MSP) will be maintained per AC 150/5340-26, current edition, Maintenance of Airport Visual Aid Facilities.

Maintenance of the Runway 04, 22 and 30R PAPI visual aids will be according to the following program:

1. Operation of the lamps will be checked and visually inspected on a daily basis by Airside Operations and will be maintained in accordance with Section 311 of the MSP Airport Certification Manual.
2. A comprehensive inspection of the Runway 04, 22, 30R PAPI visual aids are conducted monthly per the PAPI inspection form included in this exhibit.
3. Personnel will check the integrity of obstacle free approach planes on a quarterly basis.
4. Insulation resistance of underground cables will be checked by airport trades personnel on a semi-annual basis.
5. Resistance of the grounding system will be checked by airport trades personnel on a semi-annual basis.
6. Findings from the monthly, quarterly and semi-annual comprehensive inspections will be noted on the inspection PAPI form included in this exhibit.
7. Repair, component replacement and/or deficiencies will be corrected as soon as practicable considering airport capacity and minimum weather criteria necessary to ensure proper repair. If applicable, appropriate parties will be notified when repairs are made.
8. PAPI inspection records will be kept on file in MSP's Part 139 software program Cityworks.

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Inspection 609991
PAPI PMI - Monthly

Metropolitan Airports Commission

Status: OPEN

Location: Runway 22

Inspected By:

Initiated By:

Initiated Date:

Projected Start: (Inspection Start) 4/3/2026 6:00:00 AM

Actual Finish: (Inspection End)

Insp. Date:(Issued)

Closed By:

Date Closed:

Related Work Orders:

Observation:

Repairs:

Recommendation:

Observations:

Verify all lamps are operational:

Verify all lamps are at equal brightness:

Verify controls are operational:

Verify if there is any fixture damage:

Clean all lamps and filters:

Inspect for damaged mechanical parts:

Inspect for damaged lightning arrestors:

Inspect for water damage and insect infestation:

Inspect for rodent activity around the units:

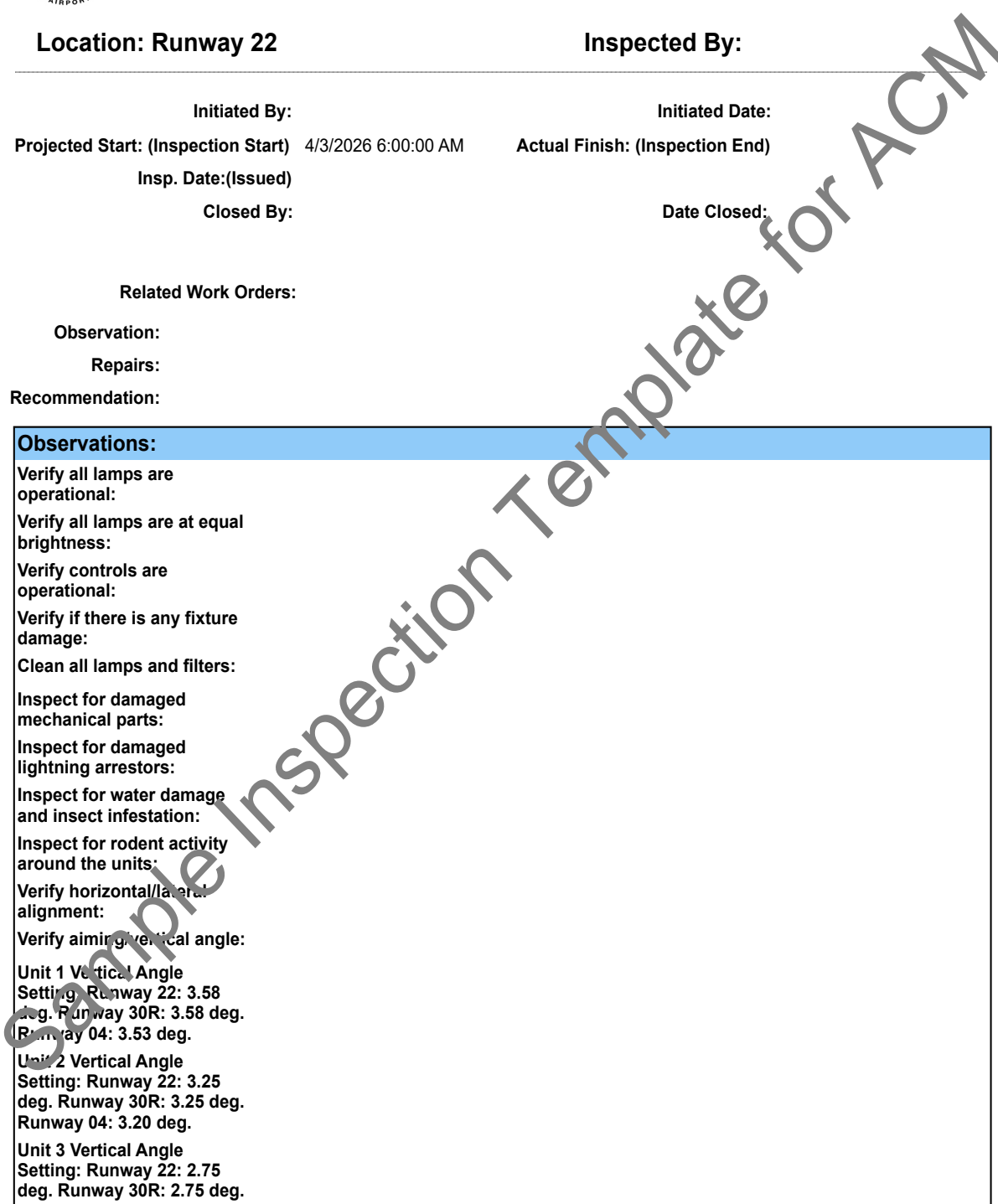
Verify horizontal/lateral alignment:

Verify aiming vertical angle:

Unit 1 Vertical Angle
Setting: Runway 22: 3.58 deg. Runway 30R: 3.58 deg. Runway 04: 3.53 deg.

Unit 2 Vertical Angle
Setting: Runway 22: 3.25 deg. Runway 30R: 3.25 deg. Runway 04: 3.20 deg.

Unit 3 Vertical Angle
Setting: Runway 22: 2.75 deg. Runway 30R: 2.75 deg. Runway 04: 2.70 deg.



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Observations:

Unit 4 Vertical Angle
Setting: Runway 22: 2.42
deg. Runway 30R: 2.42 deg.
Runway 04: 2.36 deg.
Verify the leveling and
operation of Tilt Switch:

Attachments:

Sample Inspection Template for ACM

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Exhibit 311-2, page 3



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Each back up power source installed on the airport that is owned by the airport shall be properly maintained as required by AC 150/5340-30, current edition, Design and Installation for Airport Visual Aids.

Maintenance of the North ALEC #1, North ALEC #2, and South ALEC generators will be according to the following program:

1. Weekly, monthly, quarterly, biannual, and annual preventative maintenance inspections will be conducted per the inspection checklist included in this exhibit.
2. Findings from the weekly, monthly, quarterly, biannual, and annual comprehensive inspections will be noted on the inspection checklist included in this exhibit.
3. Repair, component replacement and/or deficiencies will be corrected as soon as practicable considering airport capacity and minimum weather criteria necessary to ensure proper repair.
4. All completed generator inspection and corrective action forms will be reviewed by airport management personnel to ensure documentation includes inspection date, deficiencies found, and if applicable a description and date of the corrective action taken.
5. Generator inspection records will be kept on file in MSP's Part 139 software program Cityworks.

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Inspection 618922
Generator PMI - 139

Metropolitan Airports Commission

Status: OPEN

Location: ALEC North #2

Inspected By:

Initiated By: Bertrand, Joseph R.

Initiated Date: 3/30/2026 6:52:10 AM

Projected Start: (Inspection Start) 4/6/2026 6:00:00 AM

Actual Finish: (Inspection End)

Insp. Date:

Closed By:

Date Closed:

Related Work Orders:

Observation:

Repairs:

Recommendation:

Observations:	DESCRIPTION
Initial Hour Meter [M/Q/A/B]	Check hour meter before running the engine.
Total Hours Run	Calculates total hours run for this inspection. 0
Voltage A	Record the following reading after generator has operated for 15 minutes under load.
Voltage B	
Voltage C	
Current A	Record the following reading after generator has operated for 15 minutes under load.
Current B	
Current C	
Check Oil Level [W/M/Q/A/B]	Check oil level. Maintain oil level between the ADD and FULL marks on the "Engine Stopped" side of the oil level gauge.
Automatic Switches [W/M/Q/A/B]	Check all Switches are in proper position for automatic start (if equipped).
Fuel Tank [W/M/Q/A/B]	Check the Fuel level; Refill if below 3/4 full.
Battery Charger [W/M/Q/A/B]	Record charging Amperage reading.
Cooling System [B]	Drain and flush every two years after operating the engine load for 1 hour. Completed 2nd full week of October.
Final Hour Meter [M/Q/A/B]	Check hour meter.
Malfunctions [W/M/Q/A/B]	Report any Malfunction and make necessary repairs.
Oil Pressure Gauge [W/M/Q/A/B]	Check for proper operating oil pressure. Refer to Operational Manual.
Oil Level Gauge [W/M/Q/A/B]	Check oil level. Maintain oil level between the ADD and FULL marks on the engine running side of the dipstick.
L-L Voltage [W/M/Q/A/B]	Check & record readings. Note: the operating voltage of a cold just started generator will be slightly higher than the operating voltage of a generator that has been under load or warm
Louvers [W/M/Q/A/B]	Check for proper operation, able to open and close freely.

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Observations:	DESCRIPTION
Air Inlet Filter [W/M/Q/A/B]	If equipped, if differential pressure exceeds 0.6 inches of water, stop the engine and clean the elements by soaking it in hot water with detergent. Rinse with clear water. Recharge the elements with a thin layer of light weight machine oil, such as WD-40.
Leaks and Noises [W/M/Q/A/B]	Check for leaks and unusual noises. NOTE: Engine must be stopped before making necessary repairs.
Main Stator Winding Temperature [M/Q/A/B]	If equipped with winding defectors, check and record Main Stator Winding Temperatures with engine under load. NOTE: nominal temperature for the alarm and 205degC (401degF) for the shutdown.
Bearings Bracket Temperature [M/Q/A/B]	Check and record bearing bracket temperature with the Engine under load (if equipped). NOTE: Nominal temperature valves for the bearing bracket are 85degC (185degF) for the alarm and 95degC (203degF) for the down.
Bearings Bracket Wear Check [B]	Remove covers and inspect generator bearings for wear and condition of lubrication every two years. Completed 2nd full week of October.
Walk Around Inspection [W/M/Q/A/B]	Inspect engine, radiator and generator for leaks, debris, loose or broken fittings, hoses or wires and guards. Repair as necessary.
Engine Crankcase [W/M/Q/A/B]	Check oil level. Maintain oil level between the ADD and FULL marks on the engine stopped side of the oil level gauge.
Engine Oil & Filter [A]	Change oil and filter every 150 hours or annually. Completed 2nd full week of October.
Cooling System [W/M/Q/A/B]	Check coolant level. Maintain level within 13 mm. (1/2 in) to bottom of filler neck or proper level of sight gauges.
Cooling System Filter [A]	Change cooling system filter annually (if equipped). Completed 2nd full week of October.
Air Cleaner Indicator [M/Q/A/B]	If available check indicator. Change elements if indicator diaphragm remains in the locked position. Change air filter annually.
Air Filter [A]	Change air filter annually. Completed 2nd full week of October.
Battery Charger [W/M/Q/A/B]	Check battery for proper operation.
Fuel System [W/M/Q/A/B]	Check for leaks. Drain water separator (if equipped). Check fuel tank level. Check fuel filter indicator (if equipped).
Fuel Filter [A]	Check fuel filter indicator (if equipped) and change filters annually. Completed 2nd full week of October.
Belts [M/Q/A/B]	Inspect for worn, broken or loose belts. Adjust if necessary.
Batteries [W/M/Q/A/B]	Clean top of batteries. Check electrolyte level, unless maintenance free. Check for loose connections.
Replace Batteries [B]	Replace batteries every two years. Completed 2nd full week of October.
Block Heater [W/M/Q/A/B]	Check for proper operation. Maintain 32DegC (90degF) coolant temperature in the block at all times.
Governor [W/M/Q/A/B]	Check and maintain oil level, if required.
Governor Oil & Filter [A]	Change governor oil and filter annually. Completed 2nd full week of October.
Gauges [M/Q/A/B]	Check the condition of all gauges. Repair or replace any broken gauges.
Air System [M/Q/A/B]	Drain water and check air pressure (if equipped).
Control Panel [M/Q/A/B]	Visually Inspect. Check for loose, broken or damaged wire or components.
Generator [M/Q/A/B]	Check for moisture, dust, oil, grease and debris on Main Stator Windings, Exciter and PMG. Check air Intake and outlets. Clean as necessary.
Reoccurrence	

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Exhibit 500-8 - Reserved for future use

Exhibit removed; content will be added in a later revision.

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Exhibit 500-9 - Reserved for future use

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