



Chapter 02: FBO Services

06. Ground Support Equipment Management

Manage ground support equipment inventory, maintenance, and deployment to ensure reliable equipment availability and safe operation for all aircraft service requirements.

Purpose

This process establishes procedures for ground support equipment management to ensure equipment reliability, operator safety, and efficient service delivery while maintaining regulatory compliance and optimizing equipment utilization across all FBO operations.

Roles and Responsibilities

Operations Leader:

- Oversee daily operations and coordinate between departments
- Authorize emergency response procedures and resource allocation
- Monitor safety compliance and operational excellence
- Coordinate scheduling across departments for operational coverage
- Review billing disputes and approve service adjustments
- Ensure regulatory compliance across all operations

Process Steps

Daily Operations Phase

- **Conduct equipment inspection** - Perform comprehensive visual, operational, and safety system checks on all ground support equipment
- **Document equipment status** - Record condition and availability in equipment management system with detailed inspection notes
- **Review maintenance schedules** - Check scheduled maintenance requirements and coordinate with team for upcoming service intervals
- **Verify operator certifications** - Confirm equipment operator certification status and coordinate additional training if required

Equipment Deployment Phase

- **Assign equipment to operations** - Match equipment to specific operations based on aircraft requirements and operational priorities
- **Conduct pre-operation safety check** - Verify fluid levels, safety systems, and operational controls before deployment
- **Deploy equipment to service locations** - Position equipment at designated locations and coordinate with line service team
- **Monitor operational performance** - Track equipment performance during operations and coordinate with operators for any issues

Post-Operation Phase

- **Conduct post-operation inspection** - Examine equipment after use and document any maintenance requirements or observations
- **Return equipment to storage** - Secure equipment in designated storage areas with proper environmental protection
- **Coordinate maintenance activities** - Schedule and coordinate maintenance with qualified technicians and maintain records
- **Manage parts and supplies** - Monitor parts inventory and coordinate with suppliers for maintenance supplies and components

Analysis and Planning Phase

- **Analyze equipment utilization** - Review usage patterns and identify opportunities for improved utilization and efficiency
- **Coordinate training programs** - Manage operator training programs and maintain current certification records for all operators
- **Plan equipment replacement** - Monitor equipment condition and coordinate replacement planning based on usage and costs
- **Update operational procedures** - Review and update equipment procedures based on operational experience and feedback

Process Mapping

Flowchart showing equipment inspection, deployment, operational monitoring, and maintenance coordination with decision points for safety compliance and utilization optimization.

Tools and Resources

- Ground support equipment inventory including tugs, ground power units, and service vehicles
- Equipment maintenance tracking system and inspection documentation forms
- Operator training materials and certification tracking systems
- Parts inventory management system and supplier contact information
- Safety inspection equipment and regulatory compliance documentation
- Equipment utilization tracking and analysis software

Success Metrics

- **Completion Time:** Equipment deployment completed within 5 minutes of service request.
- **Quality Standard:** 98% equipment availability during operational hours with minimal downtime.
- **Safety Standard:** Zero equipment-related safety incidents and 100% compliance with inspection requirements.
- **Client Satisfaction:** 94% client satisfaction with equipment reliability and service delivery.

Common Issues and Solutions

- **Issue:** Equipment breakdown during critical service operations
- **Solution:** Implement backup equipment protocols, coordinate immediate maintenance response, and deploy alternative equipment to maintain service continuity


Issue: Operator certification lapses affecting equipment availability

Solution: Maintain current training schedules, implement certification tracking alerts, and cross-train operators on multiple equipment types

Issue: Parts availability delays affecting maintenance schedules

Solution: Maintain critical parts inventory, establish relationships with multiple suppliers, and implement predictive maintenance to anticipate parts needs

Safety Considerations

-  **BEST PRACTICE:** Conduct monthly equipment safety meetings and maintain current manufacturer service bulletins and updates

Regulatory References

- OSHA 29 CFR 1910 - General Industry Standards for Equipment Operation
- 14 CFR Part 139 - Airport Operating Requirements for Ground Equipment
- Manufacturer equipment operation and maintenance manuals
- Company equipment safety and maintenance procedures
- Equipment operator training and certification standards