



Chapter 02: FBO Services

05. Aircraft Marshalling and Parking

Provide safe and efficient aircraft ground guidance and parking services to ensure proper aircraft positioning while maintaining ramp safety and operational efficiency.

Purpose

This process establishes procedures for general aviation aircraft marshalling and parking operations to ensure safe aircraft ground movement, optimal ramp space utilization, and compliance with ground safety regulations while providing professional guidance services to pilots and aircraft operators. Our operations focus on Part 91 general aviation aircraft including single-engine aircraft (Cessna 172, Piper Cherokee), light twins, and turboprop aircraft (King Air, Pilatus, TBM series).

Roles and Responsibilities

Line Service Technician:

- Provide direct aircraft handling services
- Execute safety protocols during aircraft movements
- Document all services provided accurately
- Coordinate with ground support equipment
- Monitor safety compliance during operations

Process Steps

Pre-Marshalling Phase

- **Assess ramp conditions** - Verify parking space availability and confirm aircraft specifications for appropriate assignment
- **Position safety equipment** - Place marshalling equipment, safety cones, and fire extinguisher with clear escape routes
- **Establish communications** - Set up radio contact with pilot and ground control while positioning for optimal visual contact
- **Initiate aircraft contact** - Signal aircraft using standard marshalling wands and establish visual communication with pilot

Aircraft Guidance Phase

- **Coordinate taxi guidance** - Provide clear directional signals for aircraft taxi path while monitoring for obstacles and traffic
- **Guide to parking position** - Direct aircraft using precise hand signals while maintaining safe distances from obstacles
- **Provide fine positioning signals** - Make final adjustments for optimal aircraft positioning within designated boundaries
- **Coordinate engine shutdown** - Signal pilot for shutdown when aircraft is properly positioned and safety requirements are met

Aircraft Securing Phase

- **Install wheel chocks** - Place chocks immediately after engine shutdown using proper techniques and verify secure placement
- **Establish safety area** - Position safety cones and establish clear boundaries around parked aircraft for ground operations
- **Install tie-down equipment** - Secure aircraft tie-downs when required for weather protection or extended parking
- **Connect ground power** - Attach ground power unit if requested and verify proper electrical connection and operation

Completion Phase

- **Conduct final safety inspection** - Review aircraft parking setup including chocks, tie-downs, and safety equipment positioning
- **Complete parking documentation** - Record aircraft location, time, and any special requirements or observations
- **Clear marshalling area** - Remove marshalling equipment and ensure area is safe for ongoing ramp operations
- **Coordinate handoff** - Transfer aircraft to appropriate service personnel and communicate any special requirements

Process Mapping

Flowchart showing pre-marshalling assessment, aircraft guidance sequence, parking completion, and safety verification with decision points for space optimization and safety compliance.

Tools and Resources

- Aircraft marshalling wands and reflective safety equipment
- Wheel chocks appropriate for various aircraft types and sizes
- Safety cones and ground marking equipment
- Radio communication equipment with appropriate frequencies
- Ground power units and electrical connection equipment
- Tie-down equipment and hardware for aircraft securing

Success Metrics

- **Completion Time:** Aircraft marshalling and parking completed within 10 minutes of initial contact.
- **Quality Standard:** 100% accuracy in aircraft positioning within designated parking boundaries.
- **Safety Standard:** Zero incidents involving aircraft or ground personnel during marshalling operations.
- **Client Satisfaction:** 96% pilot satisfaction with marshalling service quality and professionalism.

Common Issues and Solutions

- **Issue:** Poor visibility conditions affecting marshalling signal clarity
- **Solution:** Use additional lighting equipment, coordinate with ground control for alternative guidance, and implement radio communication backup procedures


Issue: Aircraft size exceeds designated parking space dimensions

Solution: Coordinate alternative parking location assignment and adjust ground support equipment positioning for larger aircraft requirements

Issue: Multiple aircraft arrivals creating ramp congestion

Solution: Implement sequential parking coordination with ground control and optimize space utilization through dynamic parking assignments

Safety Considerations

-  **BEST PRACTICE:** Conduct daily briefing on current NOTAMs, runway conditions, and special aircraft handling requirements

Regulatory References

- 14 CFR Part 139 - Airport Operating Requirements
- FAA Advisory Circular AC 150/5210-5D - Painting, Marking, and Lighting of Vehicles
- ICAO Annex 2 - Rules of the Air (Aircraft Signals)
- OSHA 29 CFR 1910.95 - Occupational Noise Exposure
- Company Ground Safety Management procedures