



## Chapter 06: Safety and Compliance

# 09. Ramp and Hangar Safety Inspections

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Conduct systematic ramp and hangar safety inspections to identify and address potential hazards.

## Roles and Responsibilities

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### 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

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### Inspection Planning Phase

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- **Develop inspection schedule** - Create systematic inspection schedule covering all ramp and hangar areas on appropriate frequencies
- **Assign inspection personnel** - Designate qualified personnel to conduct inspections with appropriate training and authority
- **Prepare inspection tools** - Gather inspection checklists, measuring devices, cameras, and safety equipment needed
- **Review previous findings** - Analyze previous inspection results and corrective actions to focus on problem areas
- **Coordinate with operations** - Schedule inspections to minimize disruption to ongoing aircraft and client operations
- **Brief inspection team** - Provide safety briefing and review inspection objectives and procedures

### Ramp Area Inspection Phase

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- **Inspect pavement conditions** - Check for cracks, holes, foreign object debris (FOD), and surface deterioration

- **Evaluate lighting systems** - Test ramp lighting, emergency lighting, and visual guidance systems for proper operation
- **Check fuel operations areas** - Inspect fuel storage, dispensing equipment, and spill containment systems
- **Assess ground support equipment** - Verify proper storage, condition, and safety features of tugs, carts, and other GSE
- **Review traffic patterns** - Evaluate aircraft and vehicle traffic flow for safety conflicts and congestion
- **Examine safety equipment** - Check fire extinguishers, first aid stations, and emergency communication devices

## Hangar Safety Inspection Phase

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- **Inspect structural elements** - Check hangar doors, roof, walls, and structural components for damage or deterioration
- **Evaluate ventilation systems** - Test ventilation equipment and air quality in work areas and confined spaces
- **Check electrical systems** - Inspect electrical panels, wiring, outlets, and grounding systems for safety compliance
- **Assess fire protection** - Test fire detection, alarm, and suppression systems in hangar and work areas
- **Review work area safety** - Inspect maintenance work areas, tool storage, and parts storage for safety compliance
- **Examine housekeeping** - Evaluate cleanliness, organization, and waste disposal practices

## Hazard Identification Phase

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- **Document safety hazards** - Record all identified safety hazards with photographs and detailed descriptions
- **Assess risk levels** - Evaluate severity and probability of potential accidents from identified hazards
- **Prioritize corrective actions** - Rank hazards by risk level to prioritize correction efforts and resource allocation
- **Identify immediate dangers** - Flag hazards requiring immediate attention or temporary protective measures
- **Research correction methods** - Investigate appropriate methods and resources needed to correct identified hazards
- **Estimate correction costs** - Develop cost estimates for hazard correction to support decision-making

## Corrective Action Phase

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- **Develop action plans** - Create specific corrective action plans with timelines, responsibilities, and

success criteria

- **Assign responsibility** - Designate specific personnel responsible for implementing each corrective action
- **Establish deadlines** - Set realistic but prompt deadlines for hazard correction based on risk levels
- **Authorize resources** - Secure necessary funding, materials, and personnel to implement corrective actions
- **Implement corrections** - Execute corrective actions according to approved plans and safety procedures
- **Verify completion** - Inspect completed corrective actions to ensure hazards have been effectively eliminated

## Follow-up and Trending Phase

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- **Conduct follow-up inspections** - Verify that corrective actions remain effective and hazards have not recurred
- **Track completion status** - Monitor corrective action implementation progress and address any delays
- **Analyze inspection trends** - Review inspection data to identify patterns and systemic safety issues
- **Update inspection procedures** - Revise inspection checklists and procedures based on experience and findings
- **Report to leadership** - Provide regular reports on inspection findings, corrective actions, and safety trends
- **Communicate improvements** - Share safety improvements and lessons learned with all affected personnel

## Tools and Resources

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### Inspection Equipment:

- Safety inspection checklists and forms
- Digital cameras for hazard documentation
- Measuring devices and testing equipment
- Personal protective equipment for inspectors

### Documentation Systems:

- Inspection tracking databases or spreadsheets
- Corrective action tracking systems
- Photographic records of hazards and corrections
- Safety trend analysis and reporting tools

### Reference Materials:



- OSHA safety standards and guidelines
- FAA airport safety requirements
- Manufacturer equipment safety specifications
- Industry safety best practices and standards

## Common Issues and Solutions

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- **Issue:** Limited time available for thorough safety inspections
- **Solution:** Develop efficient inspection procedures; train multiple personnel to conduct inspections; use technology to streamline documentation

**Issue:** Resistance to implementing costly safety improvements

**Solution:** Demonstrate cost-benefit of accident prevention; prioritize high-risk hazards; explore cost-effective correction alternatives

**Issue:** Recurring hazards in same areas despite corrective actions

**Solution:** Investigate root causes of hazard recurrence; modify procedures or training; consider design changes to eliminate hazard sources

## Regulatory References

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- **14 CFR Part 139.309** - Safety areas and operational requirements
- **29 CFR 1910.22** - Walking-working surfaces general requirements
- **29 CFR 1910.95** - Occupational noise exposure standards
- **OSHA 29 CFR 1926.95** - Personal protective equipment requirements
- **FAA Advisory Circular AC 150/5210-5** - Painting, Marking, and Lighting of Vehicles Used on an Airport
- **NFPA 407** - Standard for Aircraft Fuel Servicing (facility safety requirements)