CORE CONCEPT

Ground Handling Safety Course: Ramp Accident Prevention, Aircraft Ground Damage and Pushback

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Introduction:

Ground handling safety, covering ramp accident prevention, aircraft ground damage and pushback, is a 1-week course for ramp supervision, turnaround coordination, handling safety and GSE team leadership staff, ending with a Turnaround Safety Audit and Ramp Damage Prevention Plan. Airlines and handling agents lose aircraft availability, repair budgets and staff to ground damage, pushback events, loading errors and ramp injuries that occur within the minutes of each turnaround. Nominees already lead or check turnaround work on the ramp, and teaching is by inspection walkthrough of turnaround tasks. CoreConcept Training Center delivers this ground handling safety course.

Course Objectives:

- Apply IATA IGOM turnaround procedures and AHM safety practices to supervise arrival, servicing and departure tasks on the stand
- Control GSE approach and docking, marshalling, wing-walking and pushback or towing to prevent aircraft ground damage
- Check loading, load securing and dangerous goods acceptance on the ramp against IATA DGR and the loading instruction
- Assess ramp injury risks from manual handling, noise, heat and refuelling zones using ISO 45001 hazard controls
- Investigate ramp incidents and ground damage events with human factors models and record findings in the handler's SMS
- Audit a turnaround and produce a Turnaround Safety Audit and Ramp Damage Prevention Plan for the handling station

Target Audience:

- Ramp and turnaround supervisors responsible for safe aircraft servicing within the scheduled turnaround time
- Ground handling safety officers responsible for ramp hazard reporting, audits and incident follow-up
- GSE team leads responsible for equipment approach, docking and operator conduct around aircraft
- Load control and loading supervisors responsible for load securing, weight statements and dangerous goods on the ramp
- Airline ground operations staff responsible for monitoring handling agents at their stations
- Pushback, towing and marshalling team leads responsible for aircraft movement under tow

Course Outline:

Day 1: Ground Handling Safety Foundations and the Ramp Risk Picture

- IATA Ground Damage Report Trends and Damage Cost Drivers
- Turnaround Task Map From Arrival to Pushback
- Ramp Occurrence and Injury Data Review for an Own Station
- Handling Agreement Safety Responsibilities Between Airline and Handler
- Ground Handling Safety Baseline Checklist for an Own Station

Day 2: IATA, ICAO and Occupational Safety Frameworks for Ramp Work

- IATA IGOM Arrival, Servicing and Departure Procedures
- IATA AHM Ground Support Equipment Safety Practices
- ISAGO Ground Operations Audit Standards and Typical Findings
- ICAO Doc 9859 SMS Components for Ground Service Providers
- ISO 45001 Hazard Identification and Controls for Ramp Workers

Day 3: Safe Turnaround Tasks Around the Aircraft

- GSE Approach, Brake Check and Docking Sequence at the Aircraft
- Marshalling Signals and Wing-Walker Duties During Stand Entry
- Conventional and Towbarless Pushback and Towing Procedures
- IATA DGR Dangerous Goods Acceptance and Loading Checks
- Refuelling Safety Zone and Fuelling With Passengers Aboard Precautions

Day 4: Human Factors, Ramp Injuries and Incident Investigation

- Dirty Dozen and SHELL Model Analysis of Ramp Errors
- Fatigue, Time Pressure and Shift Handover Risk Controls
- Manual Handling, Noise and Heat Stress Controls on the Ramp
- Load Securing Errors and Weight Statement Discrepancy Cases
- Ramp Incident Investigation Using Root Cause and Barrier Analysis

Day 5: Turnaround Inspection Walkthrough and the Damage Prevention Plan

- Turnaround Observation Walkthrough Against IGOM Checklists
- Pushback and Marshalling Walkthrough With Wing-Walker Positions
- Hold Loading Walkthrough for Securing and Dangerous Goods Checks
- Ground Damage Event Investigation Exercise Using Station Records
- Turnaround Safety Audit and Ramp Damage Prevention Plan Completion

Skills You Will Gain:

- Turnaround Safety Supervision
- Aircraft Ground Damage Prevention
- Pushback and Towing Safety
- Dangerous Goods Checking
- Ramp Human Factors Analysis
- Ramp Injury Prevention
- Ramp Incident Investigation
- Ground Operations Auditing

Why Attend This Course:

- Deliver a Turnaround Safety Audit and Ramp Damage Prevention Plan to the station manager and the airline's ground operations safety lead
- Decide when a turnaround must be stopped because GSE, loading or pushback conditions fall outside procedure
- Avoid aircraft repair costs, flight cancellations and lost-time injuries caused by docking contacts, pushback events and loading errors
- Equip ramp agents, drivers and wing-walkers with the checklists, signals and briefing points practised during the course

Conclusion:

Back at work, the participant gives the Turnaround Safety Audit and Ramp Damage Prevention Plan to the station manager, the handling safety officer and the airline ground operations representative. They use it to agree which turnaround tasks to re-brief, which GSE approach and pushback practices to change, and which loading and dangerous goods checks to tighten. After the first month of use, the station should compare ground damage reports, ramp injuries and audit findings with the baseline taken on the course and revise the plan where events repeat.

Frequently Asked Questions FAQ:

What should participants know before a ground handling safety course?

Participants should already supervise, coordinate or check turnaround work on the ramp and know their station's handling procedures. Bringing an anonymised ground damage report, ramp injury record or turnaround checklist helps them apply the walkthrough exercises to their own station.

How does a ground handling safety course differ from a ramp handling management course?

This course concentrates on preventing aircraft ground damage and ramp injuries during each turnaround: GSE docking, marshalling, pushback, loading, dangerous goods and refuelling. Ramp handling management courses address equipment fleets, service contracts, staffing and handling performance, with safety as one area among several.

Why does aircraft ground damage matter in ground handling safety?

Ground damage takes aircraft out of service, triggers inspections and repairs, and causes delays and cancellations, and IATA tracks these events in its Ground Damage Report. Much of it occurs during GSE approach, docking and pushback, where procedures, signals and supervision can prevent contact.

What do participants take back from the ground handling safety course?

Participants take back a Turnaround Safety Audit and Ramp Damage Prevention Plan with audit findings, ranked hazards, GSE, pushback and loading controls, briefing points and named owners, ready to present to their station manager and airline customers.