



Ground Related Safety Issues Through the Eyes of Flight Crews

InfoShare – Ground Operations

Dallas, TX

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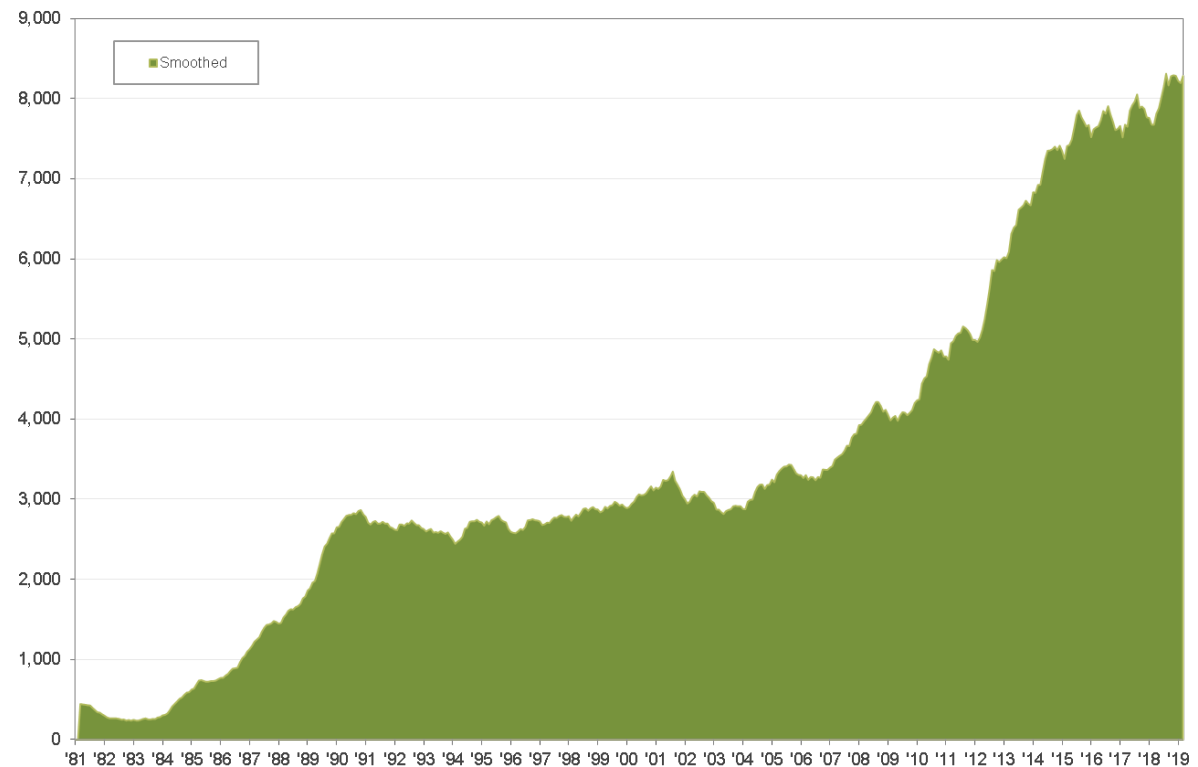
**AVIATION SAFETY
REPORTING SYSTEM**



ASRS Report Volume Profile

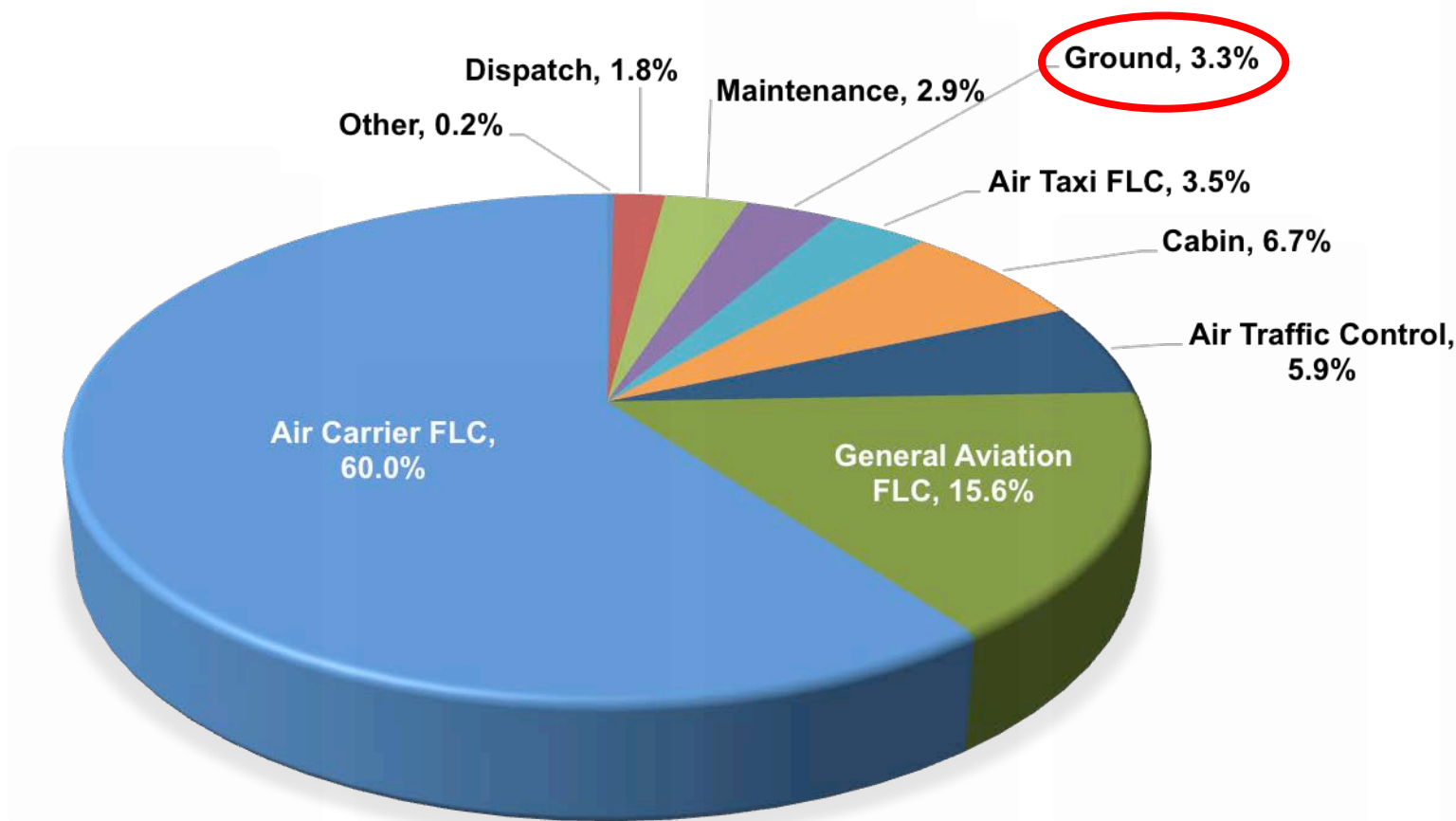
- Over 43 years of confidential safety reporting
- Over 1,631,000 reports received
- Over 6,590 alert messages issued
- Over 8,425 reports per month, or 405 per working day
- Total report intake for 2018 was 99,010
- Current intake estimate for 2019 is over 102,000

Monthly Intake
January 1981 – March 2019



Incident Reporter Distribution

April 2018 – March 2019



n = 101,101



Source: 100% ASRS Report Data



ASAP Reporting to ASRS

- **ASAP Reporting**

- 263 Total Programs
- 138 Air Carriers/Operators

More programs being added continuously

- **Reporting Groups**

- 133 Pilot
- 57 Maintenance
- 46 Dispatch
- 23 Flight Attendant

ASRS Electronic Transmission Protocol compatible with numerous software platforms

- 4 Other (Including Ground Crew, etc.)

- **Majority are received through Secure Electronic Data Transmission protocols**

- **Paper form submissions continue to be received at ASRS**

24.4% of all reports are matched to unique events in 2018



Recent ASRS Safety Telecon Topics

September 2018 – March 2019 (Since Last Infoshare)

Recent Safety Telecon Topics

A320 ACARS Data Transmissions Blocks VHF

B737NG Uncommanded Roll With Spoiler Use

Aspen Evolution PFD Failure

Piper PA28 Alternator Failure

ATC Insufficient Staffing/TMU Flow Management

CRJ-200 Water in Pitot Static System

Air Ambulance Operations in IAD Class B Airspace

B737 Incorrect Arming of Evacuation Slides

CPDLC ATC Clearance Issues

MDT Airspace Issues

CE-525A Stabilizer Trim Frozen in Cruise Flight

C206 Rudder Cable Failure

A320 Flight Crew O2 Dispatch Requirements

CLT RNAV STAR BANKR2 Crossing Restrictions

FLL Class C Not Sufficient for Current Traffic Levels

CL35 False Dual Engine Fire Warning

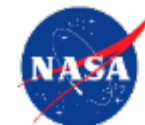
B737-800 Broken Flight Control Cables

NMAC at Non Towered Airport



Recent Ground/Ramp Operations Alerts

- Towbarless Aircraft Tug Equipment Issues
- Jet Blast Incidents Involving Ramp Operations Personnel
- Ground Vehicle Conflict Issues
- Potential Effects of Insecticide Spray on Crewmembers
- Ramp Personnel in the Vicinity of Operating Engines
- ERJ-170 Baggage Loading Procedure Deviations
- B737-800 Baggage Loading Procedure Deviations at JFK
- Ramp Personnel Safety Issues



Ground-Related Safety Issues

- Use of Cell Phones in Unauthorized Areas
- Hazmat Documentation Errors
- Non-Adherence to Standard Operating Procedures
- Training Deficiencies
- Inappropriate Use of Equipment
- Communication Breakdown and Signaling Confusion
- On-Time Departure Pressure
- Lack of Procedural Knowledge
- Distractions, Interruptions



Ground-Related Issues through the Eyes of Flight Crews

- Airline employees work together to provide safe operation on the ground as well as in-flight
- Requires a high degree of communication and cooperation
- ASRS has typically presented reports describing challenges from the Ground Personnel perspective
- ASRS is sharing reports describing the challenges from the Flight Crew perspective
- Presentation is intended to provoke thought and discussion...



Pilot-Reported Ground Operation Issues

Worksheet Guidelines (ACN 1604270)

- B747 flight crew reported numerous procedure and documentation errors regarding Hazmat shipment due to inconsistencies in company procedural manuals
- Event Details:
 - NOTOC document with multiple cross-outs and ink changes
 - Loadmaster's lack of reference to worksheet, and reportedly stated *"...worksheets were just 'generic,' and that 'sometimes we just make things work.'"*
 - Reporter noted extra straps in some locations and missing straps in one or two places
 - On-time departure pressure vs. flight safety and legality
 - Communication Breakdown – Loadmaster confused and upset
 - Unclear guidance, but departed within specifications.....



Pilot-Reported Ground Operation Issues

Worksheet Guidelines (ACN 1604270)

■ Event Details (Cont'd):

- In cruise, First Officer discovered a signature missing on the verification line of the tie down worksheet.
- *“While at the time of departure I believed that everything was secured properly, upon reading the manuals afterwards I'm no longer 100% sure everything was correct.”*



Source: <https://stock.adobe.com>

Pilot-Reported Ground Operation Issues

Snake Charmer (ACN 1603361)

- B767-300 flight crew reported poor adherence to SOP and poor communication led to starting Number 2 engine with the air cart parked directly in front of that engine
- **Event Details:** With APU inoperable, #2 engine air start required
 - Ground crew utilization of non-standard and unclear communication phraseology *“...yeah go ahead...” “yeah, you're good.”*
 - First Officer reported a Maintenance Technician came on the radio and said *“abort the start and shut down #2! They parked the huffer right in front of the engine!”*
 - Situation could have resulted in catastrophic engine damage or worse *“...injuries...from items becoming projectiles.”*
 - Flight crew also cited non-standard pushback procedures



Pilot-Reported Ground Operation Issues

Is the Parking Brake Set? (ACN 1591840)

- B777 flight crew reported a tow bar issue during pushback required a return to the gate
- Event Details:
 - Normal initial pushback with “...*clear to start engines...*” received
 - Communication/headset problems were noted
 - Captain reported after communication was re-established “... *the tug driver...asked ‘is parking brake set’ and I replied ‘no, do you want the parking brake set?’ He replied ‘set parking brake’ and I set parking brake and replied ‘parking brake set’.*”
 - Tow bar disconnected with no command to set parking brake
 - Tow bar was wedged between the nose gear wheels
 - Passengers returned to terminal via stairs and buses
 - Maintenance action required to remove tow bar and complete inspection



Pilot-Reported Ground Operation Issues

Numbers Game (ACN 1580034)

- EMB-140 flight crew identified weight and balance discrepancy during preflight
- Event Details:
 - Preflight release documents review determined aircraft exceeded Maximum Takeoff Weight (MTOW) for the conditions
 - Documented payload was reduced to maximum allowable
 - Crew did not observe any baggage or cargo off loaded
 - Station Agent admitted that bags were omitted from computer system, but not physically removed from the cargo compartment
 - Captain questioned Station Manager then stated *“they...just removed the carry-on bags from the system and he didn't seem to think that it was a big deal.”*
 - Crew concerned that employees would deliberately exceed aircraft loading and CG limits



Pilot-Reported Ground Operation Issues

Wireless SNAFU (ACN 1559770)

- EMB-175 flight crew reported the ramp crew pushed the aircraft without clearance, towards conflicting taxiing aircraft
- Event Details:
 - Passenger door was closed and crew was ready for pushback
 - Ramp person communicated the area was clear and FOD walk had been completed – ready for brake release
 - Crew released brakes-would advise when clearance received
 - Push started without clearance and with aircraft inbound
 - Crew told driver to stop the push, but did not receive response
 - Communication Breakdown: Ramp crew wireless headsets were crossed between the aircraft on two adjacent gates



Pilot-Reported Ground Operation Issues

Missing in Action (ACN 1539844)

- B737-800 flight crew reported releasing the parking brake for pushback, but the ground crew was not present and the aircraft which was not connected to a tug, rolled a few feet on its own.



Source: <https://stock.adobe.com>

- Event Details:
 - Before Start Checklist was completed
 - Ramp Personnel were not able to use headsets due to weather in the area, and hand signal briefing was accomplished
 - When ready, the flight crew called for pushback clearance
 - Parking brake was released, and aircraft rolled back a few feet
 - Flight crew was unaware the Ramp Crew had left due to ramp closure for weather and lightning



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