



# ASRS Dispatch Safety Issues - “To Ground or Not to Ground”

InfoShare – Dispatch

Dallas, TX

April 2019

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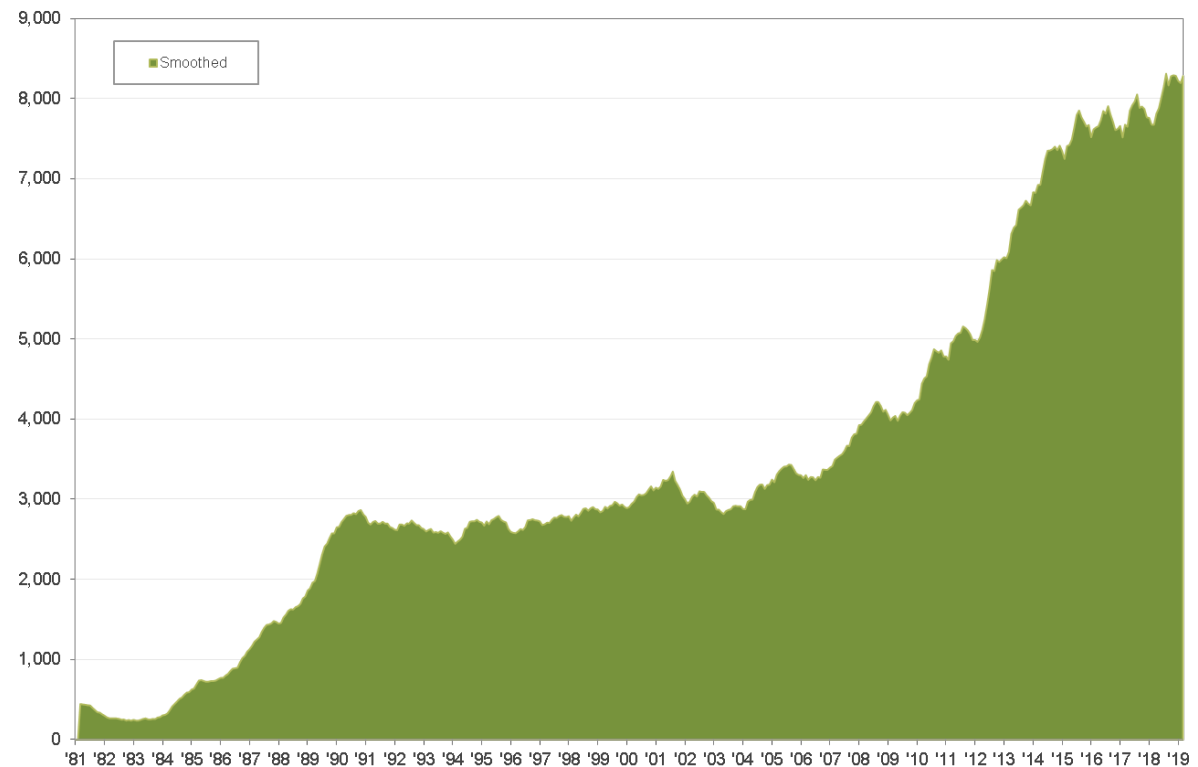
**AVIATION SAFETY  
REPORTING SYSTEM**



# ASRS Report Volume Profile

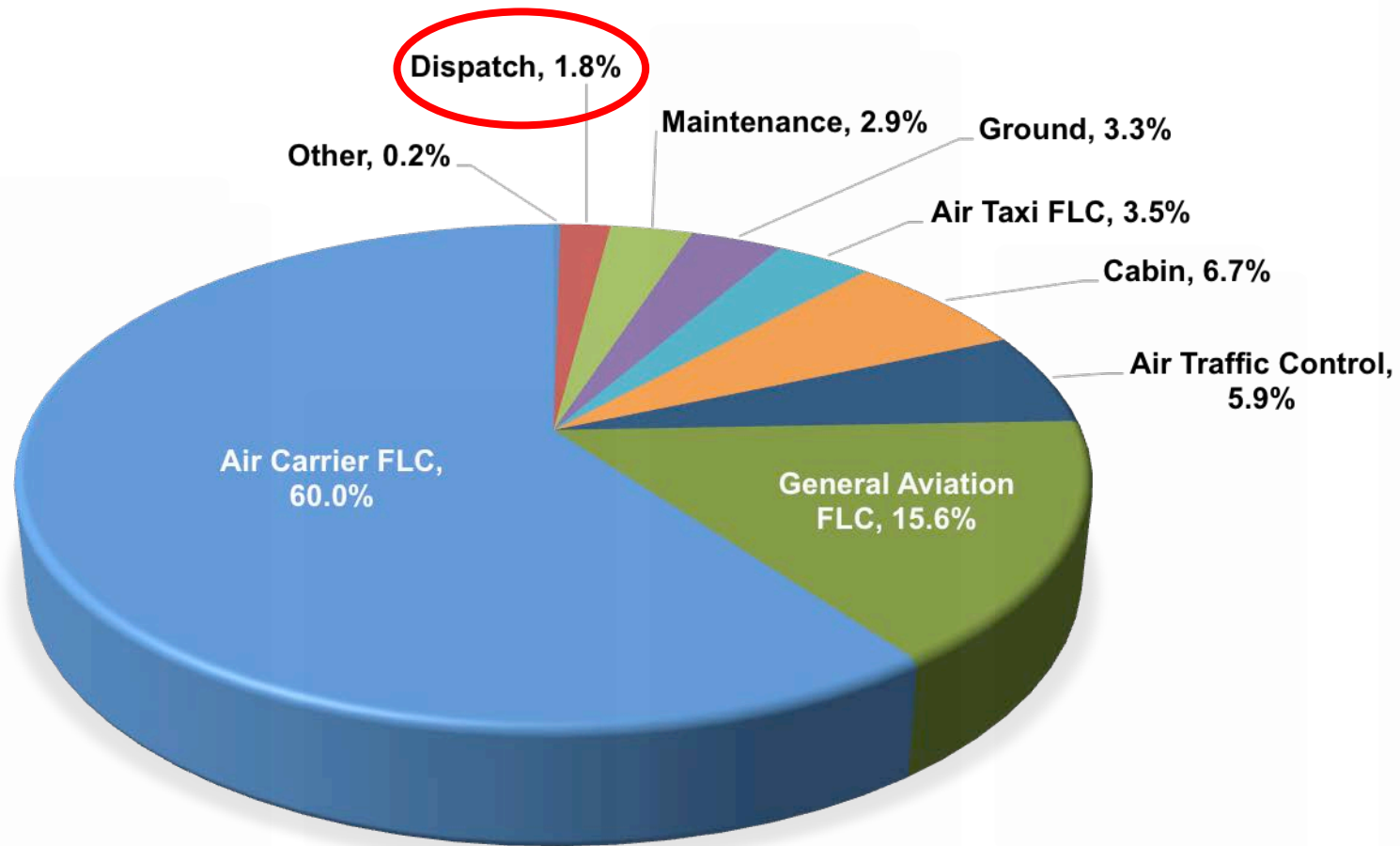
- Over 43 years of confidential safety reporting
- Over 1,631,000 reports received
- Over 6,590 alert messages issued
- Over 8,425 reports per month, or 405 per working day
- Total report intake for 2018 was 99,010
- Current intake estimate for 2019 is over 102,000

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
- 4 Other (Including Ground Crew, etc.)

ASRS Electronic Transmission Protocol compatible with numerous software platforms

- **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



# ASRS Safety Telecon Topics

September 2018 – March 2019 (Since Last Infoshare)

## Recent 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 Concerns

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 Dispatch-Related Alert Messages

- Dispatcher Staffing Concerns
- Terrain Critical Depressurization Procedures (TCDP) Issues
- Central America Volcanic Ash Activity Report Availability for Flight Crews
- FSS NOTAM Oasis Procedures
- MDT Runway 13 Displaced Threshold Marking
- A320 Wing Anti-Ice Valve MEL Procedure
- SIGMET Location Identification Issues
- Security Concerns With Passenger Internet Access



# Dispatch System Outage Issues

- Loss of Operational Control
- Planned outages gone wrong
- Inoperative back-up equipment
- Lack of training in back-up procedures
- Communication breakdown
- Contradictory Operational Control and Operational Authority expectations
- Company pressure to continue operations



# “To Ground or Not to Ground”

*Planned Outage* (ACN 1592416)

- Air carrier Dispatcher reported an unexpected communication issue with company personnel due to equipment problems
- Event Details:
  - Planned computer outage for IT upgrades
  - Chief Dispatcher then communicated outage was canceled
  - Dispatcher stated *“For the next 3 hours work was normal. ... [then] I received notification...that the Captain on [a flight] had been trying to contact me...for 30 minutes.”*
  - Telephone Network System was apparently not working
  - Back up phones were not properly programmed





# “To Ground or Not to Ground”

## *Planned Outage* (ACN 1592416)

- **Event Details (Cont'd):**
  - Dispatcher was without a Sector monitor for 2 hours
  - Increased workload
  - Communication Breakdown
  - Loss of Operational Control
  - Dispatcher stated *“No message was sent out to the floor to remind people to use the phone call log on sharepoint due to the phones not being recorded.”*



# “To Ground or Not to Ground”

*ACARS INOP* (ACN 1568027)

- Air carrier Dispatcher reported that during a company-wide ACARS outage aircraft Out, Off, On and In times were not being reported, creating erroneous dispatch data
- Event Details:
  - Dispatcher was informed of company-wide ACARS outage
  - Takeoff numbers were being provided via phone
  - Load planners were able to transmit final weights
  - Visual reference of flights was available through backup flight tracking program
  - Several flights were missing OOOI times



Aviation Safety Reporting System



# “To Ground or Not to Ground”

ACARS INOP (ACN 1568027)

## ■ Event Details (Cont'd):

- Dispatcher stated *“...company email went down [as well] and according to Flight Operations Manual pilots are directed to communicate times, weights, etc...using company email and or voice if email is not available.”*
- Several flights were missing OOOI times *“...desk was unable to accurately determine 117 legality times.”*
- Position reports were incorrectly entered
- Dispatchers had no way of knowing if flights were airborne
- Outage lasted over 8 hours
- Zero aircraft were grounded during this situation
- Reporter stated *“To say that loss of operational control occurred would be a large understatement.”*



# “To Ground or Not to Ground”

## *Loss of Operational Control* (ACN 1290870)

- Three dispatchers described a computer outage that resulted in the loss of operational control of airborne aircraft
- Event Details:
  - Dispatch monitors and plots experienced an outage
  - Affected dispatch responsibilities and equipment included:

**Flight Planning**

**Fuel Calculations**

**ACARS**

**Emergency/Diversion Planning**

**Flight Following**



# “To Ground or Not to Ground”

## Loss of Operational Control (ACN 1290870)

### ■ Event Details (Cont'd):

- Number of flights in the air were unknown
- One of the dispatchers stated “...*we called the hub to temporarily hold all flights until we had recovered operational control. About five minutes into us trying to handle the situation, we heard from one of our coordinators that the Director of Operations called hub ops, and told them it was alright for our flights to push.*”
- Outage lasted 20-25 minutes
- IT system failure caused the event
- Reportedly “...*inadequate training on secondary dispatch programs...*” made the situation worse.
- FAR 121.533 Operational Control concerns



# “To Ground or Not to Ground”

*Lost Comm* (ACN 1276605)

- Dispatcher experienced loss of ACARS communication with one flight while inbound to Mexico City during a weather event
- Event Details:
  - ACARS outage with international flight
  - Commercial radio contact was also unsuccessful
  - Communication was lost for over 1 hour
  - Aircraft was out of communication until verified on the ground in MMMX by company agents
  - Dispatcher stated *“This may have been prevented by having only aircraft with SELCAL or SATCOM fly to [foreign locations].”*



# “To Ground or Not to Ground”

*Hot Spot* (ACN 1098812)

- Air Carrier Dispatcher described a one plus hour computer outage and the difficulties encountered
- Event Details:
  - Unable to flight follow and loss of flight operational control due to computer system failure
  - Back-up plans failed
    - ❖ “...computer screens locked up so I was unable to gain access to the program created for this sort of incident.”
    - ❖ “The backup laptops brought in failed to function at all.”
  - Some aircraft were finally contacted via ATC Center
  - Another Dispatcher managed to create a hot spot with a cell phone and signed into the system with a personal computer.





# Aviation Safety Reporting System

- Program Information
- Report to ASRS
- Search ASRS Database
- Publications/Studies
- International
- Online Resources

- ASRS Database Online ←
- ASRS Database Report Sets
- Requesting ASRS Data



ASRS captures confidential reports, analyzes the resulting aviation safety data, and disseminates vital information to the aviation community.

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**NOTAM Issues**

July 2015, Issue 426

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Select a Form To Submit a Report

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- ▶ [Air Traffic Control](#) - Air Traffic Controllers
- ▶ [Maintenance](#) - Mechanics
- ▶ [Cabin](#) - Cabin Crew

[How to Report Online](#) ▶

- Review proper browser settings, security tips, and provisions.
- ▶ [FAQ for Electronic Report Submission](#)
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Learn more about ASRS such as report processing and reporting metrics.



<https://asrs.arc.nasa.gov/>



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