Cabin Safety Issues Related to Pre-Departure and Inflight Issues

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AVIATION SAFETY REPORTING SYSTEM
Topics of Discussion

- ASRS Reporting
  - General and Cabin Attendant Intake
  - Cabin Attendant Related Events - General Overview

- Cabin Safety Issues Related to Pre-Departure and Inflight Issues
Report Processing Flow

Airline Safety Action Program (ASAP) and Air Traffic Safety Action Program (ATSAP) reports
ASRS Report Volume Profile

- 37 years of confidential safety reporting
- Over 1,150,000 reports received
- Over 5,800 alert messages issued
- Over 6,700 reports per month, or 323 per working day
- Total report intake for 2013 was 80,840
- Current rate estimate for 2014 is over 90,000

Monthly Intake
January 1981 – December 2013

Aviation Safety Reporting System
ASAP Reporting to ASRS

- Overall ASAP Intake
  - 181 Total Programs
  - 76 Air Carriers

- Reporting Groups
  - 74 Pilot
  - 44 Mechanic
  - 39 Dispatch
  - 19 Flight Attendant
  - 5 Ground Crew

- Secure Electronic Data connection protocols between airline and ASRS
  - 179 Programs
  - 75 Airlines

26% of all reports are matched to unique events in 2013
These products and services fulfill the program’s mission to disseminate safety data

- **Alert Messages**
  - Safety information issued to organizations in positions of authority for evaluation and possible corrective actions.

- **CALLBACK**
  - Monthly newsletter with lessons learned format, available via website and email.

- **Quick Responses**
  - Rapid data analysis by ASRS staff on safety issues with immediate operational importance generally limited to government agencies.

- **ASRS Directline**
  - Safety topic summaries based on ASRS reports published to meet the needs of operators and flight crews.

- **Focused Studies/Research**
  - Studies/Research conducted on safety topics of interest in cooperation with aviation organizations.

- **ASRS Database**
  - The public ASRS Database Online and data available in Database Report Sets or Search Requests fulfilled by ASRS staff.
Incident Reporter Distribution
January – December 2013

Source: 100% ASRS Report Data

n = 80,840

- Air Carrier FLC: 60%
- General Aviation FLC: 16%
- Air Traffic Control: 11%
- Cabin: 5%
- Air Taxi FLC: 3%
- Dispatch: 2%
- Maintenance: 2%
- Ground: 1%
- Other: 0.2%
Flight Attendant Intake
2008 – 2013

Source: 100% ASRS Report Data

n = 17,610
Flight Attendant Intake – Top Ten Anomalies
January – December 2013

Categories are not mutually exclusive. Therefore, a single incident may be coded by ASRS analysts as involving more than one anomaly.

Source: 100% ASRS Report Data

Aviation Safety Reporting System

March 2014
ASRS Cabin Incident Records

General Overview of Primary Analysis Records

January 2012 – Present
Cabin Incidents
Event Anomaly

- Published Material / Policy Issue: 67
- Critical Aircraft Equipment Problem: 57
- Aircraft Equipment Problem Less Severe: 32
- Illness Issue: 24
- FAR Issue: 22
- Aircraft Smoke/Fire/Fumes or Odor Issue: 20
- Maintenance Issue: 9
- Inflight Weather / Turbulence Encounter: 4
- Passenger Misconduct: 3
- Security Issue: 2

Categories are not mutually exclusive. Therefore, a single incident may be coded by ASRS analysts as involving more than one anomaly.

Source: NASA ASRS Database

March 2014
### Cabin Incidents

**Aircraft Type**

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>B737</td>
<td>37</td>
</tr>
<tr>
<td>B757</td>
<td>25</td>
</tr>
<tr>
<td>A319/320/321</td>
<td>20</td>
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<tr>
<td>B767</td>
<td>14</td>
</tr>
<tr>
<td>B777</td>
<td>10</td>
</tr>
<tr>
<td>B747</td>
<td>9</td>
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<tr>
<td>MD80 Series</td>
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<td>Dash 8 -200,-400, Q400</td>
<td>8</td>
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<tr>
<td>EMB ERJ 170/175 ER/LR</td>
<td>4</td>
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<tr>
<td>Candair Regional Jet (200, 500, 700, 900)</td>
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<tr>
<td>Commercial Fixed Wing</td>
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<tr>
<td>Widebody Transport</td>
<td>2</td>
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<tr>
<td>Embraer 145</td>
<td>1</td>
</tr>
<tr>
<td>A330</td>
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</tr>
</tbody>
</table>

*Source: NASA ASRS Database*
Cabin Incident Reports Related to Pre-Departure and Inflight Safety Issues
Pre-Departure Issues

- FAR related issues
- Required crew for boarding
- Jet bridge concerns
“I told her we may have additional bags to check. I also told her not to close the aircraft entry door until I could get the overhead bins closed. As soon as I left the immediate area, the agent Supervisor told [another Flight Attendant] that they had to go and proceeded to close the entry door. The FAR for overhead bin was violated. The FAR for stacked luggage in the closet was violated since additional oversized bags were on the plane and the only option was to stack them in the forward closet. The aircraft entry door was closed 5 minutes before scheduled departure time.”

(ACN 1122923 Excerpt)
“[When we] arrived at the gate the agents asked who we were, so we stated the working crew. The pilots were with us. The agents looked surprised about this. Unknown to us, they had already started boarding the aircraft. One Agent ran down the jetbridge to stop boarding. We stated that all passengers needed to deplane so we could do our emergency equipment checks, etc. The passengers deplaned aircraft and the Agent stated that a bag was still onboard. We asked that the bag be removed by the Agent before we board ourselves.”

(ACN 1122661 Excerpt)
“While deplaning at this specific gate, the jet bridge was unable to completely butt up against aircraft. There was a gap of at least 4 inches between the aircraft and bridge. Agent stated that at this gate that was the closest the bridge would go, no ramp to bridge gap. Agent stated this is an on going problem with this gate. Totally unsafe, I was able to put my leg past my knee through the gap. A child could easily fall and be seriously hurt.”

(ACN 1083321 Excerpt)
In-Flight Issues

- Reported In-flight Issues
  - Passenger Misconduct
  - Smoke in the Cabin
“Passenger became irate over his seat and wanted to move from 44C near the bathroom, to B/C or F/C. When he was told by another flight attendant that he had to stay in his cabin, he became violent and hit the Number 6. It took 5 men to subdue him and put the flex cuffs on him. He was reseated to 20J and when I got off of break, about 30 min. later (or more. don't know the time), he was still thrashing around. He managed to get his arms forward by slipping them under his butt and through his legs. His hands were now in front. He was biting crew and passengers, as well as kicking. He kicked a hole in the fuselage [sidewall].”

(ACN 1125956 Excerpt)
“…looked into the cabin and saw a thick cloud of smoke quickly taking over the cabin. Passengers began to ring call lights and to complain. I quickly called the Captain…. He responded  and told me he was aware of the emergency and his plan to land ASAP. I gathered the Halon, and walked around [with] oxygen and PBE. I walked over to [another Flight Attendant] who was checking…for possible sources of fire. …I decided to look for the Emergency checklist and were able to read up to 9. It was very difficult to read and make sense of this chart, in part do to the low visibility and the oxygen mask over my face. I asked passengers to put on the life vest…as precaution. After a safe landing…I continued to stay on the PA and kept them informed of the situation.

(ACN 1124569 Excerpt)
QUESTIONS?
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