



Fuel Policies and Filed Alternates

InfoShare – Dispatch

Seattle, WA

Linda Connell

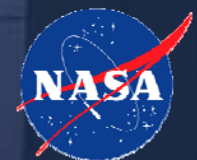
Program Director, NASA ASRS

Dennis Doyle

Project Manager, Booz Allen Hamilton

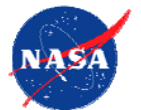
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**AVIATION SAFETY
REPORTING SYSTEM**



Topics of Discussion

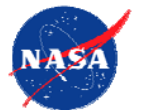
- ASRS Reporting
 - General and Dispatcher Intake
 - Dispatch Personnel Related Events - General Overview
- Fuel Issues Related to Policy
- Filed Alternate Issues



ASRS Reporting



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Report Processing Flow

Airline Safety Action Program (ASAP) and Air Traffic Safety Action Program (ATSAP) reports



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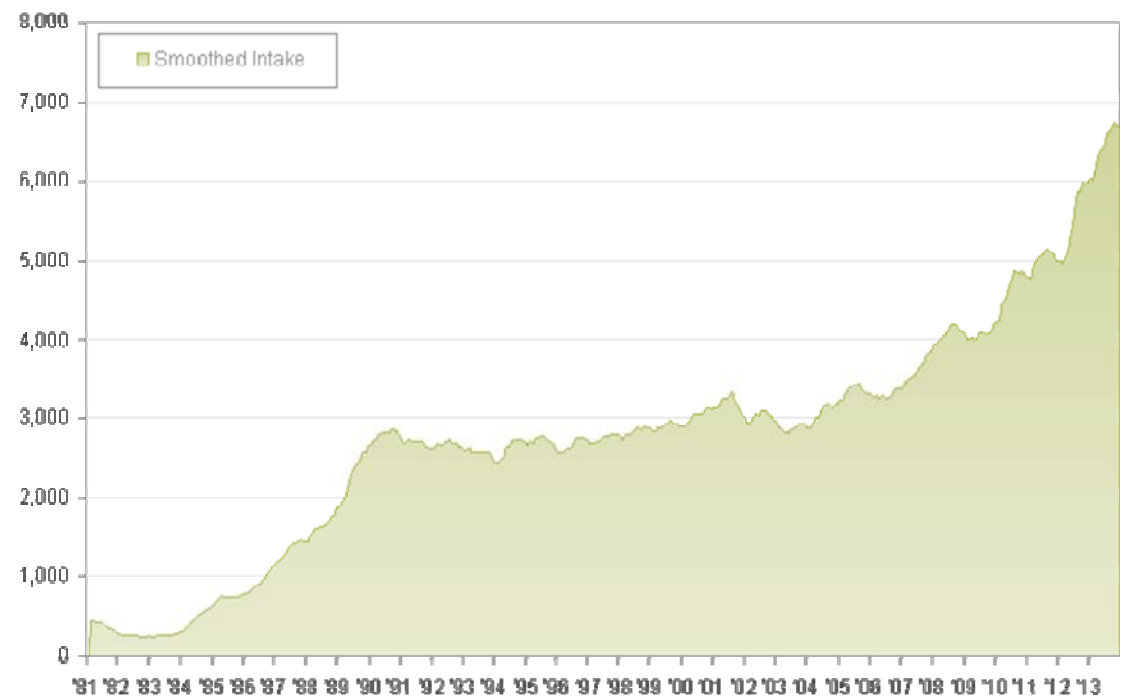
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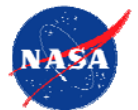
ASRS Report Volume Profile

- 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 approximately 90,000 reports

Monthly Intake
1981 – 2013



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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

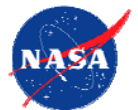
- **Secure Electronic Data connection protocols between airline and ASRS**

- 179 Programs
- 75 Airlines

ASRS Electronic Transmission
Methodology compatible with
numerous software platforms

More airline programs being
added continuously

26% of all reports are matched to unique events in 2013



ASRS Products

- 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 a 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.



ASRS Database

The public ASRS Database Online and data available in Database Report Sets or Search Requests fulfilled by ASRS staff.



Focused Studies/Research

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



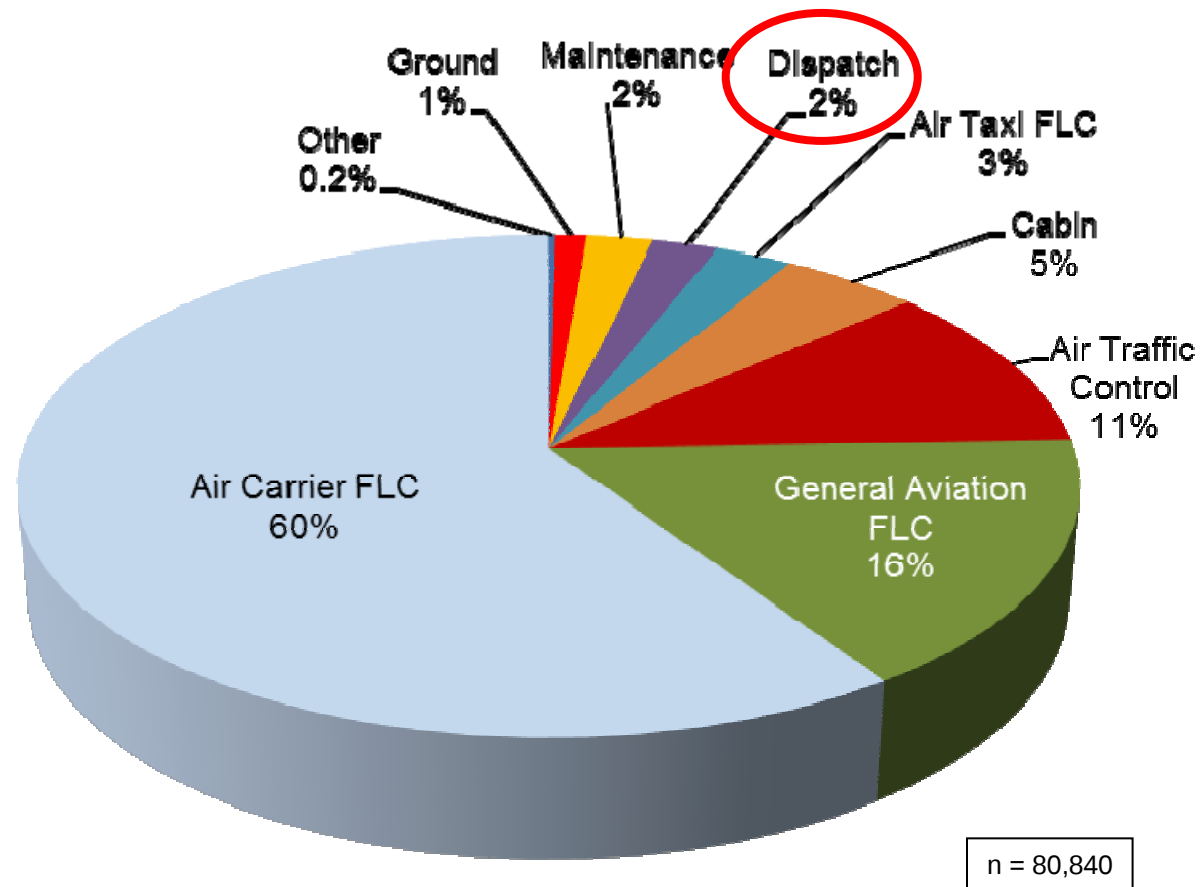
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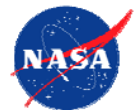
Incident Reporter Distribution

January – December 2013



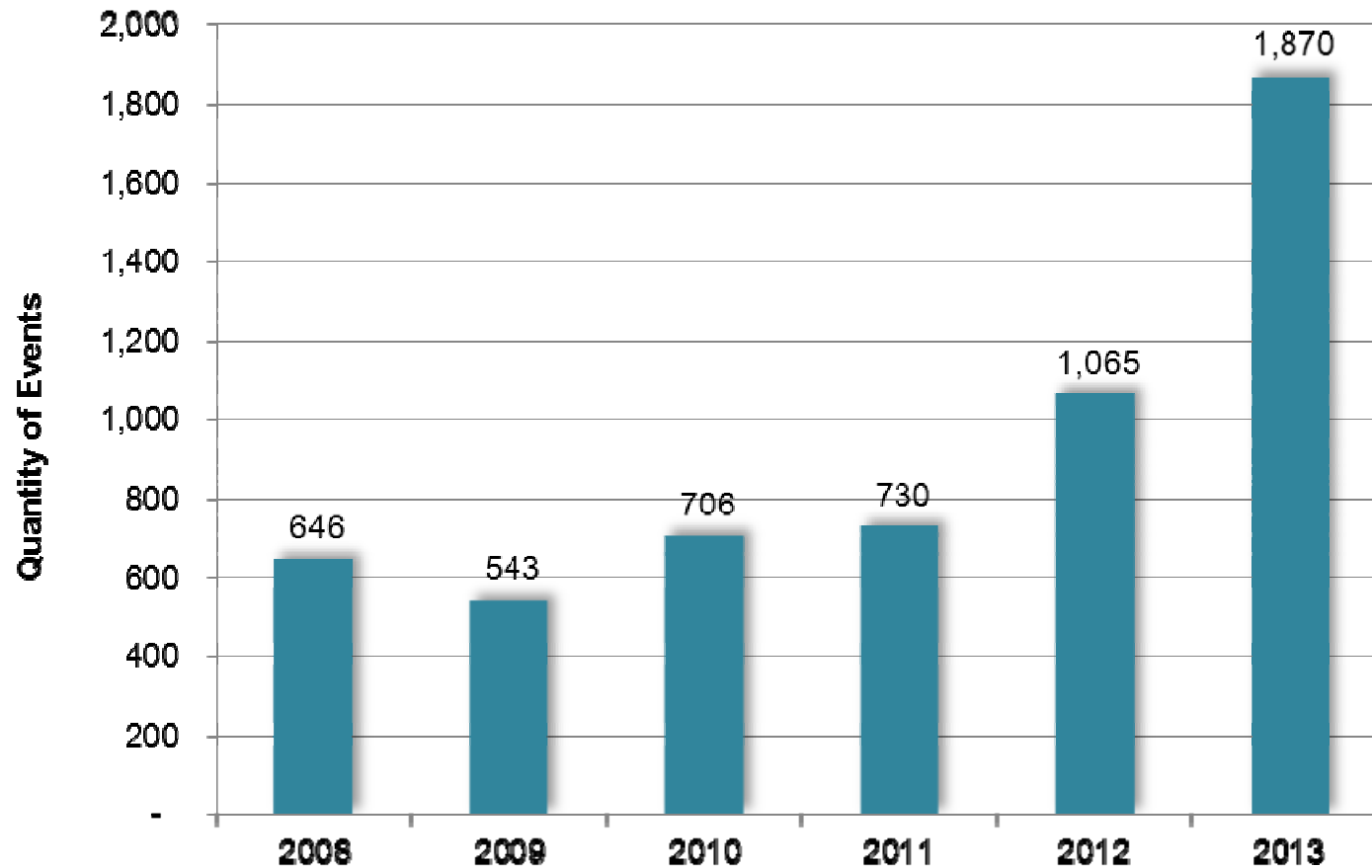
Source: 100% ASRS Report Data

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Dispatcher Report Intake

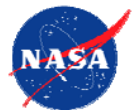
2008 – 2013



Source: 100% ASRS Report Data

n = 5,560

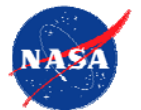
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Fuel Issues Related to Policy

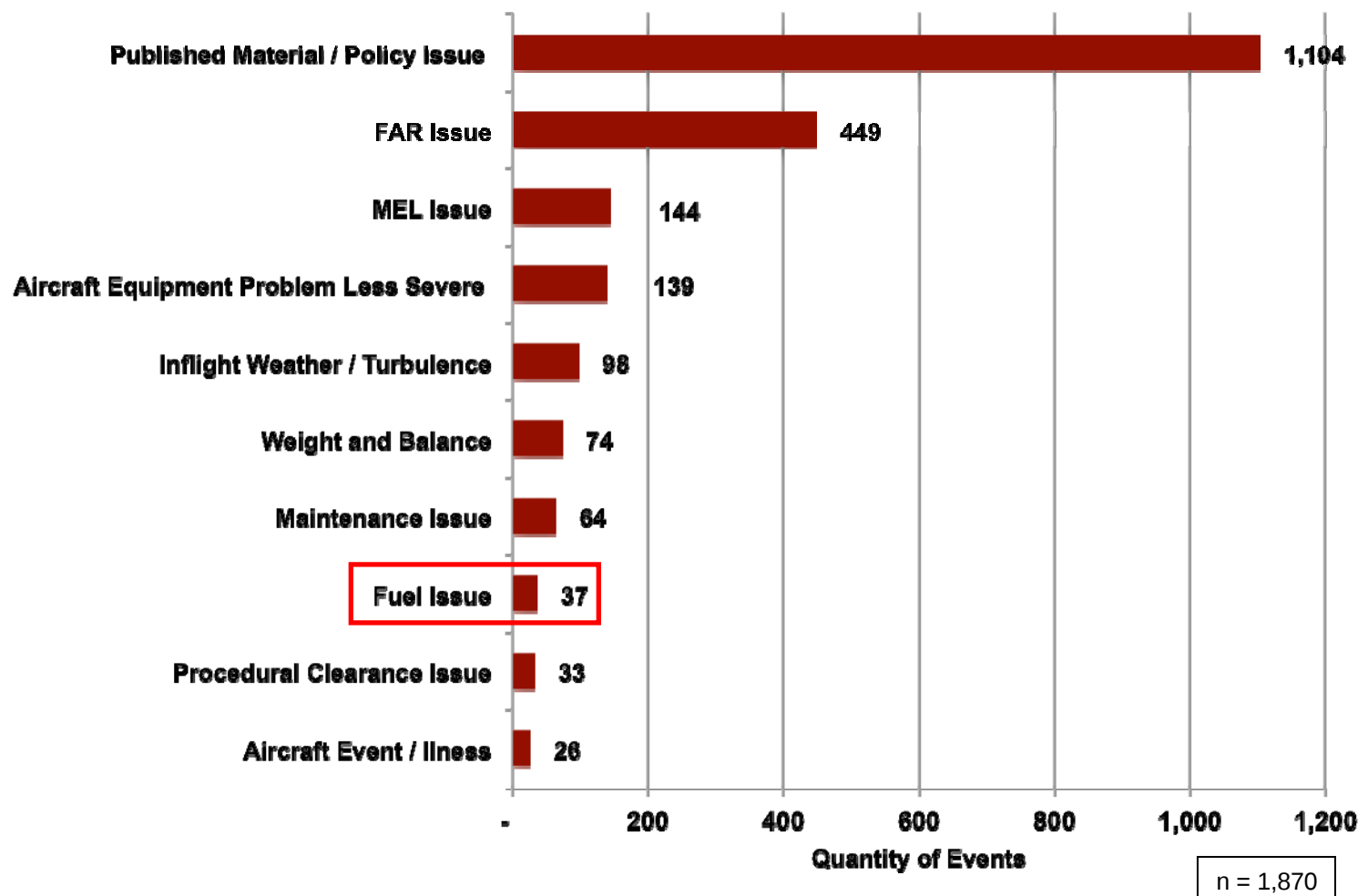


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Dispatch Report Intake – Top Ten Anomalies

January – December 2013

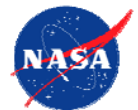


Categories are not mutually exclusive. Therefore, a single incident may be coded by ASRS analysts as involving more than one anomaly.

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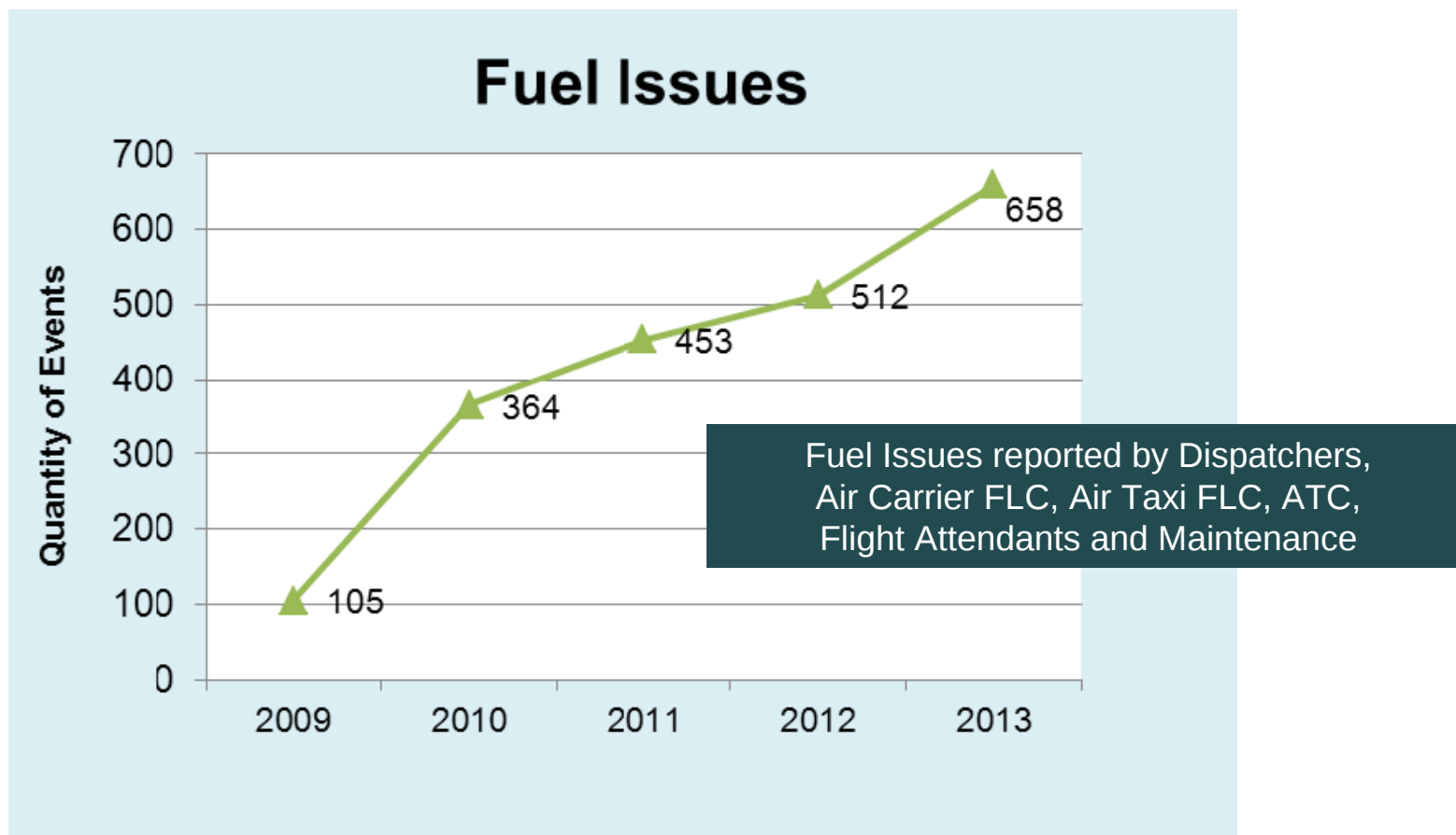
Source: 100% ASRS Report Data

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ASRS Report Intake From Dispatchers, Air Carrier FLC, Air Taxi FLC, ATC, Flight Attendants and Maintenance Intake – Fuel Issues

2009 – 2013



Total intake does not include General Aviation FLC, Ground Personnel, or "Other" reports.

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Fuel Issues, n = 2,092

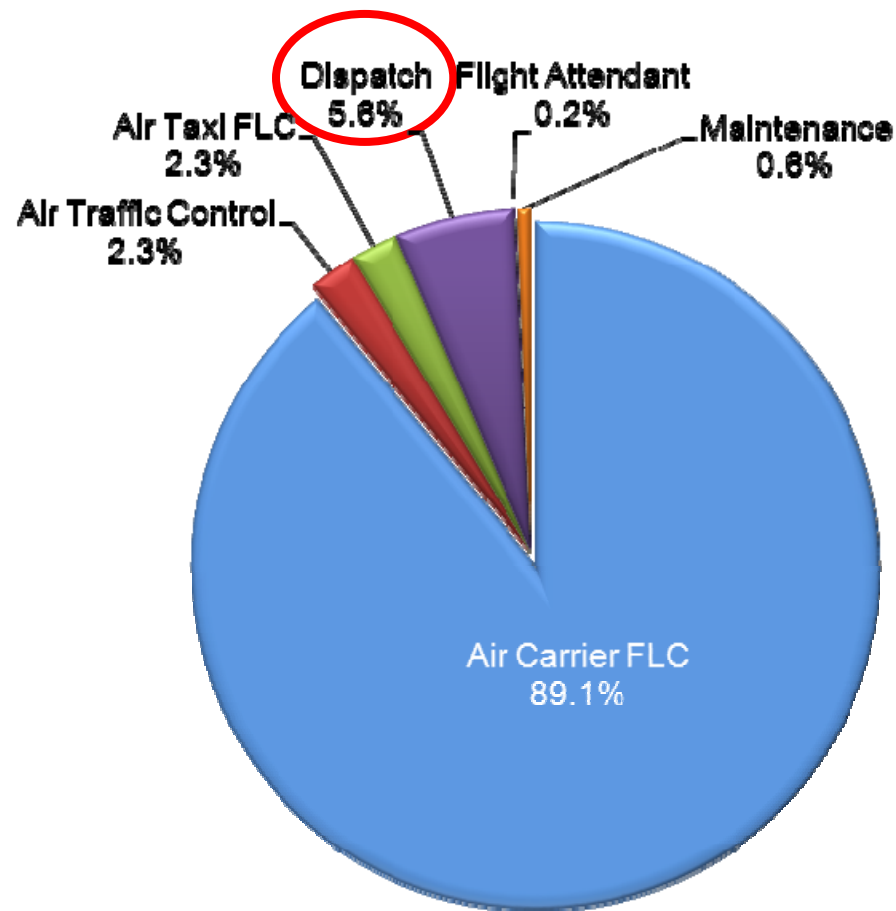
Source: 100% ASRS Report Data

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Fuel Issues - Reporter Function

January – December 2013



n = 658



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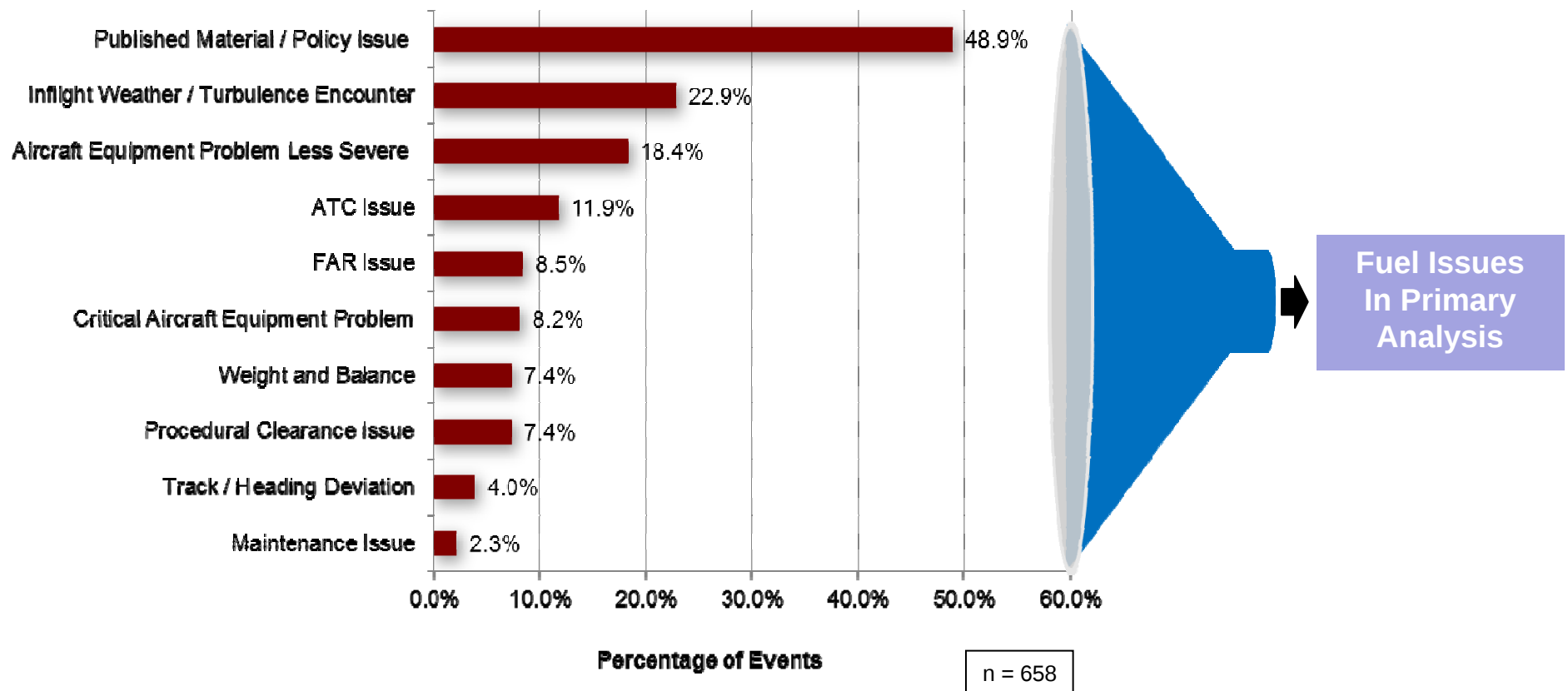
Source: 100% ASRS Report Data

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Fuel Issues – Concurrent Anomalies

January – December 2013

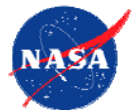


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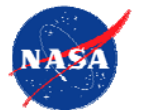
Source: 100% ASRS Report Data

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Fuel Issues Related to Policy

- Examples of Fuel Policy Issues
 - Flight fuel planning software issues
 - Questionable mandated reserve fuel calculations
 - Mandated maximum holding fuel
 - Dispatch with minimum legal fuel quantity
 - Unrealistic enroute altitudes and terminal routings
 - Fuel Bias (actual burn exceeds forecasts)
 - Interpretation of MEL fuel requirements



Fuel Issues Related to Policy

Captain Reported: "... I knew it was tight on gas and the Dispatcher didn't give us any add or fuel to play with, so I flew powered back and as fuel conscious as I could.... Upon closer inspection my release thought I needed only 1301 for reserve. There is no way the EMB can fly for 45 minutes at low altitudes and burn only 1301 pounds of fuel.... **My planned arrival fuel was supposed to have been 2064 and it was just under 1800 even with me climbing steeper, flying slower and using as little as possible with a tailwind.** I should also mention we got straight out of ORD with no delays and minimal ground fuel burn so we took off with a few hundred extra than minimum takeoff fuel. All in all, release fuel from ORD to ZZZ should be several hundred pounds more for safe operation. Dispatch should revise this release to include crossing Shelbyville at 14,000 feet plus a realistic amount for required reserve fuel. In addition they should always give an additional 500 pounds at minimum to cover contingencies due to variations in flight."
(ACN 1078188 Excerpt)



Fuel Issues Related to Policy

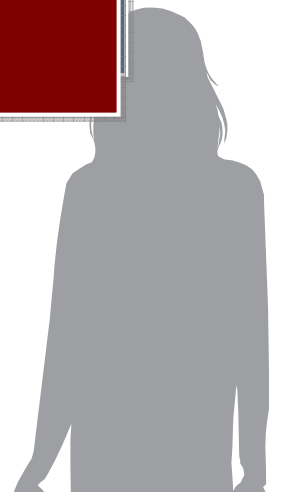
Captain stated: “Operating a through flight with an aircraft and terminal change in the hub. **Dispatch release received with tankering fuel.** I did not thoroughly review the release...so **I missed that the flight plan was short both time and fuel.** If you look at the last segment, it shows from the VOR to the airport, a distance of 21 NM, would take 1 (ONE!!!) minute. It actually took 16 minutes. **Our burn was 1,000 pounds over release [burnout] fuel.** Dispatch is trying to tighten up on fuel and at the same time the dispatchers are not adjusting the poor flight plans. The result is the pilots having their necks hanging out....”
(ACN 1082018 Excerpt)



Fuel Issues Related to Policy

Dispatcher Reported: “I arrived today and took over flight. I decided to do fuel uplift roughly 30 minutes prior to departure and saw MEL 28-2-04 (Left Center Tank Fuel Boost Pump) on this aircraft. I adjusted my fuel and adjusted the adjusted takeoff gross weight (ATOG) to comply with the MEL, but I did not lock the flight or call the Operations Agent. **The plan was done correctly and the aircraft weights were within limits, but the Operations Agent did not check the boxes on their weight and balance page in OTIS to appropriately apply the MEL.** The Captain and First Officer were reviewing the loading schedule prior to departure and did not question the fact that there was no ballast fuel notated on the loading schedule in the zero fuel weight adjustments section.

(ACN 1111266 Excerpt)



Fuel Issues Related to Policy

Dispatcher Reported: "... Flight diverted after a missed-approach due to thunderstorm activity at the originally planned airport. **My concern is that the flight burned into its reserve fuel getting to its first, and closest, alternate....** I first released this flight with company hold fuel and then went back and added two alternates because I did not like what I was seeing on the radar.... The forecast weather was still calling for "alternate none" conditions. I also added 1,000 LBS of Dispatcher add fuel on the first release. **Where, and with how much fuel, would this flight have landed with if I had not added the 1,000 LBS of dispatch added fuel, and gone against fuel policy, and added two alternates?** If the crew would have attempted the same approach, without the 1,000 LBS of Dispatcher added fuel, and then diverted ... **his arrival fuel would have been under 2,500 LBS!** To me this shows that the company policy of 12 minutes of hold fuel, **when thunderstorm activity is present or forecasted, is not a safe amount of fuel...**"

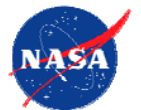
(ACN 899862 Excerpt)



Filed Alternate Issues



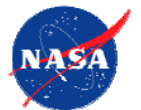
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Filed Alternate Issues

■ Filed Alternate Issues

- Non-required alternate flights
- Minimum Fuel and alternate requirements
- Weather Changes – Reference different weather sources for a alternate planning
- Incorrect alternate planning due to conflicting information sources
- Late TAF changes resulting in illegal alternates



Filed Alternates

“...flight was planned FOD 5.2 no alternate. Weather was clear and good. When flight was on final at 5,000 FT he sent ACARS needing alternate because airport was closed. I asked why and got no response. Called ops and they called someone and reported there was a brief field closure for unknown reason but they were open. ...I had run burn for [other airport] so I sent burn 2.7. No response. I called Tower and was told that when my pilot had demanded an estimate on closure the best they had was approximately 2 hours and he diverted. Told me flight was talking to center and that they was open and good. ...later pilot called. **He was upset with my plan of 5.2 arrival fuel. He had landed with 3.0. Tried to explain it was the proper plan given the conditions. He felt he should always be given back pocket fuel....”**

(ACN 1117636 Excerpt)



Filed Alternate Issues

“Flight departed ...7 minutes ahead of schedule. A new TAF came out at [13 minutes before takeoff] which required that an alternate be added. Neither the pilot or I caught in time. I added ZZZ Airport as an alternate and sent the crew the burns.”

(ACN 1119357 Excerpt)



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Filed Alternates

“[Destination] required an alternate. ZZZ1 was used as the alternate with WX based on the XA51z TAF at 5sm VIS/BKN080 for an arrival of XE35z. The flight blocked out at XD00z. TAF changed again at XD41z calling for 1/2SM FG BKN002 BKN140 and FM171400Z 00000KT P6SM OVC110. At this point, **the alternate became illegal.** The TAF change that came across on the ALERT screen in Dispatch Monitor was not seen until at least XE20z (approximately). **By the time I realized the situation, it was too late to take action;** the flight blocked in at XE30z. During the ensuing time, I had a large number of flights inbound to ZZZ that were being affected by a Ground Delay Program and in this particular instance, when I realized the illegality, there was nothing that could be done about it. The fact that the alternate was not changed enroute constituted a violation of 121.631(b). The aircraft had sufficient fuel to get to other alternates closer to ZZZ; however, the aircraft had already landed in ZZZ by the time the event had determined to have occurred.”

(ACN 1123785 Excerpt)



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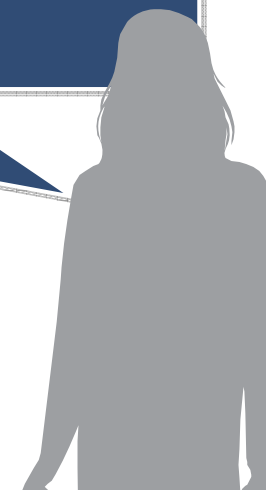
Filed Alternate Issues

“I went to list ZZZ as an alternate for ZZZ1 and noticed an issue between the NOTAMs showing for ZZZ in SABRE, Software B and Software C. The NOTAMs shown in Software C and Software B looked exactly the same while the NOTAMs in Sabre were different These sources not matching could lead to many problems such as figuring incorrect alternate minimums if a glideslope or LOC were out of service. What is the fix for this? How many other releases have I sent where I haven't seen ALL of the NOTAMs? Are the pilots missing NOTAMs in the weather package I create for them. If so I may be setting them up for failure as well.”

(ACN 1123756 Excerpt)



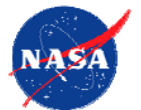
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QUESTIONS?



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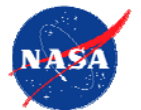
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