

***FIRE, SMOKE OR FUMES
OCCURRENCES
ON TRANSPORT AIRPLANES***

R.G.W. CHERRY & ASSOCIATES
LIMITED

Occurrences were classified as “Significant Events” if they resulted in, or it was likely that they resulted in, any of the following:

Diversion

Return to Departure Airport

Rejected Take-off

Emergency Evacuation

Depressurization

Fuel Dump

In-Flight Thrust Engine Shutdown (includes shutdown during take-off or landing)

Emergency Descent

Emergency Declared

Emergency Services Deployed

Ground Damage (other than Minor Damage)

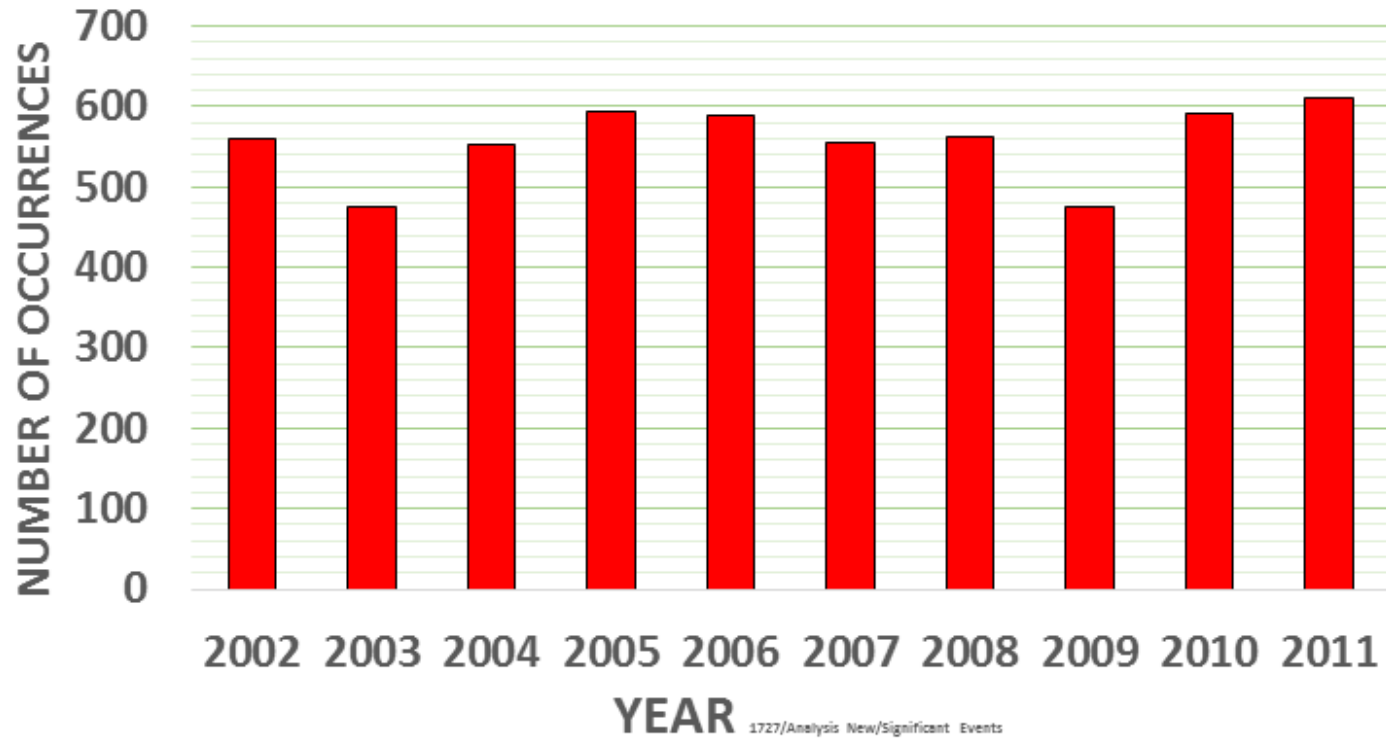
Airplane Damage (Minor, Substantial or Destroyed)

Overweight Landing

Study includes data for 10 years (2002-2011)

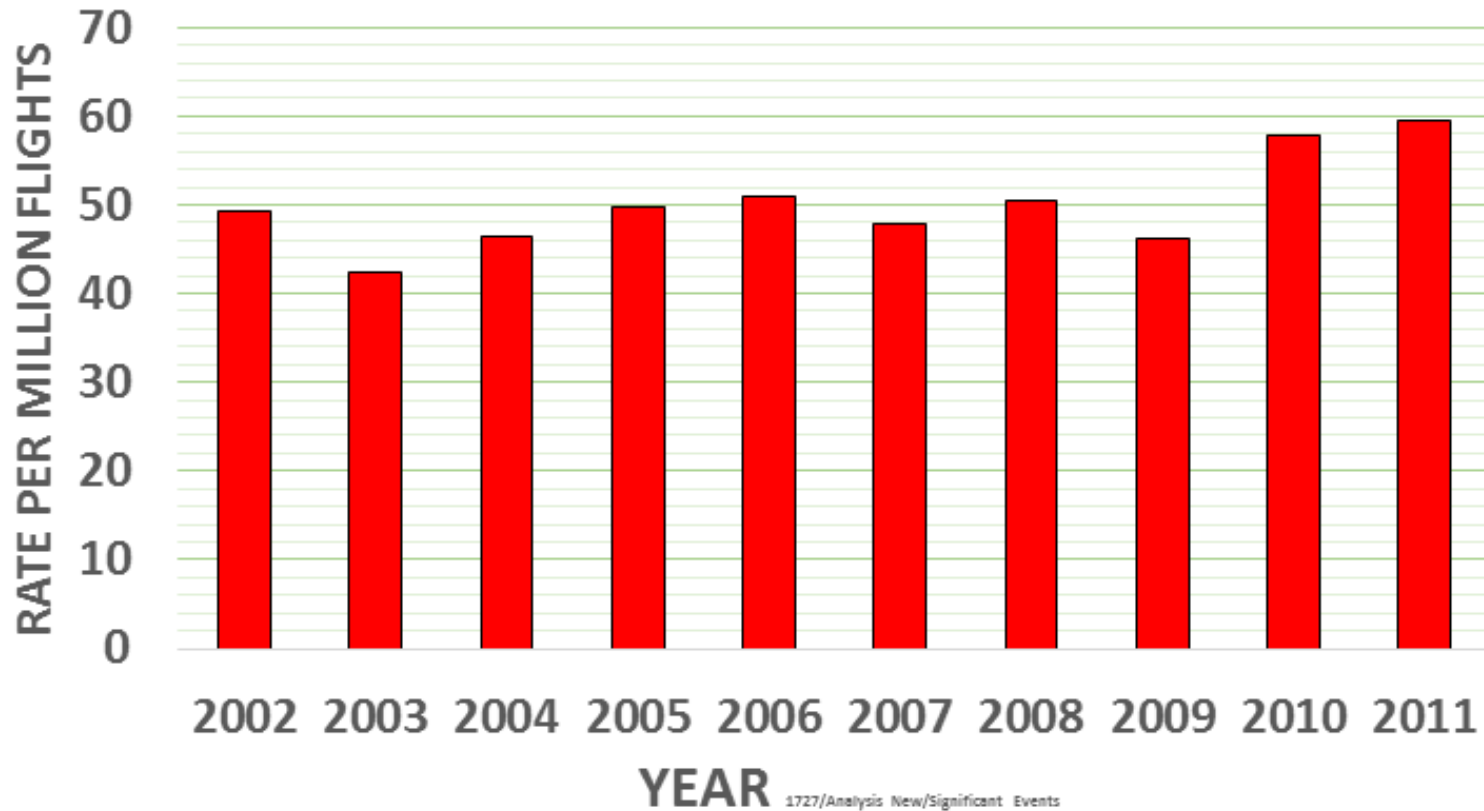
Of the 14,533 occurrences that were considered valid in the study approximately 38% were considered Significant Events.

TOTAL NUMBER OF SIGNIFICANT EVENTS



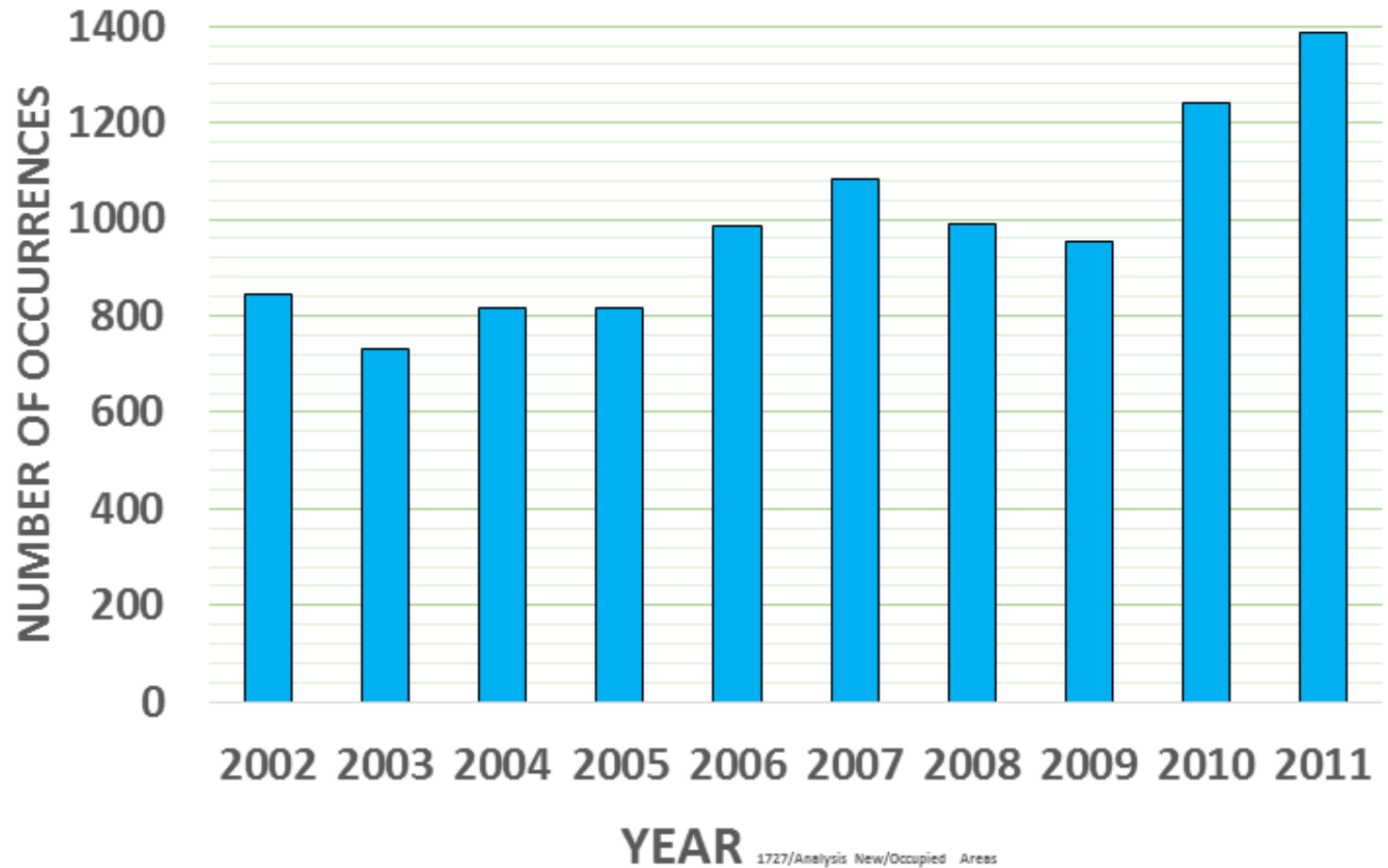
Significant Events - Total Number per Year

RATE OF OCCURRENCE OF SIGNIFICANT EVENTS



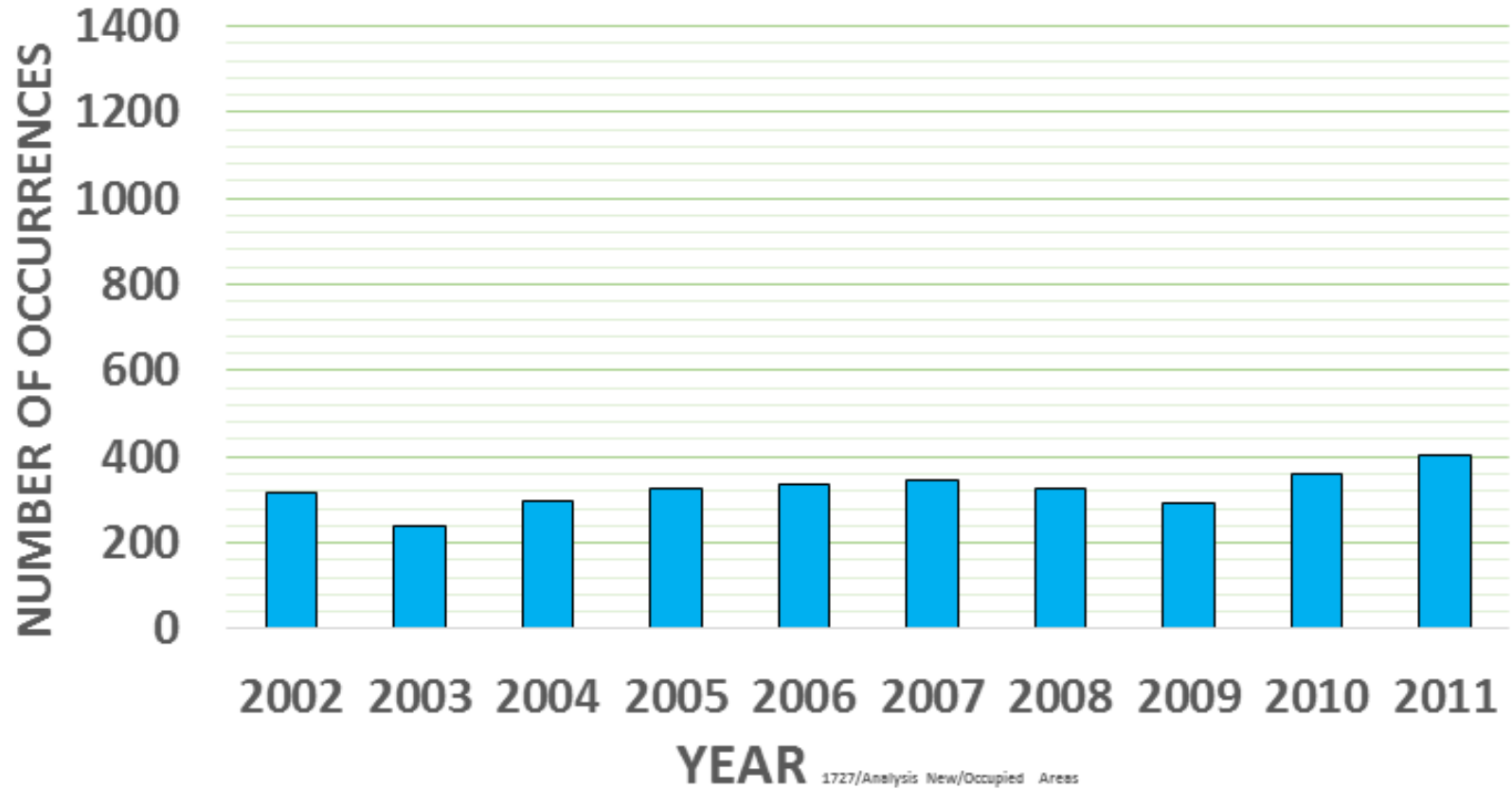
Significant Events - Rate of Occurrence per Million flights

ALL EVENTS



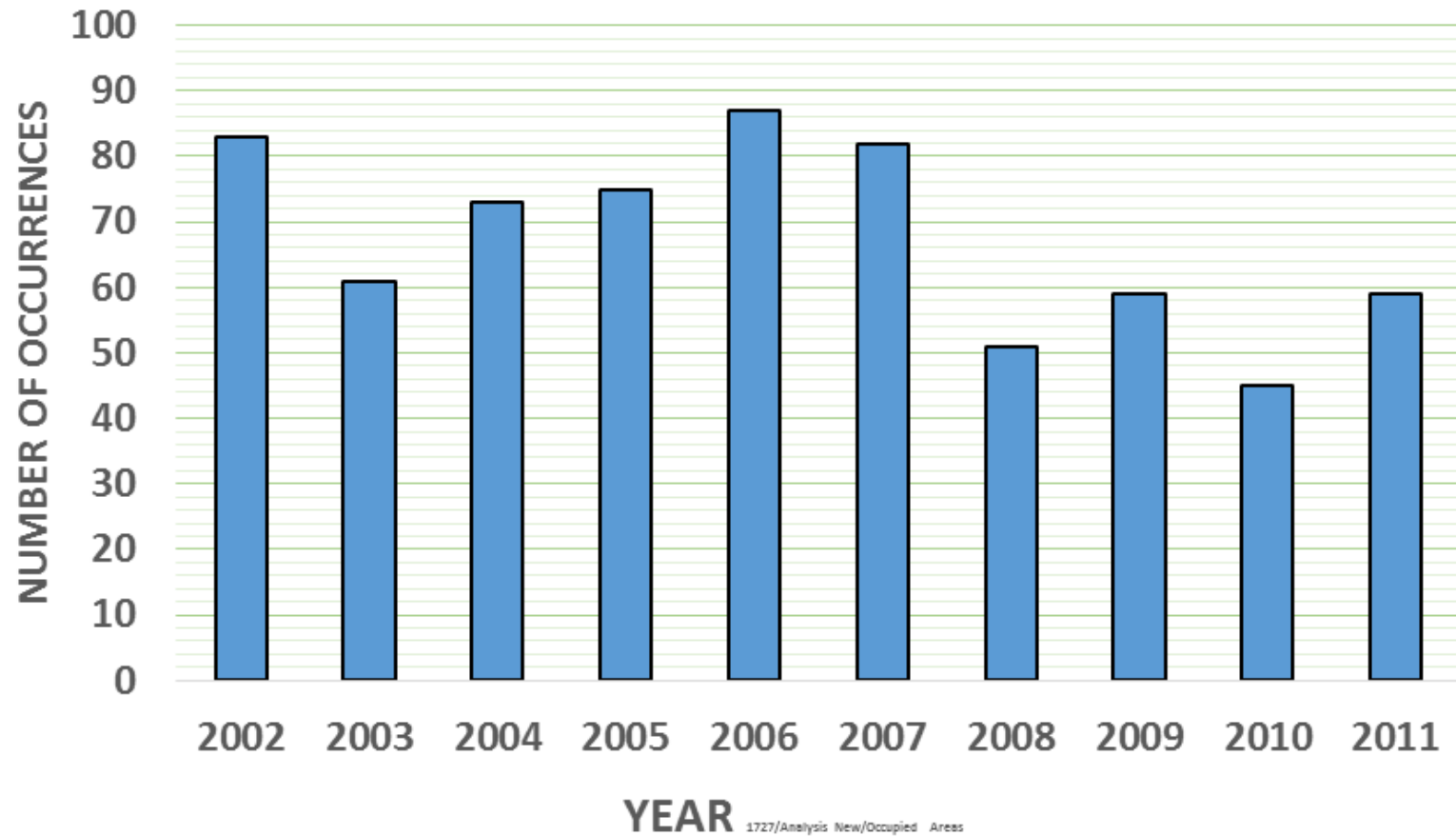
– Occupied Areas - Annual Number of All FSF Events in – Passenger Airplanes

SIGNIFICANT EVENTS



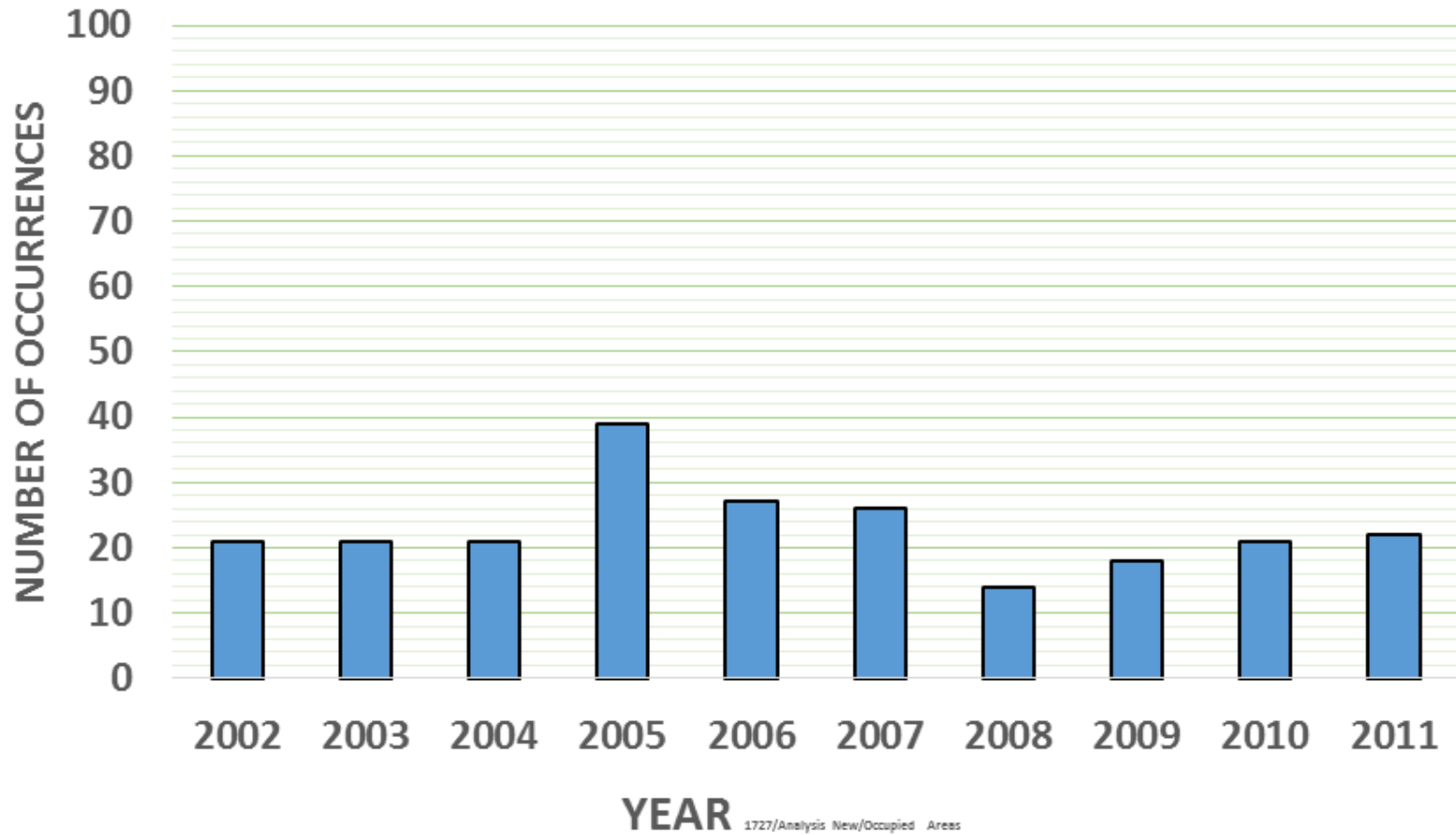
Occupied Areas - Annual Number of Significant FSF Events in – Passenger Airplanes

NUMBER OF OCCURRENCES - ALL EVENTS



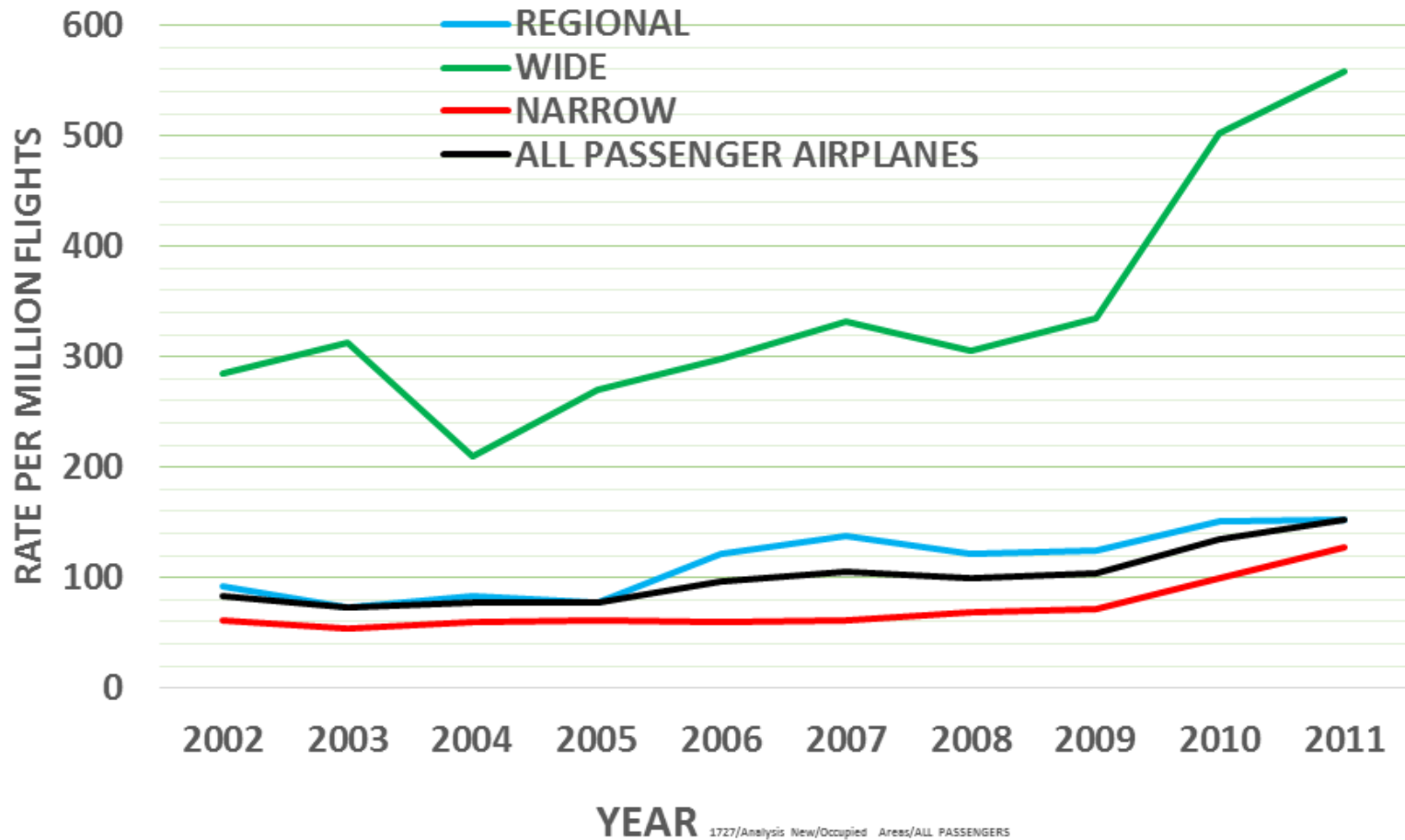
Occupied Areas - Annual Number of All FSF
Events in – Freighter Airplanes

NUMBER OF OCCURRENCES - SIGNIFICANT EVENTS



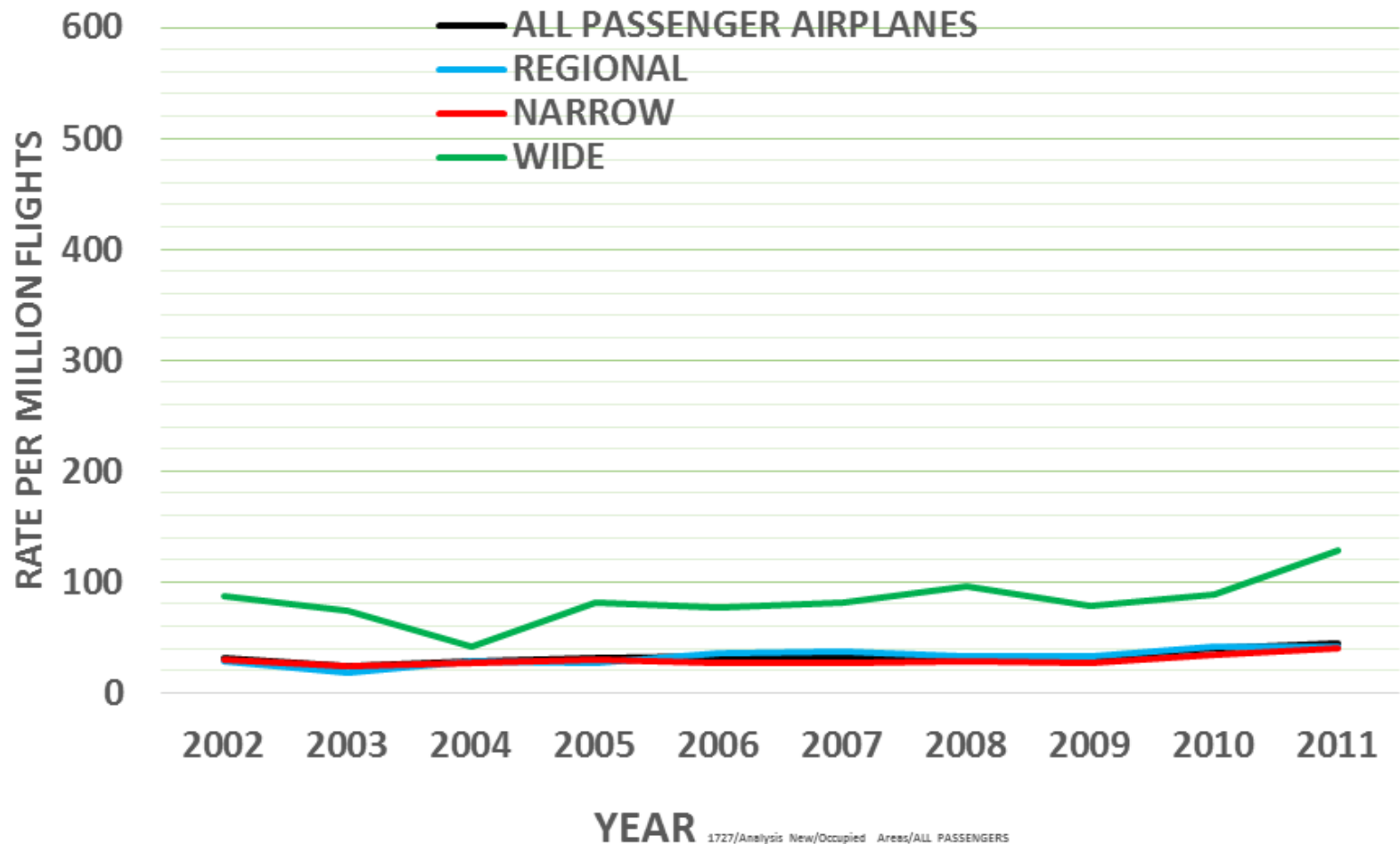
Occupied Areas - Annual Number of Significant FSF Events in – Freighter Airplanes

RATE OF OCCURRENCE - ALL EVENTS

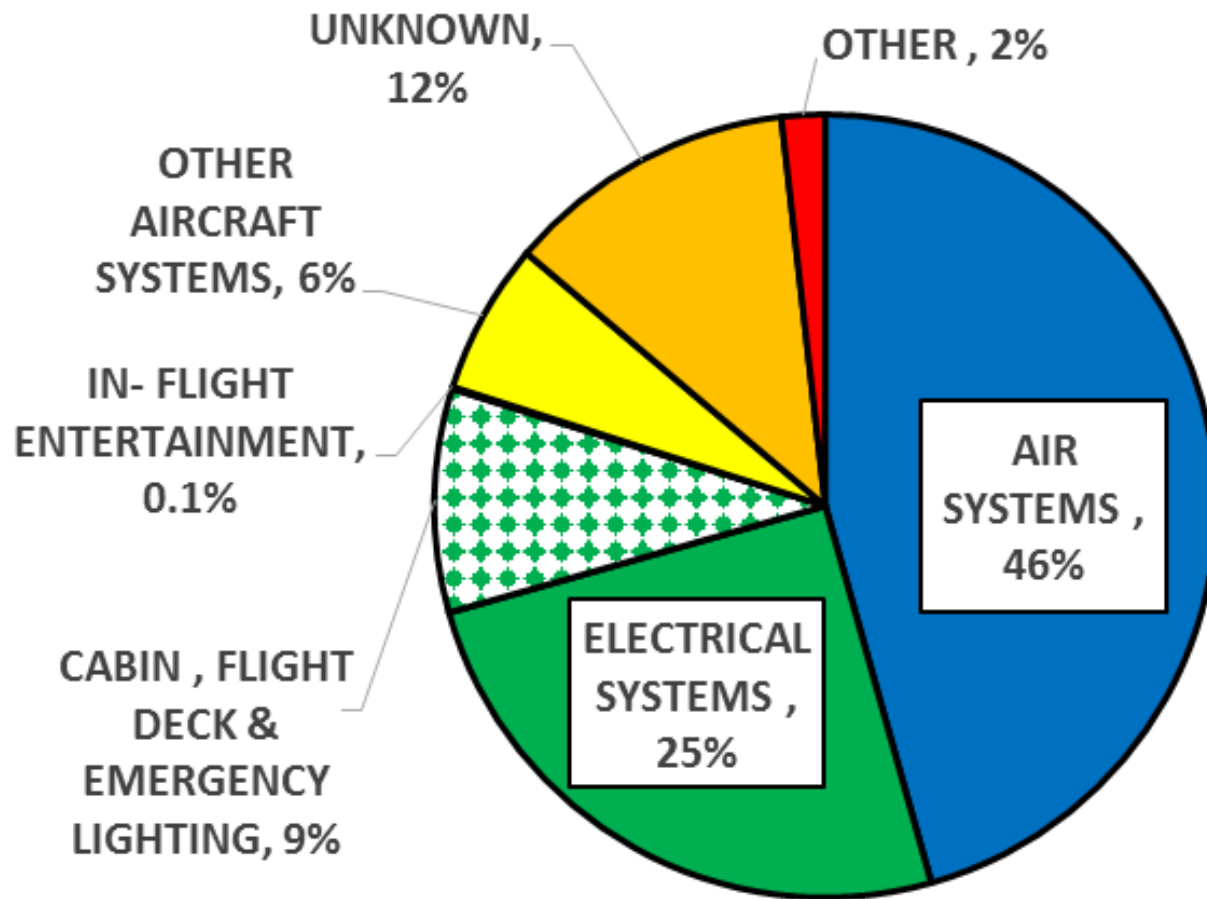


– Occupied Areas - Rate of Occurrence of All FSF Events – Passenger Airplanes

RATE OF OCCURRENCE - SIGNIFICANT EVENTS

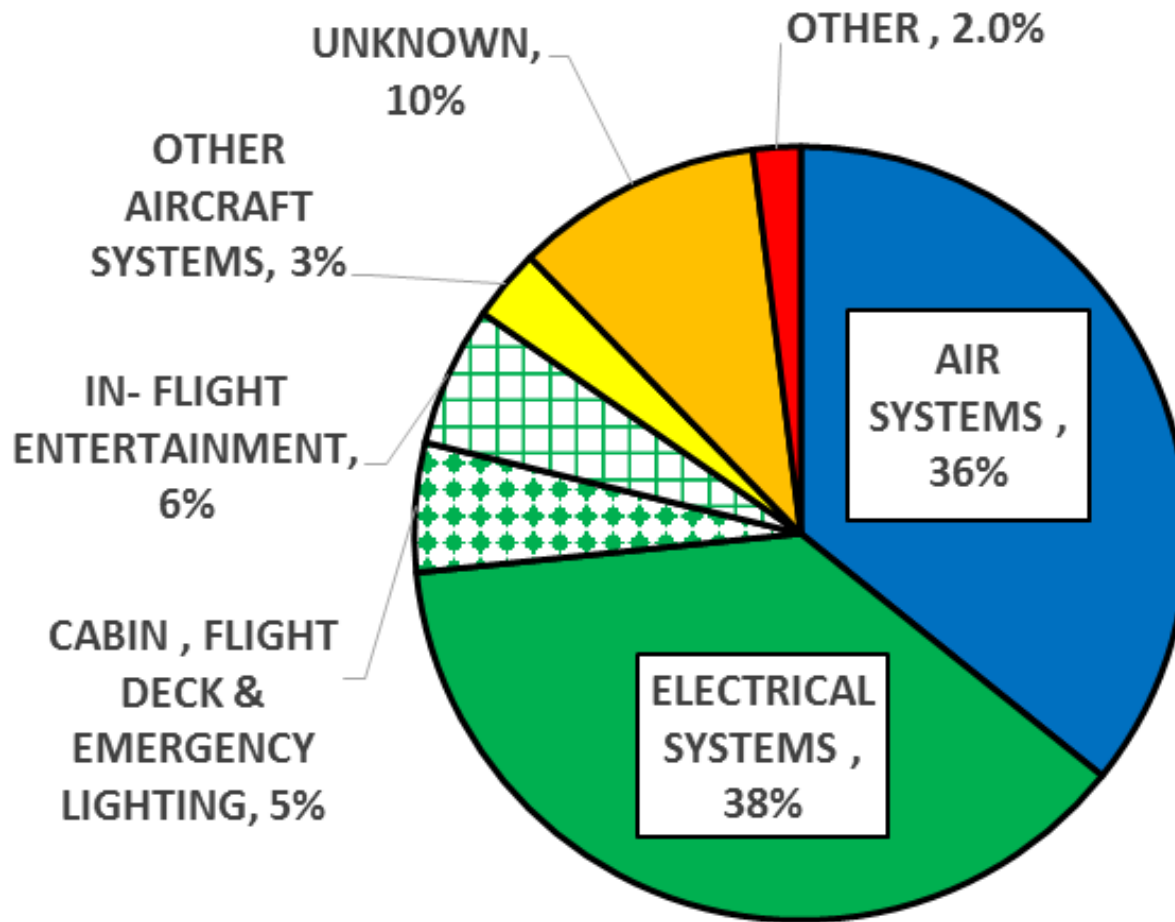


– Occupied Areas - Rate of Occurrence of Significant FSF Events – Passenger Airplanes



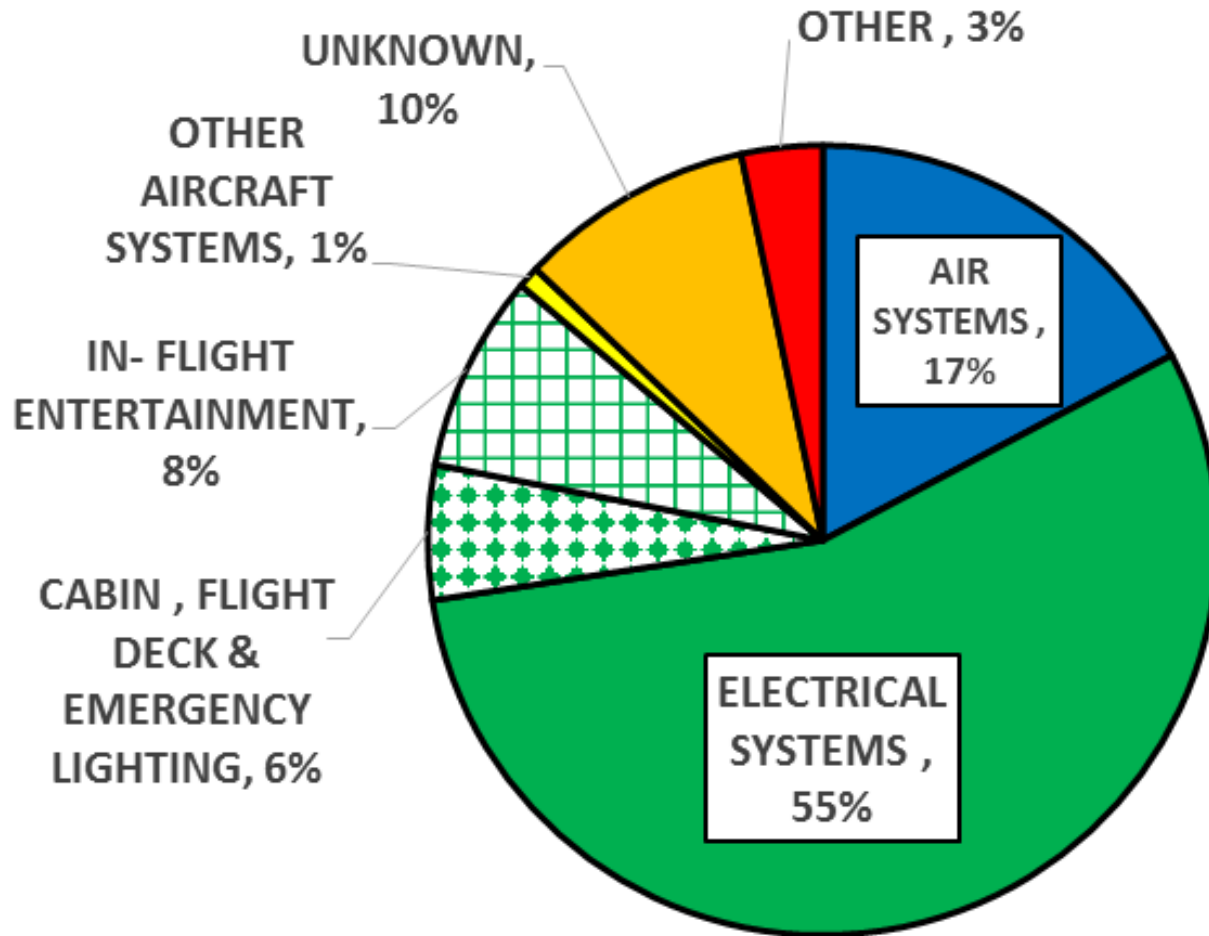
ALL EVENTS 1727/Analysis New/1727/Analysis New/Occupied Areas

– Occupied Areas - Sources of FSF in Regional Passenger Airplanes



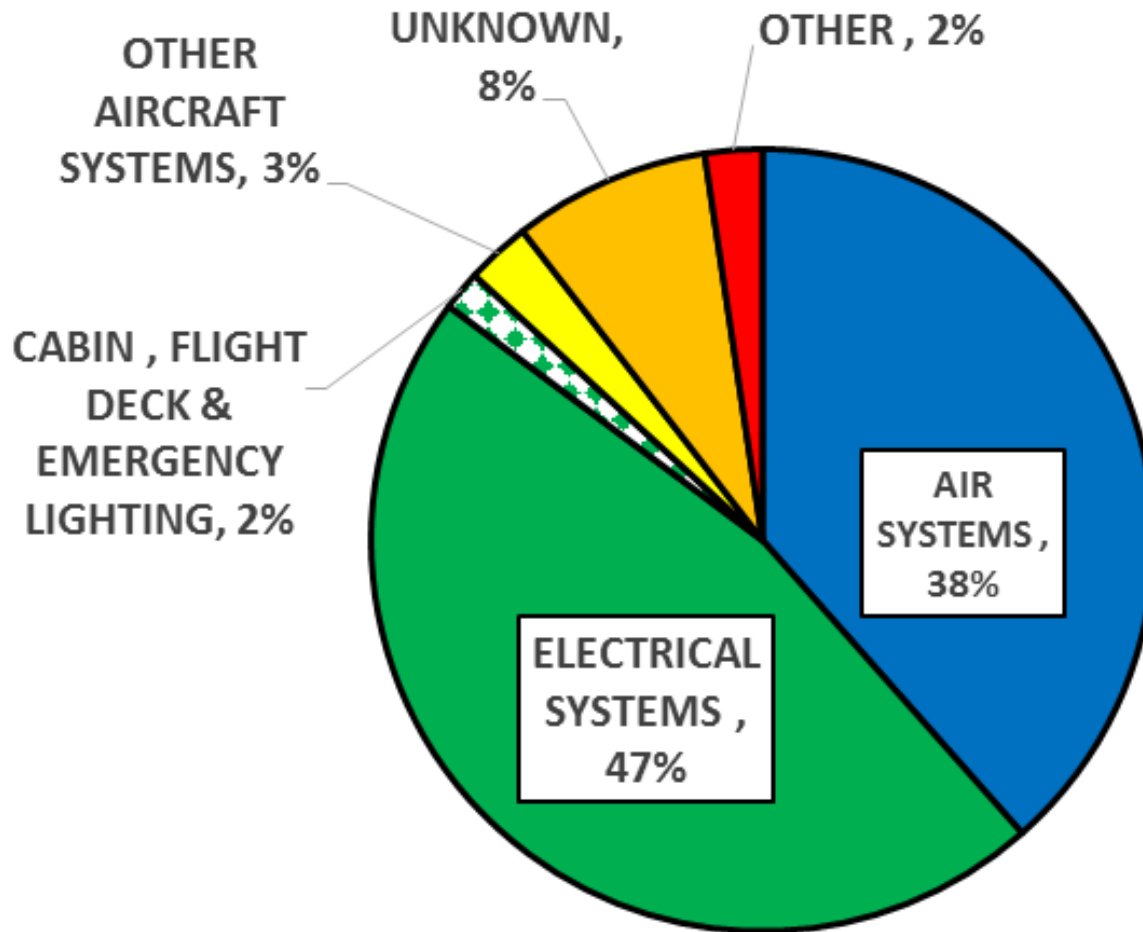
ALL EVENTS 1727/Analysis New/1727/Analysis New/Occupied Areas

– Occupied Areas - Sources of FSF in Narrow Body Passenger Airplanes



ALL EVENTS 1727/Analysis New/1727/Analysis New/Occupied Areas

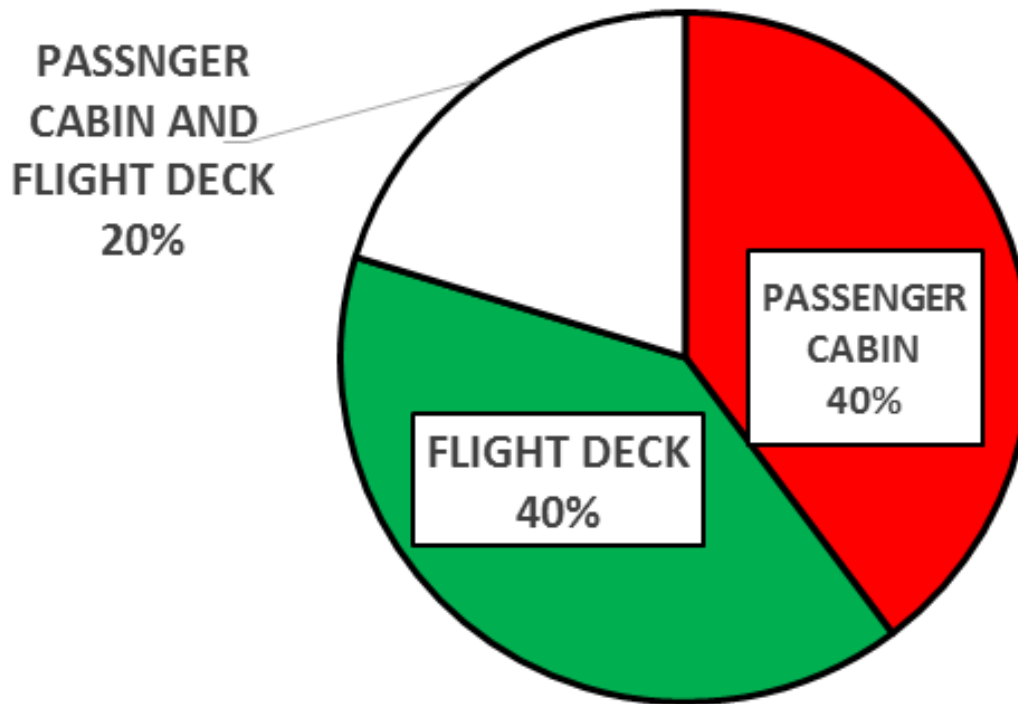
Occupied Areas - Sources of FSF in Wide Body Passenger Airplanes



ALL EVENTS 1727/Analysis New/Occupied Areas

Occupied Areas - Sources of FSF in Freighter Airplanes

FSF Events – by Location

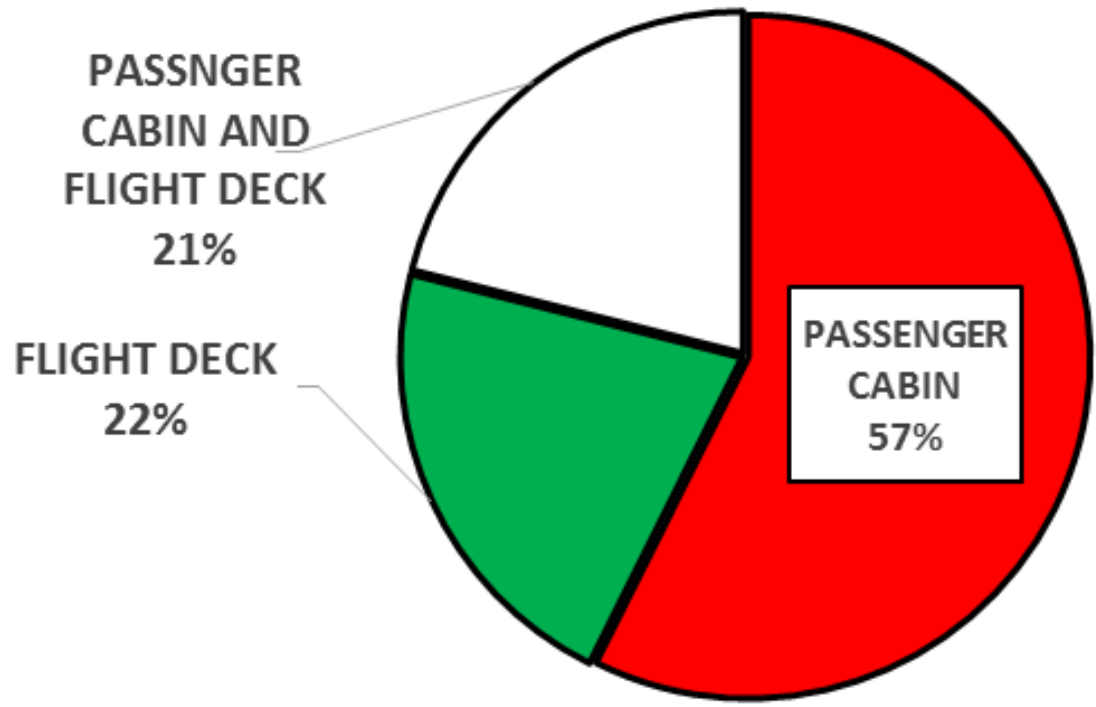


ALL EVENTS

1727/Analysis New/occupied Areas

Occupied Areas - Location of FSF in Regional Passenger Airplanes

FSF Events – by Location

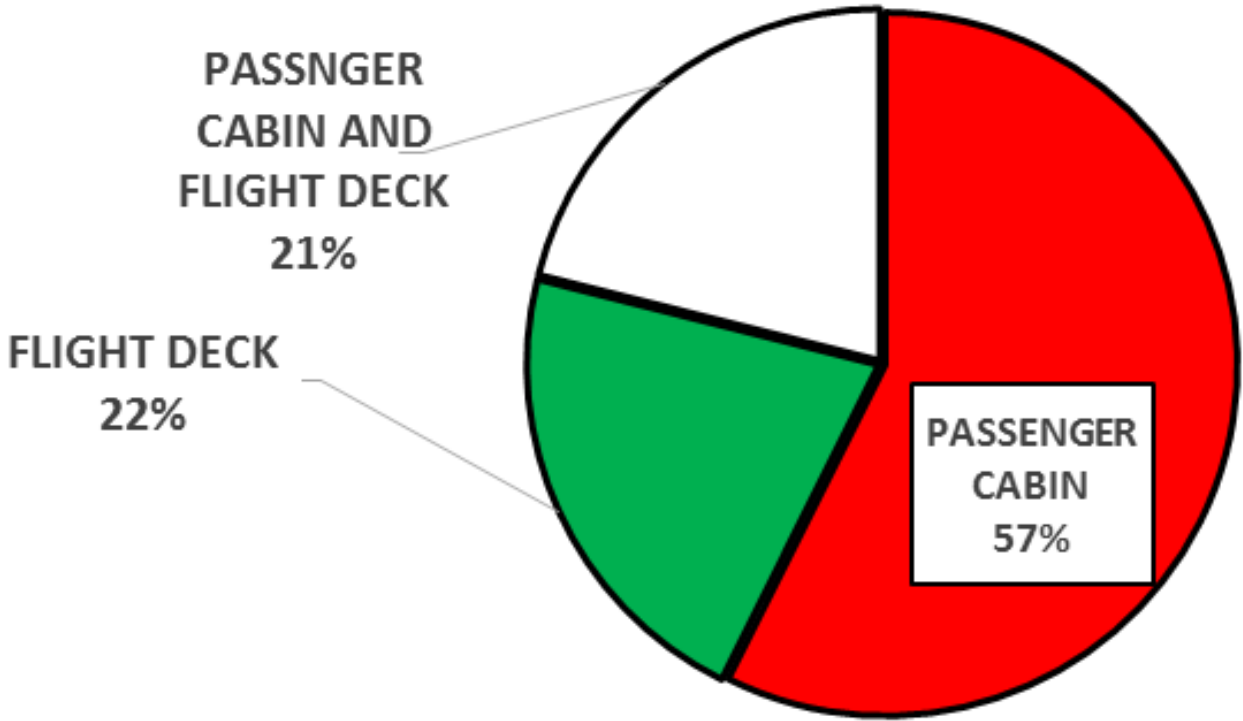


ALL EVENTS

1727/Analysis New/occupied Areas

Occupied Areas - Location of FSF in Narrow Body Passenger Airplanes

FSF Events – by Location

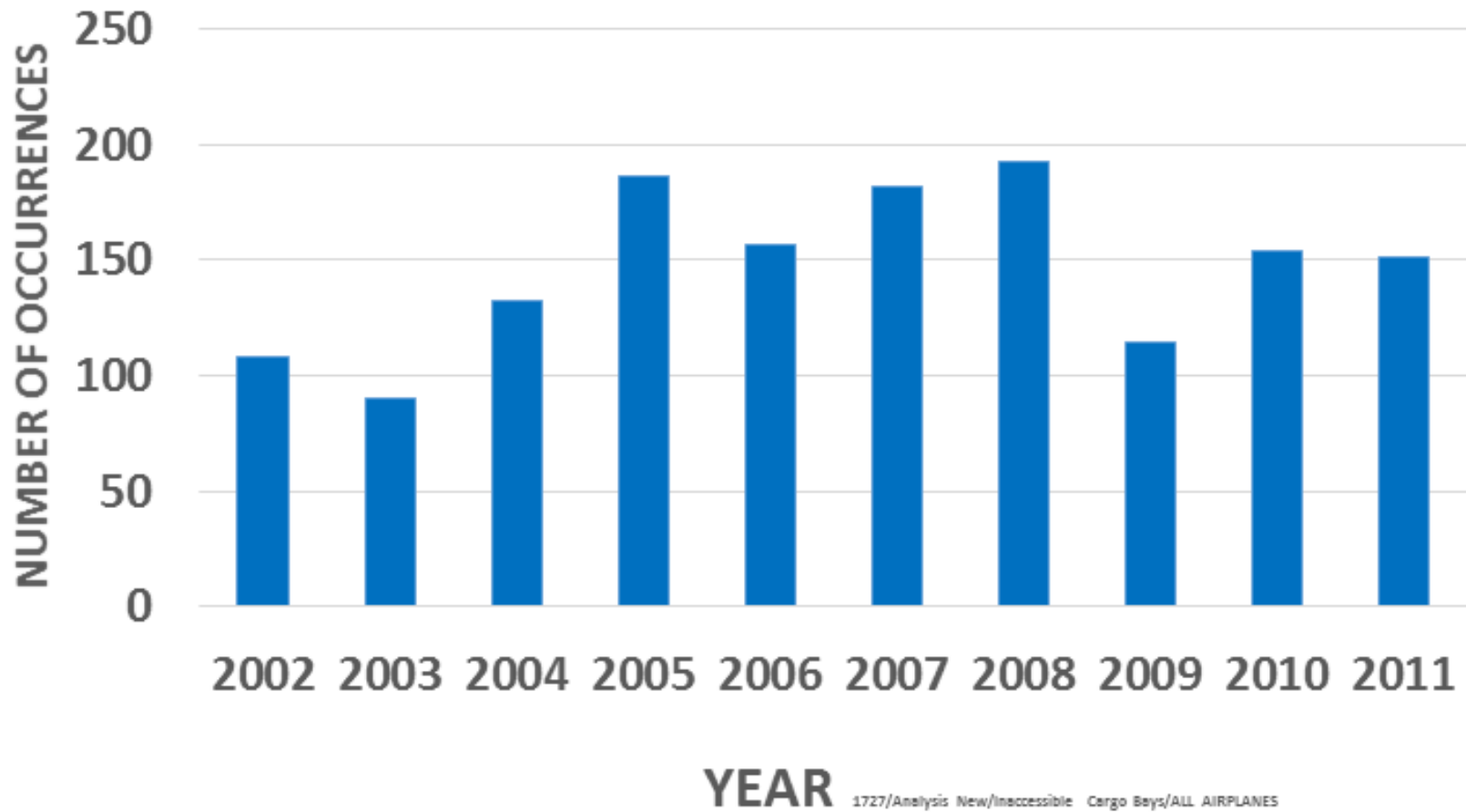


ALL EVENTS

1727/Analysis New/Occupied Areas

Occupied Areas - Location of FSF in Wide Body Passenger Airplanes

TOTAL NUMBER - ALL EVENTS

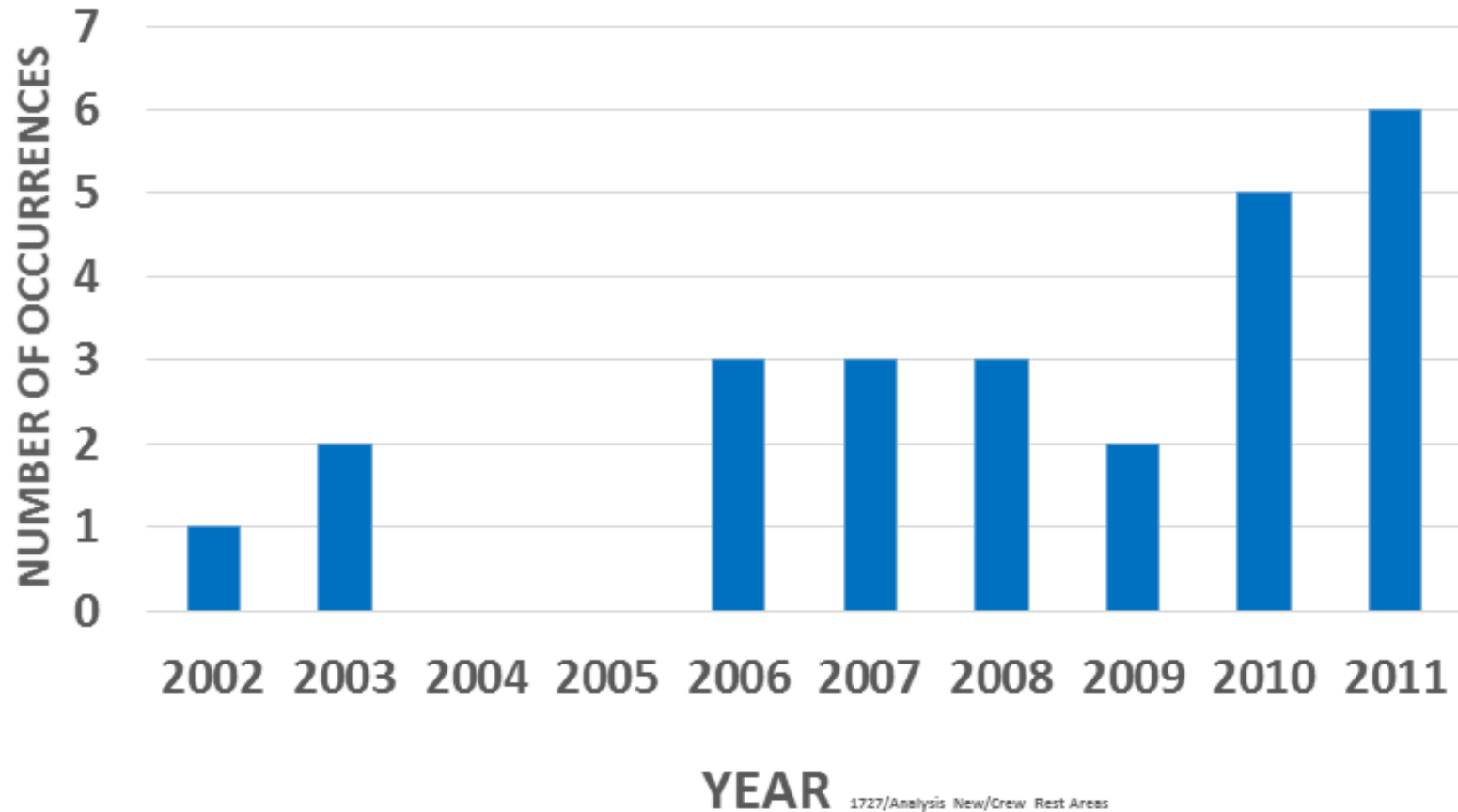


– Lavatory - Airplane Detector Events per Year for Passenger Airplanes

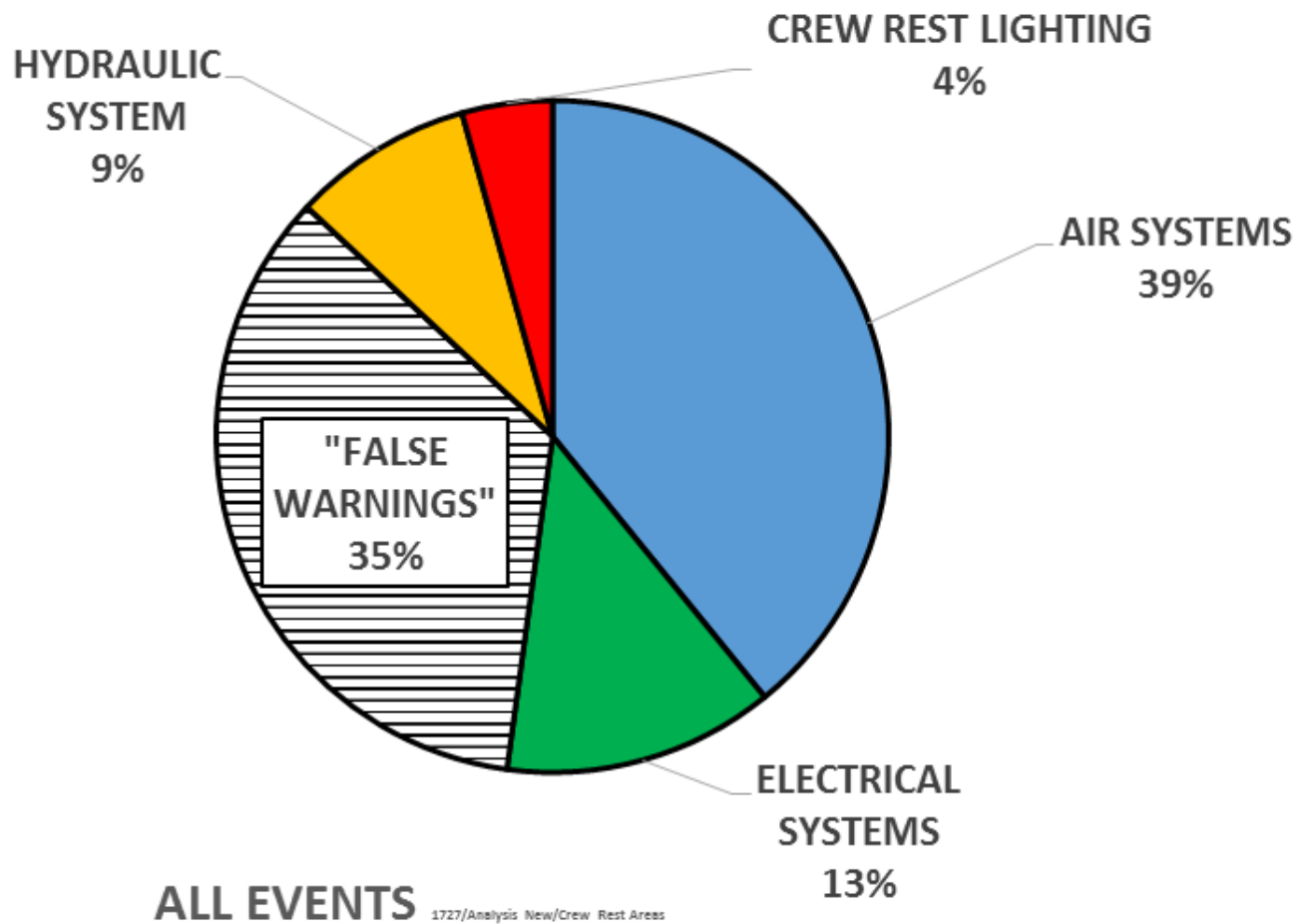
Lavatory - Proportion of “False Warnings” resulting in Unscheduled Landings or Rejected Take-offs

	All “False Warning” Detector Events	Number of Unscheduled Landings	Unscheduled Landing Proportion	Number of Rejected Take-offs	Rejected Take-off Proportion
Regional Passenger	431	112	26%	19	4%
Narrow Passenger	59	8	14%	0	0%
Wide Passenger	40	1	3%	0	0%
All Passengers	530	121	23%	19	3.6%
All Freighters	4	0	0%	0	0%

TOTAL NUMBER - ALL EVENTS



– Crew Rest Areas - Wide Body Airplane Detector Events per Year



Crew Rest Areas - Identified Causes of All Detector Events

Ongoing work:

Cost impact

Additional years of data added to Data Base

Report to be published and Data Base released in Fall