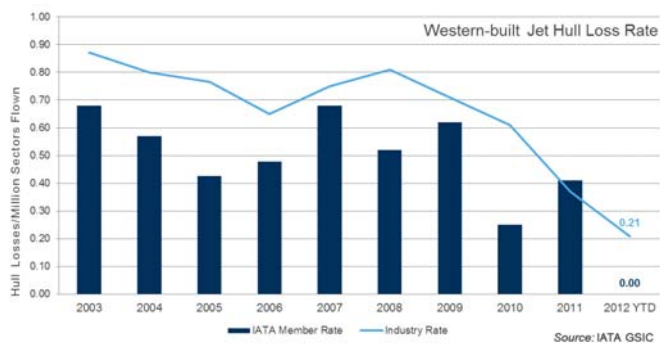


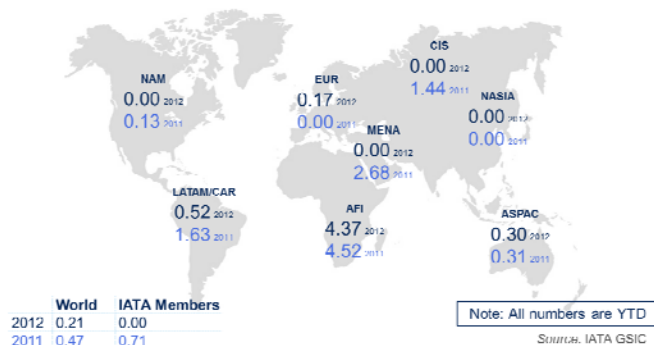
## 13<sup>th</sup> Incident Review Meeting (IRM) Bulletin

### Accident Rate Update: Year-to-date 2012 (as at 31 Oct: 2012 vs. 2011)

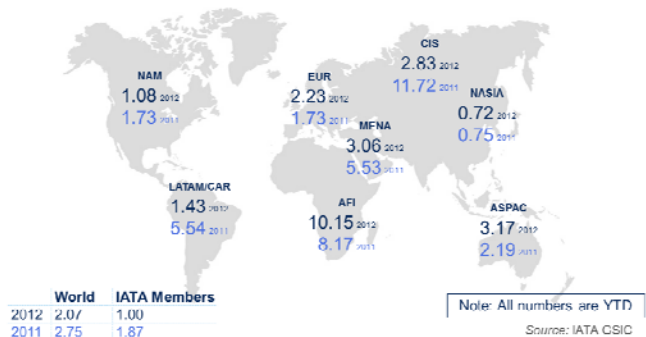
#### Western-built Jet Hull Loss (2003-YTD 2012)



#### Western-built Jet Aircraft Hull Loss Rate per Operator Region (YTD 2012 as at 31 Oct)



#### Total Accident Rate per Operator Region (YTD 2012 as at 31 Oct)



### All Accidents Year-to-date 2012 (as at 31 Oct: 2012 vs. 2011)

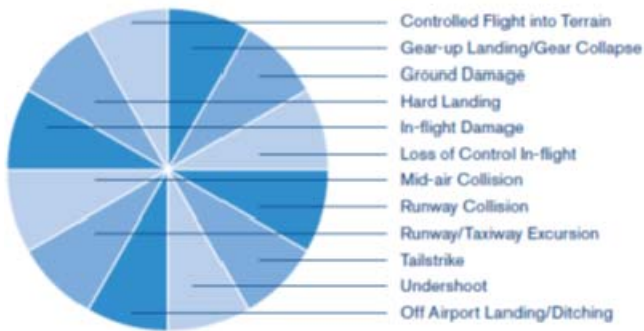
	31 Oct 2012	31 Oct 2011
Total Accidents	64	82
Accidents with IATA Members	16	29
Western-built Jet Hull Losses	5	11
Total Fatal Accidents	10	22
Fatalities	395	490

### Overview of all Accidents: Year-to-date 2012 (as at 31 October: 2012 vs. 2011)

- Number of accidents is lower for YTD, in comparison to 2011
- 25% of all accidents so far involved members
  - versus 35% at this time last year
- 8% of all accidents involved Western-built Jet Hull Losses
  - versus 27% at this time last year
- 16% of all accidents were fatal
  - versus 27% at this time last year
- The number of fatalities is lower than last year's at this time

## Main Issues from Incident Review Meeting

During each IRM meeting, member airlines discuss incidents, accidents or any occurrence with the potential risk of causing an accident. IATA and the member airlines classify accidents as per the following categories, presented below.



The following section presents the issues discussed at this IRM, in some of these accident categories, and the considerations noted during the meeting. The occurrences presented either resulted in these types of accidents (e.g. CFIT) or had the potential risk of resulting in them. Presentations included events associated with all types of aircraft (turboprop, regional jets, narrow body and wide-body jets) and in all regions of the world. Each section of the Accident Categories was presented with high level analysis of accident category precursors found in STEADES program.

The standard IATA anti-competitive rules were reviewed at the start of the meeting, along with the “Chatham House rules” regarding de-identification of the information from the meeting.

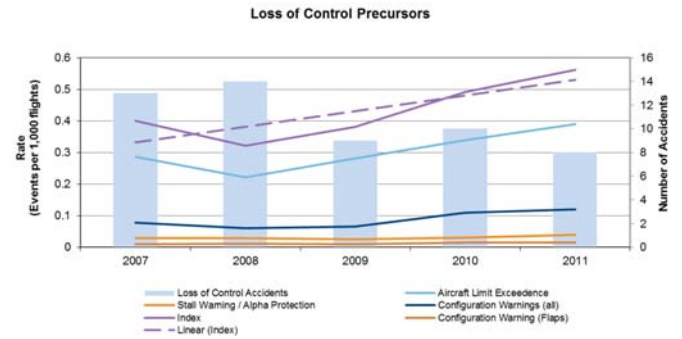
A new category of “Emerging Issues” was introduced at IRM 13. The topics presented included:

- Lithium Batteries:
  - See In-Flight Damage
- Wake turbulence encounters in RVSM airspace:
  - See Loss of Control In-flight
- Potential for runway collision:
  - Airlines should consider the concept of positive runway identification before any takeoff and landings
- Automation Addiction:
  - See separate presentation attached

**NEXT INCIDENT REVIEW MEETING:  
Atlanta, Georgia, USA 12-13 March 2013**

## Loss of Control In-flight

### STEADES Precursors



### Threats identified at IRM:

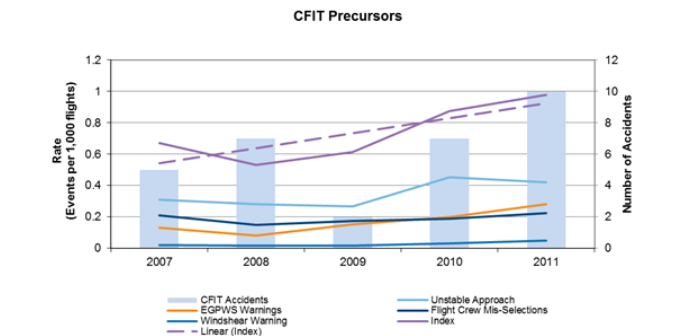
- Wake turbulence encounters during cruise RVSM airspace
  - Report to ATC directly and by copy of ASR
- Birdstrikes
  - Support IATA Birdstrike Database development
  - Report to ATC units directly after birdstrike, immediately by R/T and further copy of Air Safety Report

### IRM Considerations:

- SLOP Implementation – encourage expediency
- IATA to create an event in FDX to look for high altitude LOC-I events

## Controlled Flight into Terrain

### STEADES Precursors



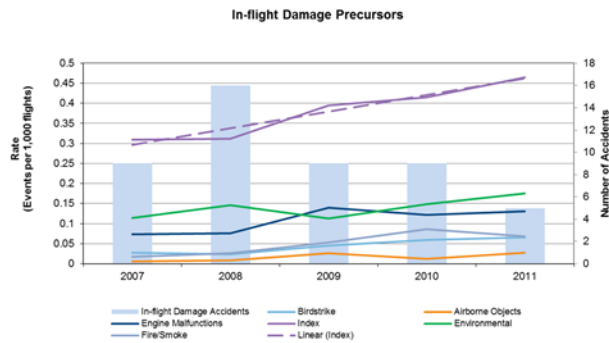
### Threats identified at IRM:

- See CFIT presentation attached



## In-flight Damage

### STEADES Precursors



### Threats identified at IRM:

- Lithium battery shipments
- Check-in questions & education of passengers
- Airmail scanning effectiveness - regional check necessary
- Cabin fire capability – “Firebane” & “Firesock”™
- Mercury awareness
- Consider additional quality assurance checks
- Don't just trust declaration of cargo carried

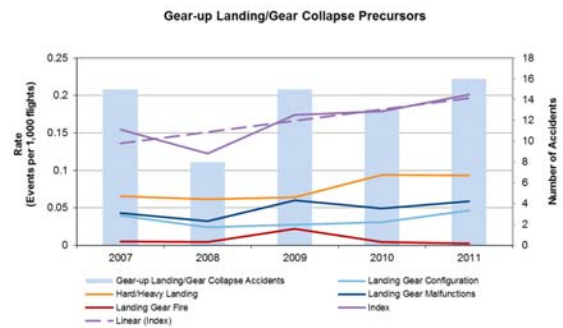
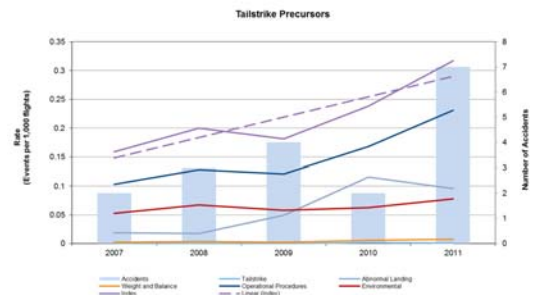
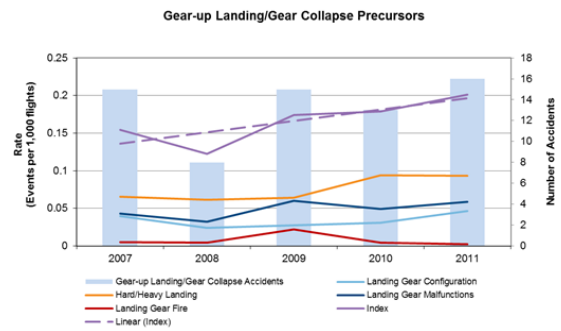
### IRM Considerations:

- Communicate the status / update of the current activities and new regulations to all IRM and IATA members. Lithium battery issues have been a Safety Group/OPC Priority since Fall 2011. The following actions were taken to address the concerns:
  - Cargo Safety Manager hired Jan 2012
  - Cargo Safety Program (SO&I) launched Jan 2012
  - ICAO issued new Li battery DG limits March 2012 supported by IATA (effective 01 Jan 2013)
  - Ops Conference Lithium Battery Panel April 2013
  - IATA-ICAO in discussions regarding potential LI Battery Incident Global Database
  - ICAO proposing global conference to address these issues
  - Shipper certification a key requirement
  - Shipper/Freight Forwarder education a key requirement
  - Blocking rogue shippers / freight forwarders a key requirement



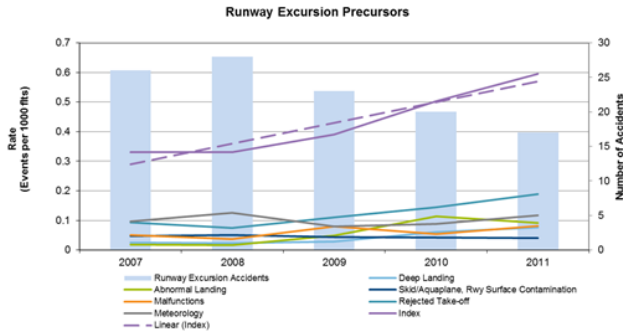
## Tailstrike/Hard Landing/Gear Up Landing

### STEADES Precursors



## Runway Excursion

### STEADES Precursors



### Threats identified at IRM:

- Management flying: minimum currency and crewing complement
- Training for crosswind landing / crab landing – review in-house training
- V1 call coordination (“go” or alternatives) – airline consideration

### IRM Considerations: Nil.



## Ground Damage

### Threats identified at IRM:

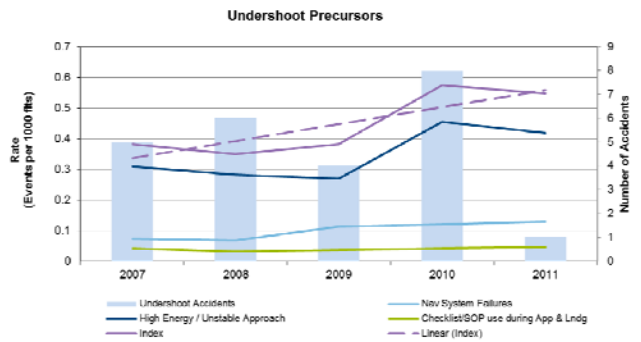
- Maneuvering areas:
  - Airport Authorities should be obliged to publish when and where maneuvering areas with less than ICAO Annex 14 obstacle clearance requirements exist
  - Airport ground markings should be introduced to assist flight-crews in assessing sufficient wingtip clearance (at maneuvering areas not ICAO Annex 14 compliant)
  - Pilot documentation should specify which airport maneuvering areas provide less than ICAO Annex 14 wingtip clearance and which ground markings assist in assessing sufficient wingtip clearance
- Wingtip clearance - technical solution needed
- De-icing equipment: why is it colored white? Encourage change to highly visible colour.
- 3<sup>rd</sup> party supplier management – Manage them!

### IRM Considerations:

- IATA should consider raising the wingtip clearance issue with ICAO
- ISAGO / IGOM - support these initiatives
- Add de-icing bay incidents to GDDB

## Undershoot

### STEADES Precursors



### Threats identified at IRM:

- Flight data monitoring agreements
  - Effective capability for the operator to carry out investigation of incidents, regardless of how the event is identified

### IRM Considerations:

- Consider a “should” in IOSA to have an agreement between company and union in a structured way to enable investigation of significant safety events identified through flight data analysis (FDA, FOQA, FDM)

## General

### Threats identified at IRM:

- Encourage cooperation / education of operator problems with ATC service providers etc...
- General Airmanship
  - Encourage back to basics (handling) new generation of pilots – additional / better use of simulator time
- Recognise the degradation of skills pool – pilots, engineers, ground staff
  - Encourage programs to address these issues / training

### IRM Considerations:

- ATC representation at IRM?
- Common hazard identification platform
  - Should be free to pool members
  - IRM format modification to take this into account (work in progress)