



MID Safety Summit

Bahrain

28-30 April



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CIVIL AVIATION



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Welcome and Opening



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Enjoy the coffee break



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Regional Safety Perspective – Lessons Learned & Current Initiatives



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GFSC & RASG-MID

Eng. William Mermelstein

Secretary – Gulf Flight Safety Committee





Gulf Flight Safety Committee

- GFSC Membership (80+)
 - Major Airlines
 - Regional Airlines
 - Corporate/Private Aircraft Operators
 - Private Sector Members
 - Military & Government
 - Civil Aviation Authorities



GFSC – How & Why

- **BACKGROUND AND TITLE**

- The Gulf Flight Safety Committee (GFSC) was formed early in 2000 by a group of Gulf based Safety Professionals from various aviation companies located within the GCC region.

- **OBJECTIVES**

- pursue the highest standards of aviation safety;
- establish a web-site to facilitate the free exchange of aviation safety data;
- maintain an appropriate liaison with other bodies concerned with aviation safety;
- via the GFSC web-site, provide assistance to operators establishing and maintaining an Aviation Safety Organization.



Gulf Flight Safety Committee

- **CONFIDENTIALITY**

- Chatham House Rules: The effectiveness of the GFSC depends upon trust, with matters relating to aviation safety being openly and freely discussed. The confidentiality and de-identification of information exchanged must be observed by all Members and Advisors. For this reason the Confidential Warning is read out at each meeting. In addition, the Confidential Warning is included on the meeting register and Members signing the register are also in effect signing as accepting the rules of confidentiality. The full text of the Confidential Warning is as follows:
- **“Details of accidents, serious incidents and incidents which may be discussed at this meeting are to be regarded as confidential. You are entitled to make use of the information within your own Organisation but please use it with discretion and do not quote anyone by name or Organization without their prior authority”.**



Gulf Flight Safety Committee

- Incident Review
 - 35% of our meetings are dedicated to incident reviews from all of our members
 - Generally we have three (3) reviews per meeting from our members (Air Carriers, Private Sector & Government)
 - Topics are discussed for the benefit and “lessons learned” informational sharing



Gulf Flight Safety Committee

- Industry Presentations
 - Various topics of interests are presented from the major airframe manufacturers, insurance companies, including the GCAA and FAA
 - Recent briefings included presentations by the FAA represented by Aaron Wilkins III updating our members on the previous RASG-MID 2012 meeting



Gulf Flight Safety Committee

- Regional Reviews
 - Topics include operational issues with Air Traffic Control, Airspace challenges, Military routes, Unmanned Aerial traffic, Etc.
 - SMS programs by our members and how they are developing and growing
 - Events such as MEBAAs and Dubai Airshows & Events, Etc.



Gulf Flight Safety Committee

- GFSC & RASG Teambuilding in the region
 - The GFSC will implement a dedicated steering committee to liaison with RASG-MID:
 - Safety Initiatives
 - Promotion of RASG Events
 - Support the rollout of regional activities
 - Joint or Partnership opportunities as they may exist between our organizations
 - Mutually beneficial opportunities where all parties can benefit and support with common goals



MID Safety Summit

GFSC & RASG-MID

Joint Partnership Opportunities





THANK YOU

GFSC & RASG-MID

Joint Partnership Opportunities





Mashhor Al Blowfi

ICAO MID Office



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The Middle East Regional Aviation Safety Group (RASG-MID)



Outline

- ❑ Establishment of ICAO RASGs
- ❑ RASG-MID
- ❑ RASG-MID/1 meeting
- ❑ RASG-MID: Organizational Structure/Working Arrangements
- ❑ RASG-MID/2 meeting
- ❑ RASG-MID Meeting the Expectations



Establishment of ICAO RASGs



Why RASGs?

- Improving the safety of the Global Air Transport System is ICAO's guiding and most fundamental Strategic Objective.
- ICAO strives to achieve a balance between identified and assessed risk and the requirements of practical and achievable mitigation strategies.
- Addressing and harmonizing regional flight operations safety issues (PIRGs, COSCAPs, TLST, ACAC, IATA, CANSO, DGCA,...).
- A new follow-up body to monitor progress, coordinate actions among States to support the implementation of the GASP.
- Ensuring effective coordination and cooperation between all stakeholders.



Establishment of ICAO RASGs



- ❑ On 25 May 2010, the 190th Session of the ICAO Council approved the establishment of the following RASGs:
 - **RASG-PA** for the Caribbean, South American, and North American regions (including Central America);
 - **RASG-EUR** for the European region;
 - **RASG-APAC** for the Asia Pacific regions;
 - **RASG-AFI** for the African region and
 - **RASG-MID** for the Middle East region.

- ❑ To support a regional performance framework for the management of safety.



RASG-MID



- ❑ RASG-MID has been established following the ICAO Council directive and the Middle East Directors General of Civil Aviation meeting agreement (DGCA-MID/1, United Arab Emirates, 22-24 March 2011).

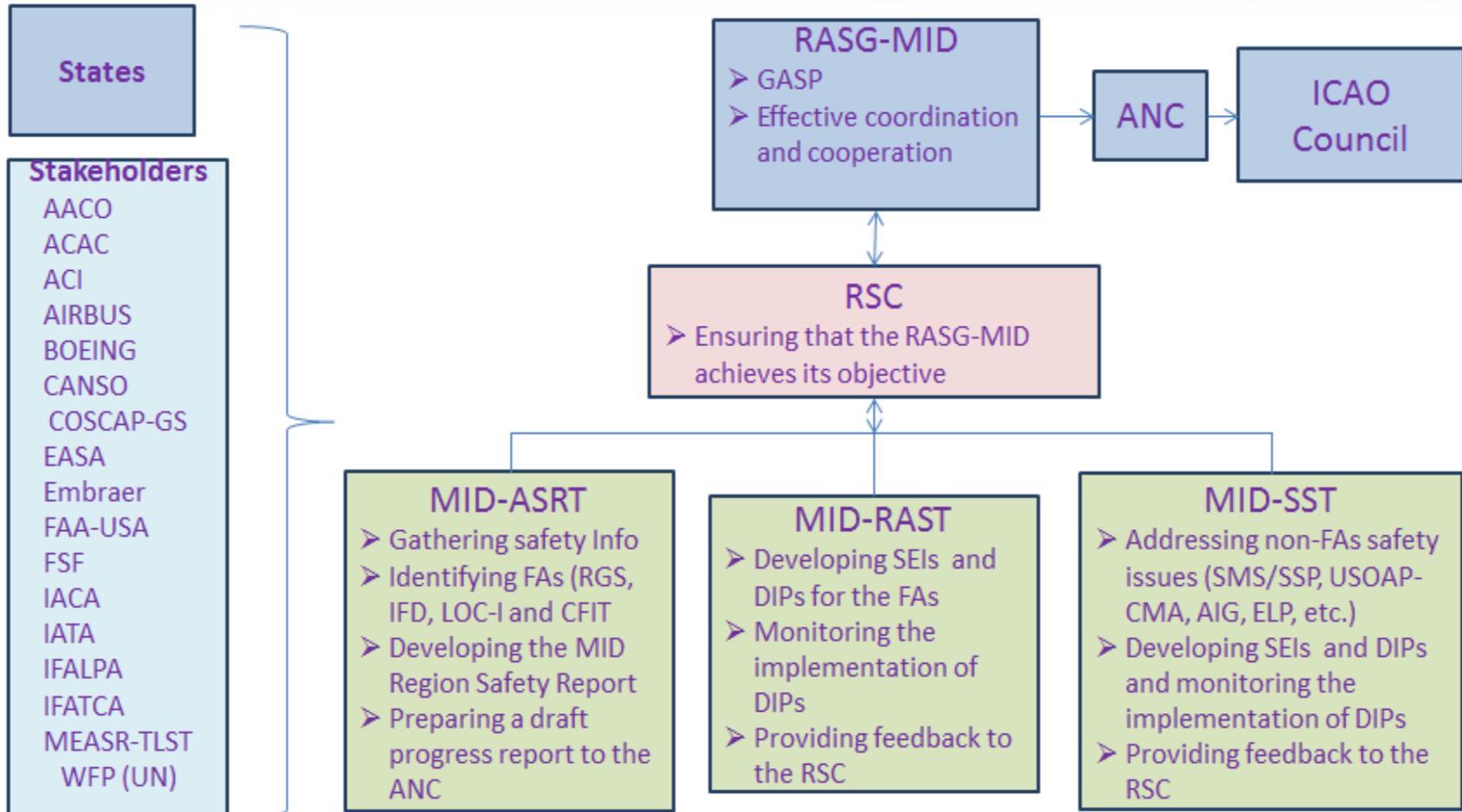
- ❑ To enhance safety in the Middle East Region by reducing:
 - Duplication of efforts, and
 - Human and financial resource expenditure



RASG-MID/1 meeting



- ❑ Hosted by the Ministry of Civil Aviation of Egypt in Cairo, Egypt, from 18 to 19 September 2011.
- ❑ A kick-off meeting in order to prepare the ground for the future activity of the Group.
- ❑ Reviewed and approved the Terms of Reference of the Group.
- ❑ Approved the RASG-MID Procedural Handbook, which includes the Working Arrangements, and Organizational Structure for the RASG-MID.





RASG-MID/2 meeting



- ❑ Hosted by the General Civil Aviation Authority (GCAA) in Abu Dhabi, UAE, from 12 to 14 November 2012.
- ❑ Endorsed the First MID Region Annual Safety Report.
- ❑ Endorsed the initial set of Draft SEIs and DIPs for further review and development.
- ❑ Established MID-RAST and MID-SST.



RASG-MID

Meeting the Expectations



- ❑ Availability and accessibility of safety information.
- ❑ Elimination of duplication of efforts.
- ❑ Human resources (Expertise).
- ❑ Financial support.
- ❑ Effective coordination and cooperation between all stakeholders.
- ❑ Continues development and prioritization of SEIs and implementation of DIPs.
- ❑ Implementation of RASG-MID Work Programmes.



The Middle East Regional Aviation Safety Group (RASG-MID)

Thank You





The Annual Safety Report

Key Safety Risk Areas for the MID Region

Ruby Sayyed
IATA - MENA



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The Annual Safety Report – Key Safety Risk Areas for the MID Region



Safety data and Annual Safety Report – 2012 Edition



Key challenges to collecting safety data



The way forward – proactive and predictive safety data

Annual Safety Report - Structure

- **Reactive Safety Information**
- **Proactive Safety Information**
- **Predictive Safety Information**



Annual Safety Report – Sources of Data

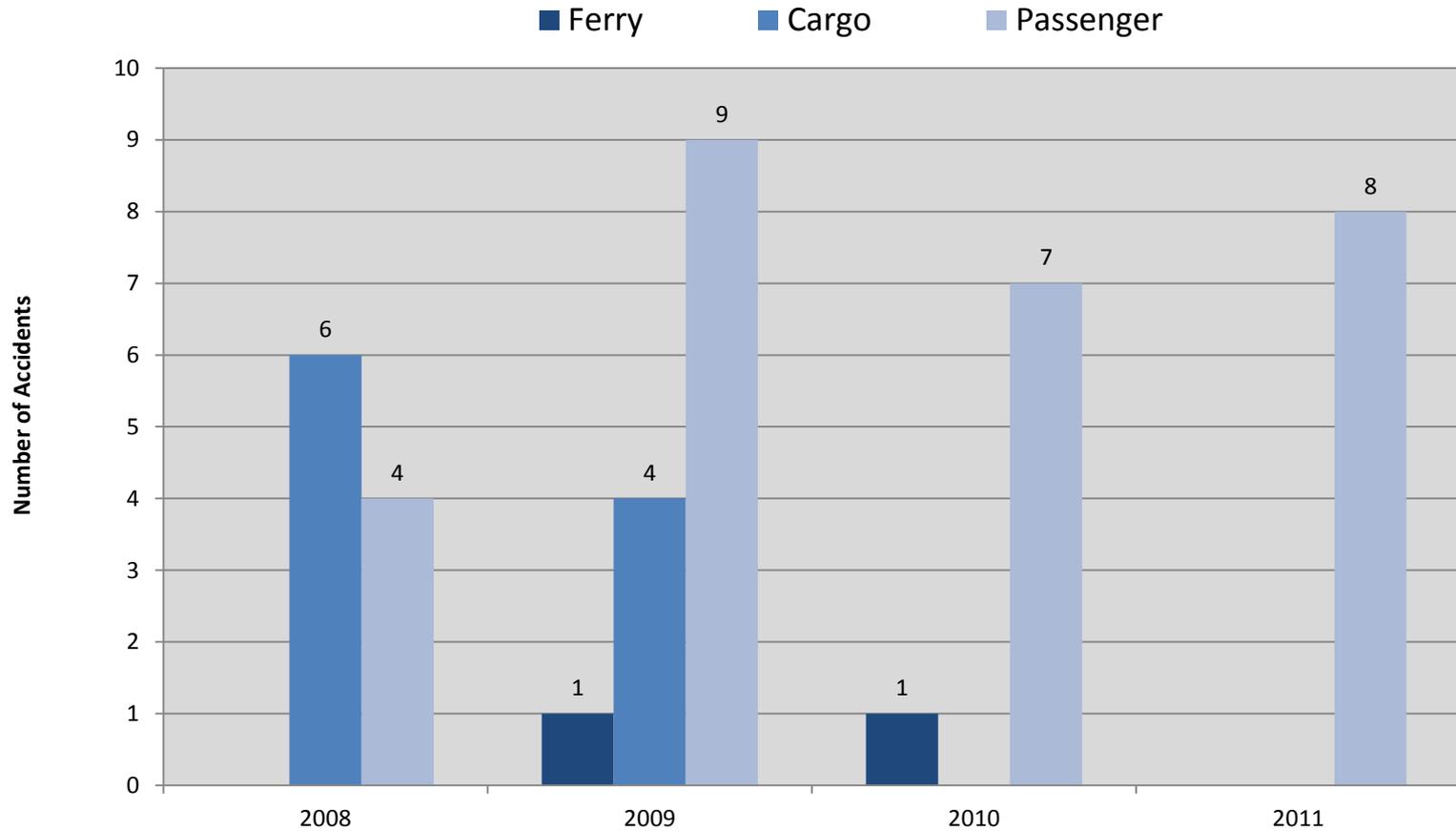
➤ IATA GSIC Databases

➤ Boeing Data

➤ ICAO Data



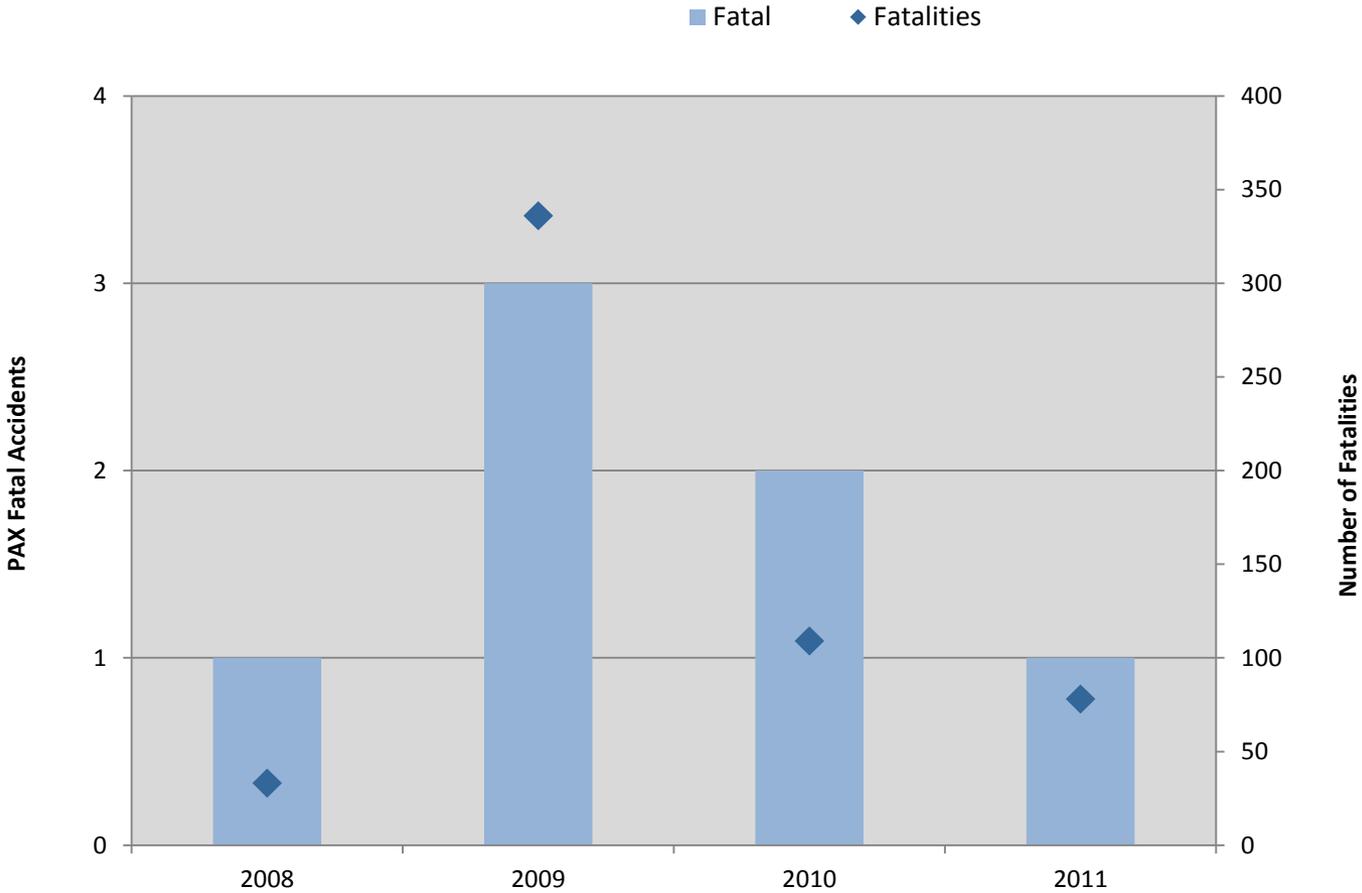
Accident Analysis: per Type of Service



Source: IATA GSIC

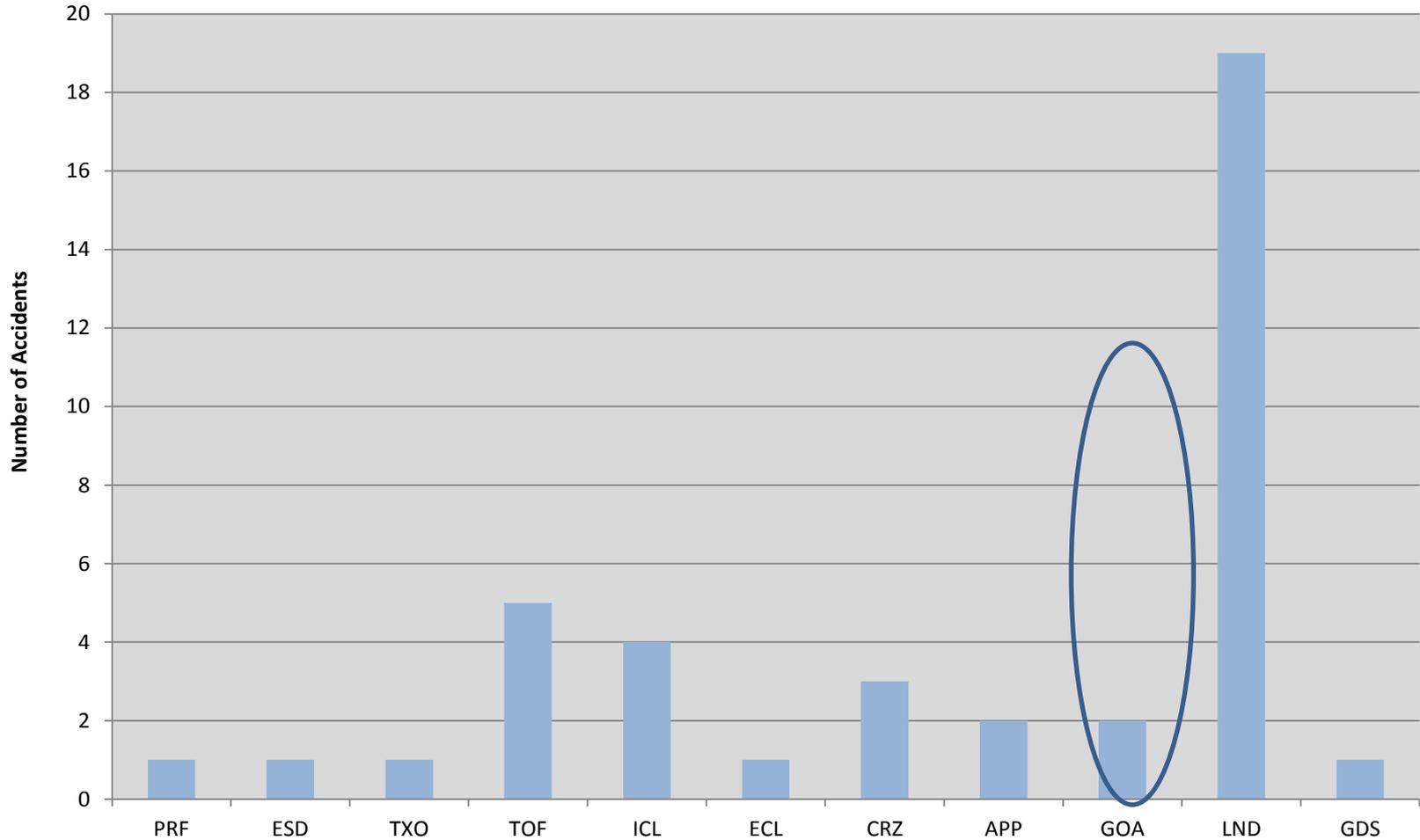
Accident Analysis: per Type of Service

Passenger Flights Fatal Accidents vs. Fatalities



Source: IATA GSIC

Accident Analysis: per Phase of Flight

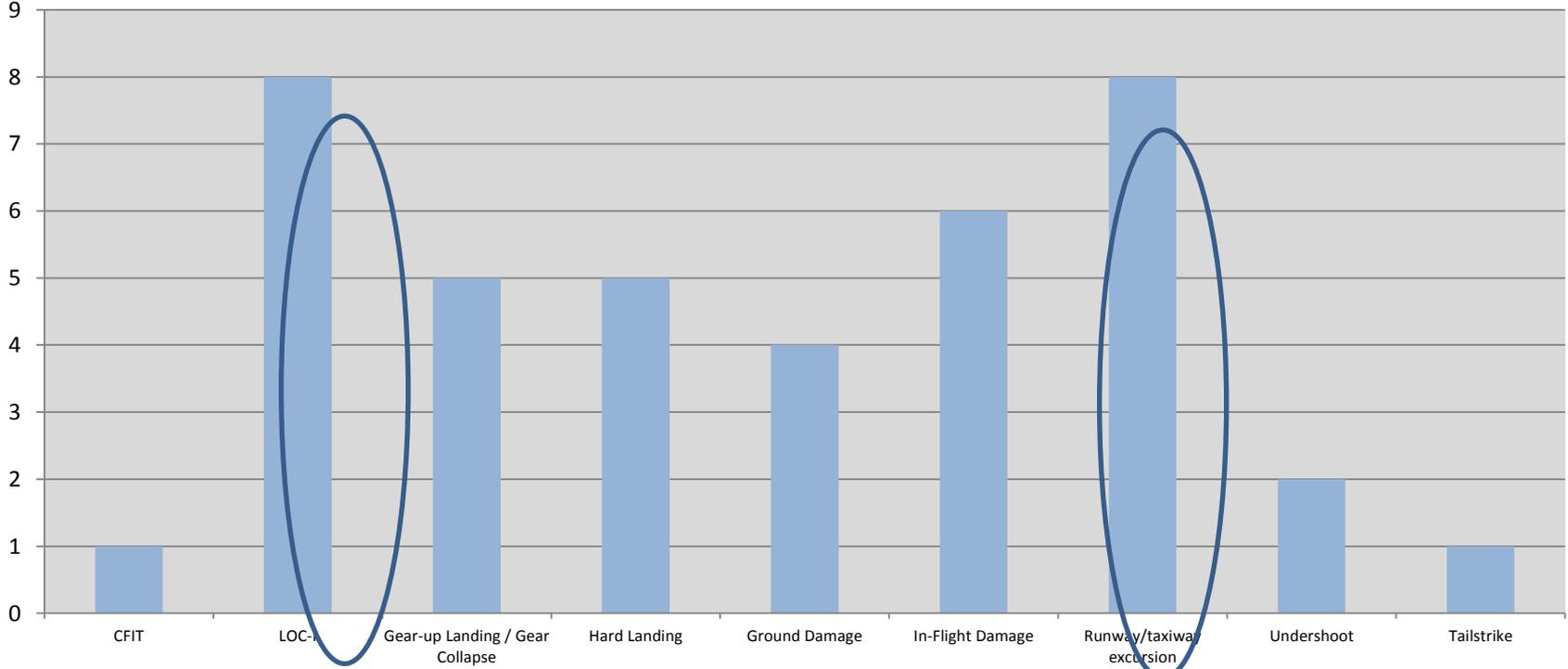


Source: IATA GSIC

Accidents: per Category

Accident categories breakdown

➤ Runway excursions and LOC-I are the biggest safety challenge for MENA

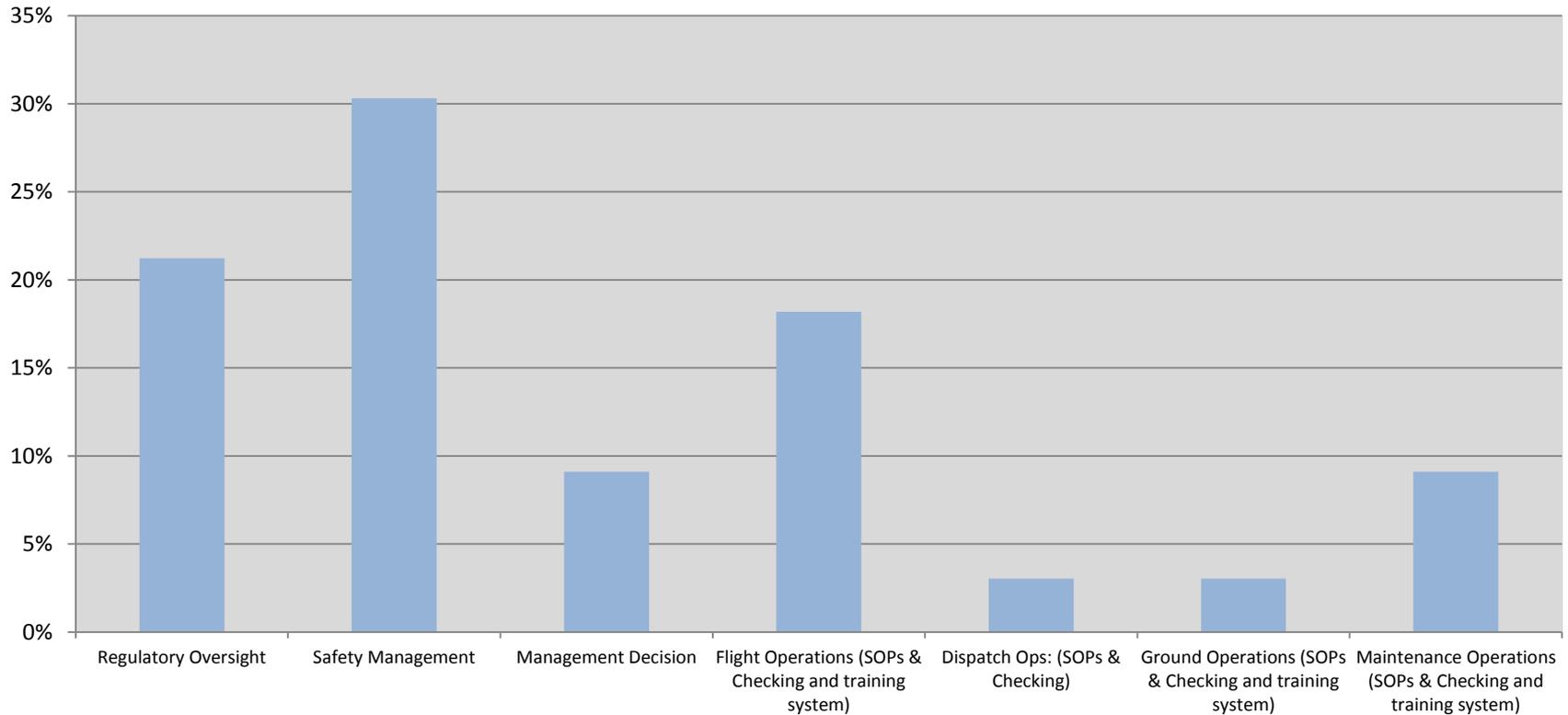


Source: IATA GSIC

Contributing Factors

Top Latent Conditions

- Deficient safety management on part of the operator was cited
- Weak Regularity oversight on part of the state was also cited as a factor in many of the accidents

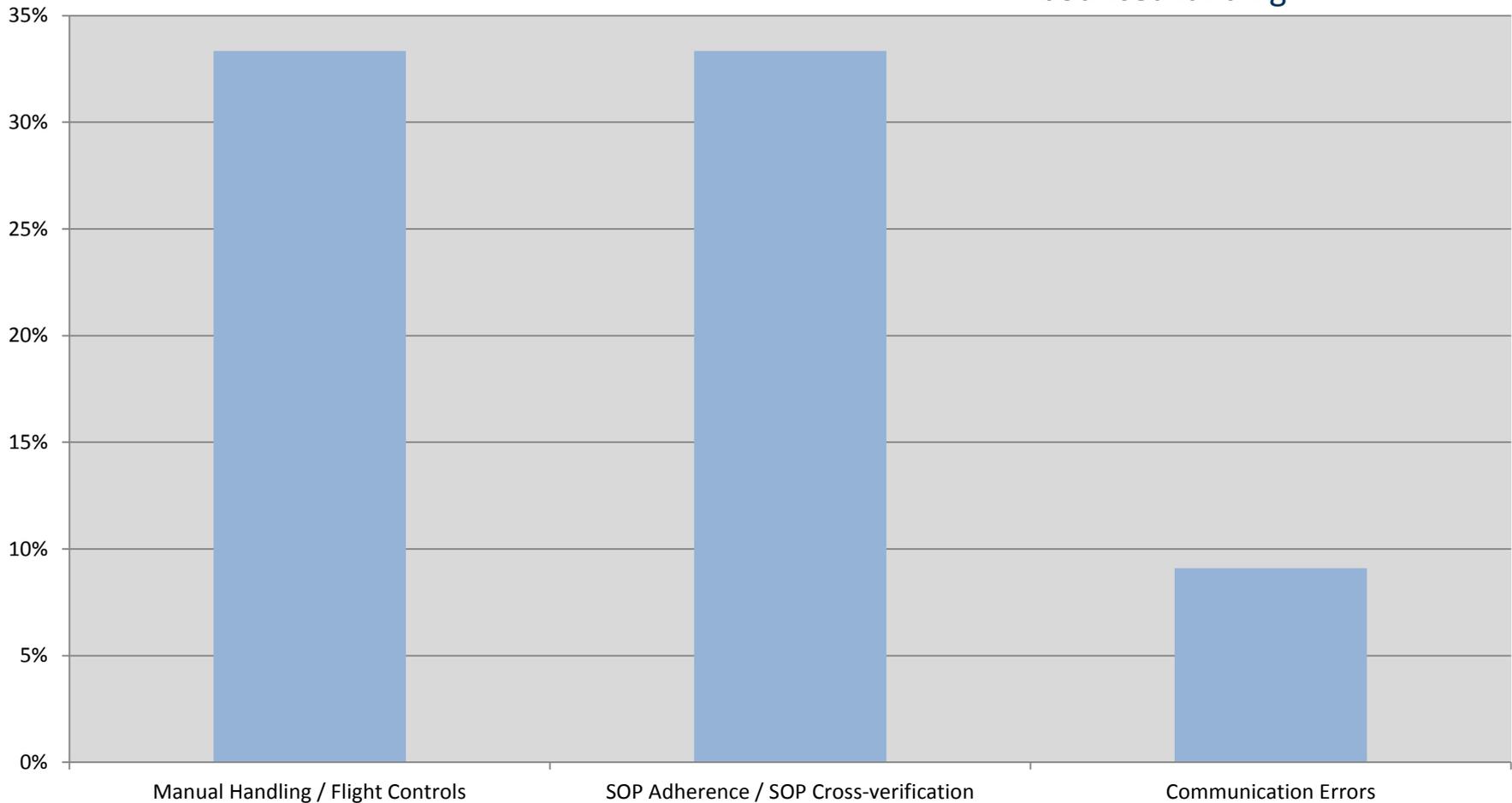


Source: IATA GSIC

Contributing Factors

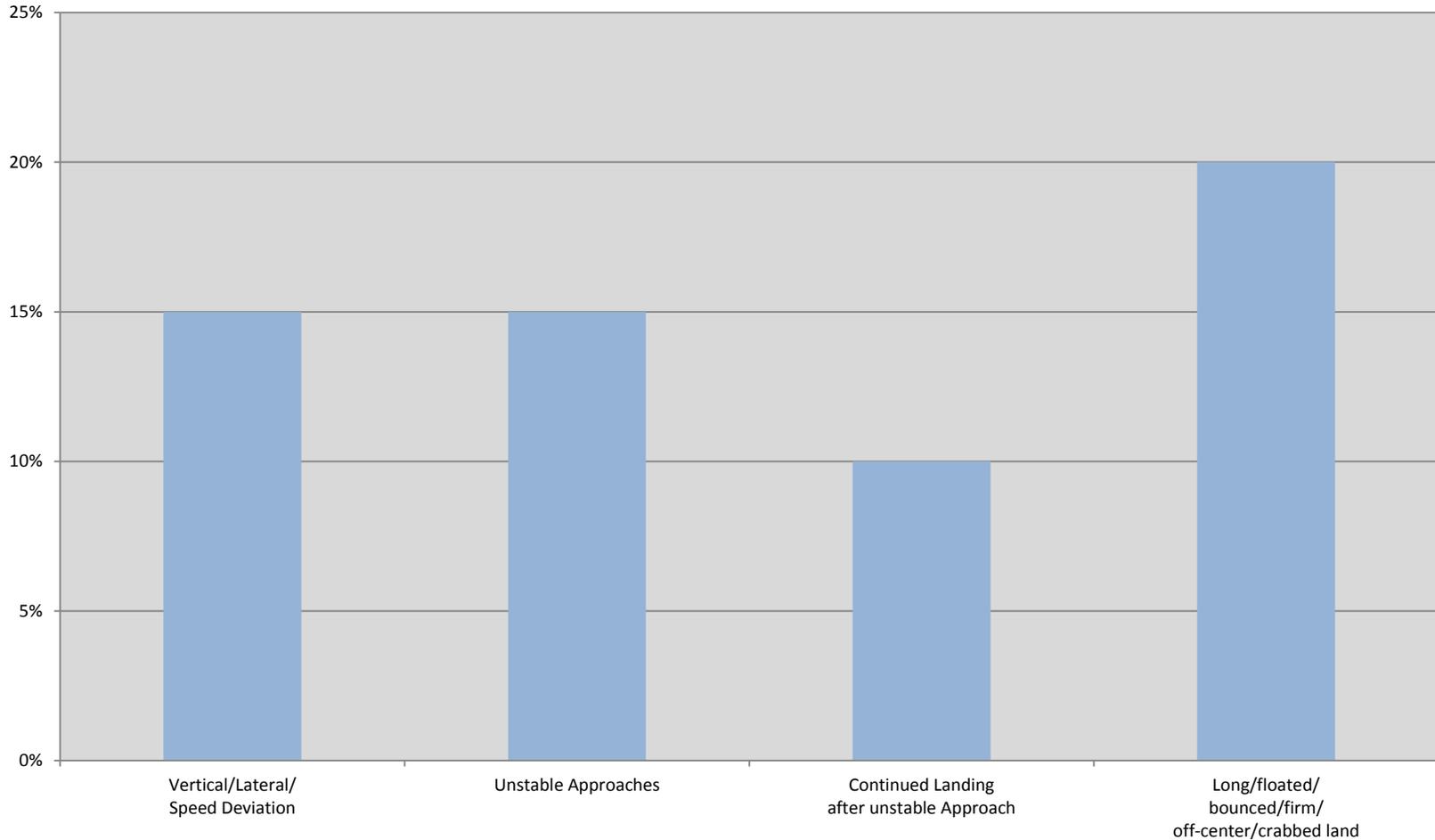
Top Flight Crew Errors

➤ Flight crew errors related to manual handling / flight control errors led to long, bounced landing



Contributing Factors

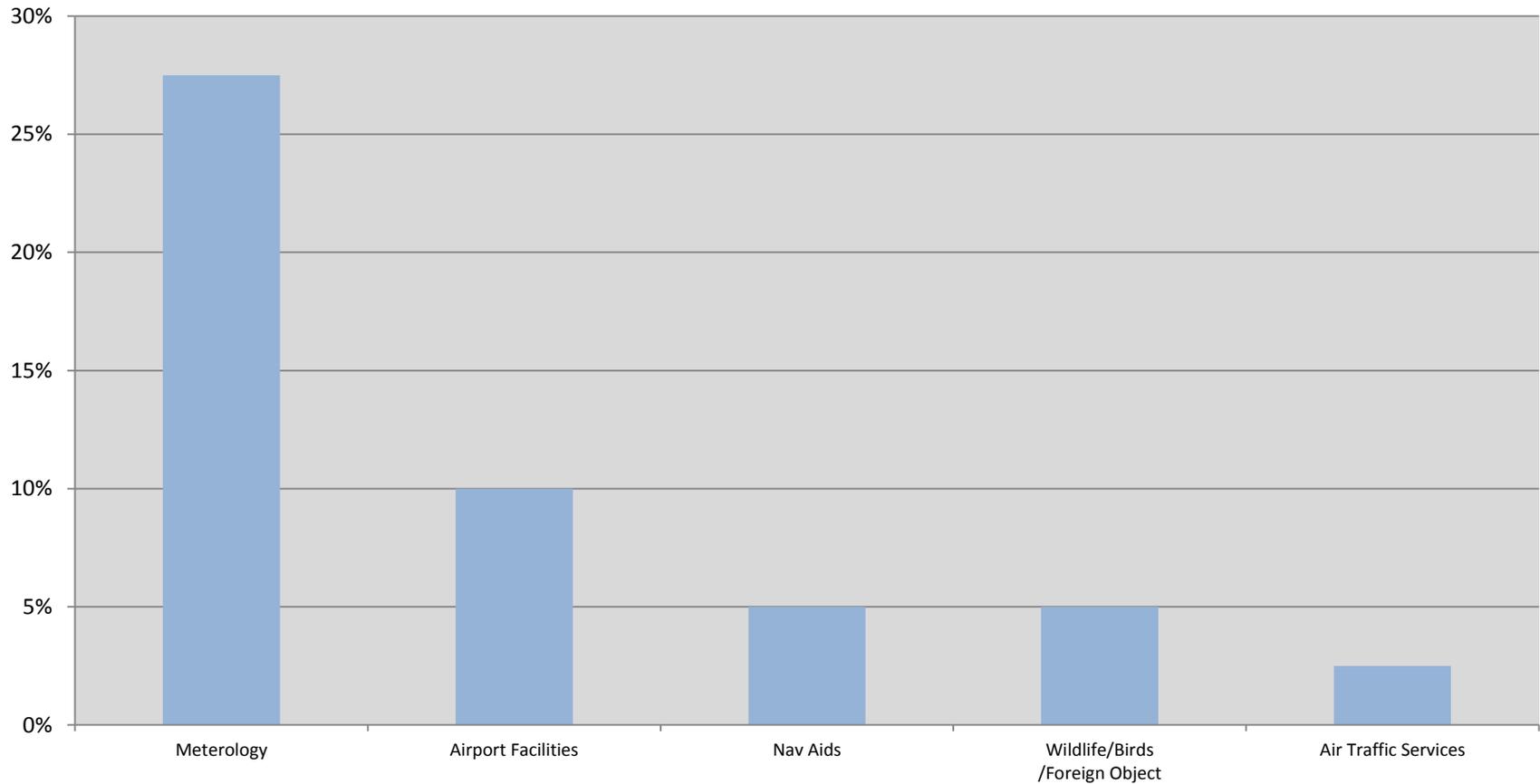
Top Undesired Aircraft State



Contributing Factors

Top Environmental Threats

- Operating in adverse weather was deemed to be a problem
- Inadequate Airport facilities cited as a contributing factor

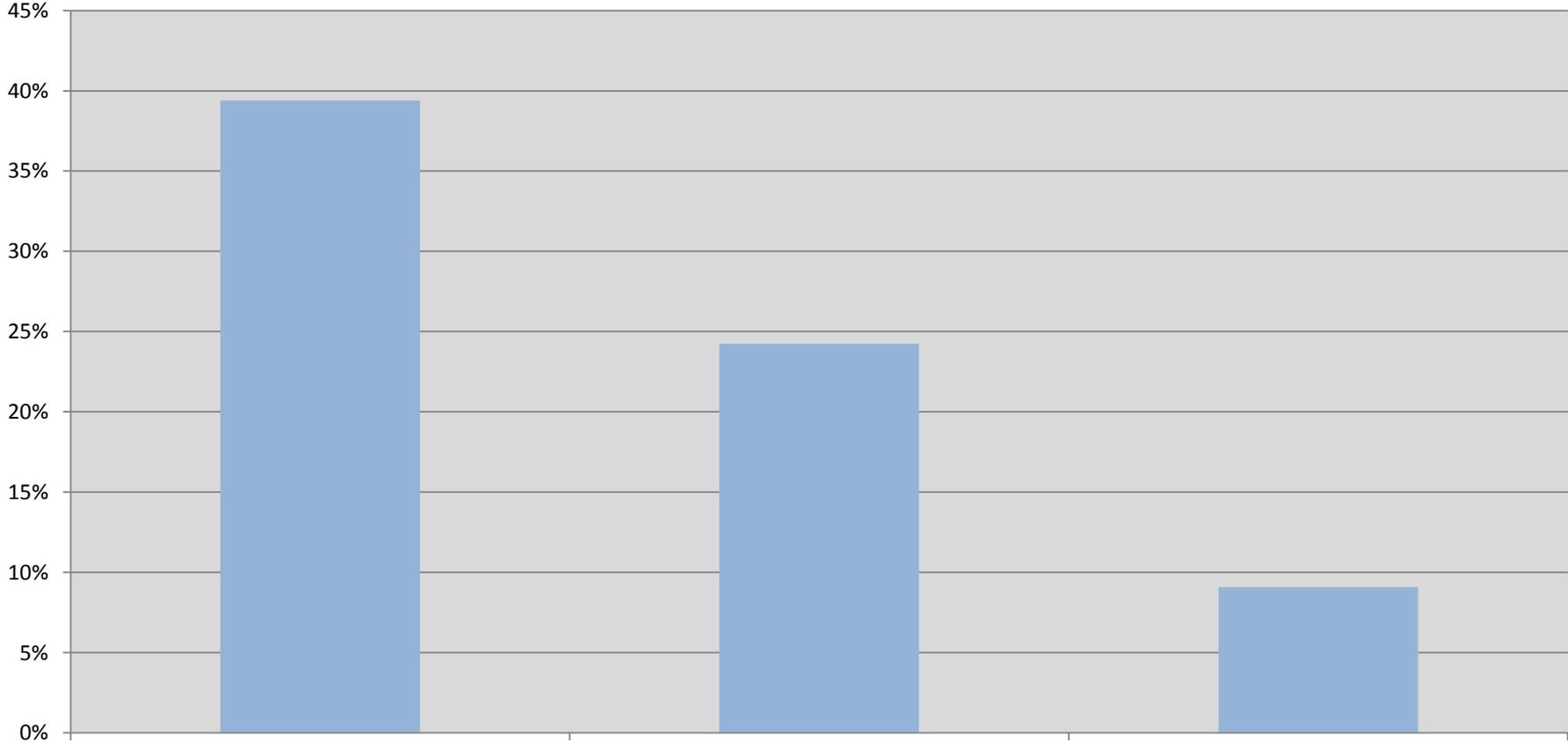


Source: IATA GSIC

Contributing Factors

Top Airline Threat

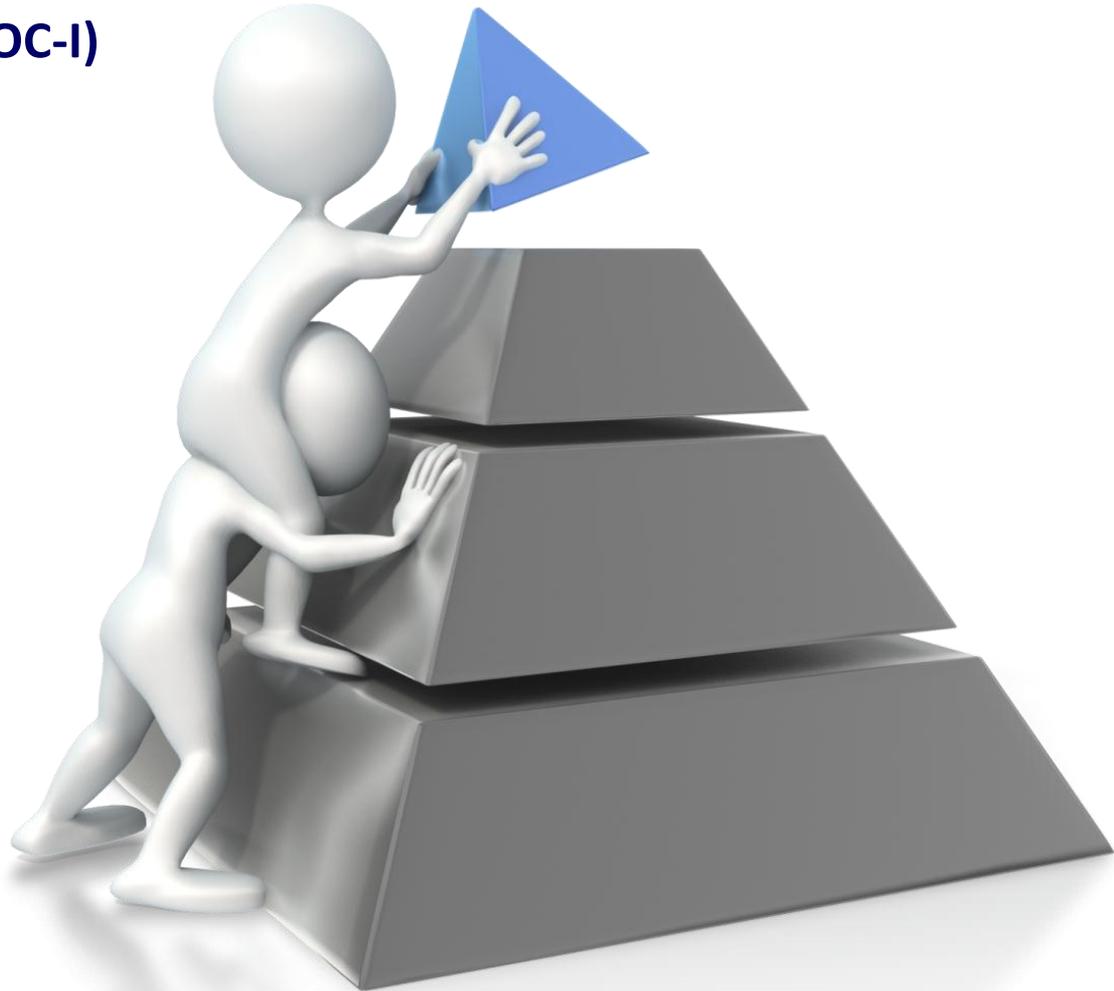
➤ Aircraft malfunction was cited as contributing factors in the accidents



Source: IATA GSIC

Key Focus Areas Identified

1. **Runway and Ground Safety**
2. **Loss of Control Into Flight (LOC-I)**
3. **In-flight Damage**



For the ASRT to succeed

We need

To work together



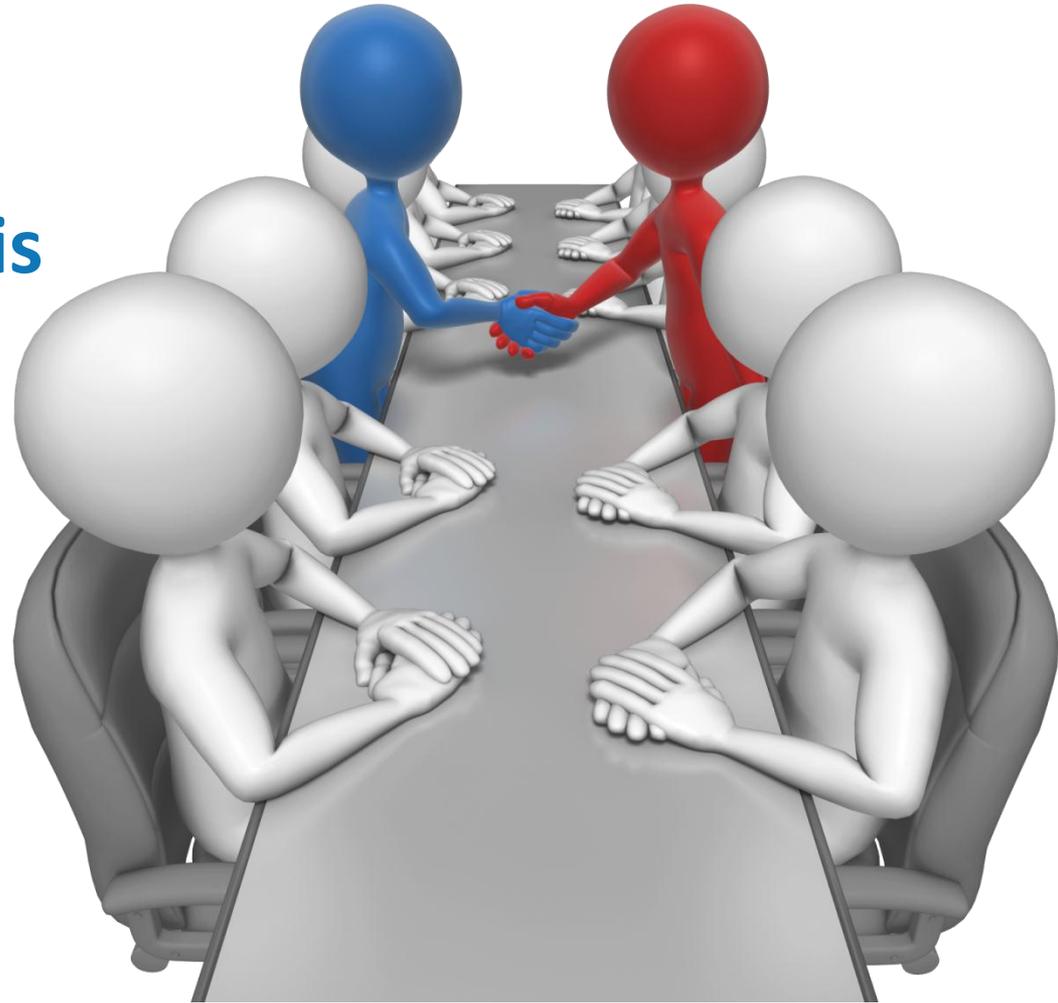
Key challenges we face include;

1. Lack of safety data information required for proactive and predictive parts of the Annual Safety Report

2. Insufficient members in the Annual Safety Report Team to work on and validate the analysis



**Sharing and exchange
of safety information is
key to the continued
success and progress
of the ASRT**





**We need open and
transparent
communication**

And active contributors to the work of the ASRT



Way Forward



Thank you!





Enjoy the lunch break



serco



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RASG Activities

RAST and SST



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MID REGIONAL AVIATION SAFETY TEAM

Haithem Gauwas
Rapporteur, MID-RAST
Manager, Aviation Safety
General Authority of Civil Aviation
Kingdom of Saudi Arabia



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Overview

- Introduction
- Objective & Purpose
- Benefits
- Team Members & Responsibilities
- Safety Enhancement Initiatives & Guidelines
- Challenges/Obstacles
- Voluntary Contributions from the Industry
- Summary
- Conclusion

Introduction

- Creation of the Middle East Regional Aviation Safety Team (MID-RAST)
- Frame work
- Standardization
- Organizational Structure

Organizational Structure



Objective & Purpose

- Analyze the data driven Safety Risk Focus Areas (FAs) identified by RASG-MID to develop Safety Enhancement Initiatives (SEIs) and recognize possible mitigation measures and provide recommended actions through Detailed Implementation Plans (DIPs) for the identified FAs.
- Deal with operational safety initiatives through the development of SEIs, and DIPs for each identified key risk area under the RASG-MID
- **SAFETY RISK FOCUS AREAS (FAs)**
 - Runway and Ground Safety (RGS);
 - In-Flight Damage (IFD);
 - Loss of Control In-Flight (LOC-I); and
 - Controlled Flight Into Terrain (CFIT).

Benefits

- Common interest
- Mature results
- Regional adaptation
- Safety Product Assurance
- Eliminate redundancy of efforts
- Your money back guaranteed

MID-RAST CORE TEAM

ORGANIZATION	NAME
SAUDI ARABIA	Mr. Haithem Gauwas
IATA	Ms. Ruby Sayyed
UAE	Mr. Mohammad Al Dossari
IATA / ETIHAD AIRWAYS	Capt. Richard Hill
BOEING	Mr. Chamsou Andjorin

Rapporteur Responsibility

- Call & Chair the MID-RAST meetings
- Keep focus on high priority items
- Ensure agendas meet objectives
- Promote consensus among the group members
- Coordinate MID-RAST activities closely with RASG-MID SC Chairperson & Secretariat

Coordinator Responsibility

- Assist the Rapporteur
- Keep focus on high priority items
- Ensure agendas meet criteria to improve safety
- Provide technical expertise and collaborate in the development of material as requested by MID-RAST
- Complete assigned task
- Expectation of commitment and participation
- Complete assigned tasks
- Provide constructive feedback

MID-RAST CONTRIBUTOR GROUP

ORGANIZATION	NAME
Egypt	AHMED ARAFA
Jordan	
Lebanon	
Oman	
Saudi Arabia	
UAE	
AACO	
IATA / Kuwait Airways	KAMEL ALAWADI
ICAO	ADEL RAMLAWI, MOHAMED SMAOUI, MASHHOR
Boeing	
ACI	
FAA	
IFALPA	

Contributor Group Responsibility

- Provide feedback on MID-RAST SEIs & DIPs
- Promote MID-RAST activities and outcomes within their Organization
- Provide feedback on MID-RAST Reports
- Provide information support when needed

Safety Enhancement Initiatives (SEIs') Guidelines

- GSI (Global Safety Initiative) Number;
- II. MID-RAST Number in the form of MID-RAST/(risk areas)/# (i.e. MID-RAST/CFIT/1);
- III. Safety Impact (High, Medium or Low);
- IV. Changeability (Difficult, Moderate and Easy) taking into consideration political will, commitment / consensus, resource requirements, availability for implementation, potential blockers – what conditions exist that could prevent implementation;
- V. Impact-Changeability (IC) Indicator;
- VI. Priority;
- VII. Champion; [Copy of RAST-MID-RGS-SEIs-DIPs - DRAFT - V8 - Combined to Top 3.xlsx](#)

Runway and Ground Safety (RGS) SEIs 1&2

- RAST-MID/RGS/1 Specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches including go-around decision making
- RAST-MID/RGS/2 Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams with immediate emphasis on
 - identification and publication of aerodrome Hot Spots; and
 - accurate notification regarding runway conditions and weather by AIS and ATS units.

Runway and Ground Safety (RGS) SEIs 3

- RAST-MID/RGS/3 Focus on Aerodrome Infrastructure and Maintenance Management with priority given to the following:
 - Promote /monitor Implementation RESA including other means such as arresting systems;
 - Regulation, guidance and specific training in relation to maintaining aerodrome runway/taxiway related markings; and
 - Regulation, guidance and specific training in relation to maintaining runways in accordance with Annex 14

Controlled Flight Into Terrain (CFIT) SEIs

- RAST-MID/CFIT/1: CFIT Training and education
- RAST-MID/CFIT/3: Implement best practice Standard Operating Procedures with respect to CFIT amongst Aircraft Operators and Air Navigation Service Providers
- RAST-MID/CFIT/4: Mandate the incorporation of the latest standard CFIT warning and prevention technology onboard operators' aircraft and within ANSP's facilities

Loss of Control In-Flight (LOC-I) SEIs

- RAST-MID/LOC-I/1: Policies and Procedures modification to prevent LOC-I (1-3)
- RAST-MID/LOC-I/2: Training to prevent LOC-I – Advanced Maneuvers – Implement Ground and Flight Training (1-3)
- RAST-MID/LOC-I/3: Training to prevent LOC-I: Human Factors and Automation

In-Flight Damage (IFD) SEIs

- RAST-MID/IFD/01: Improve aviation safety in the MID region through mitigation of bird strike, wildlife and FOD hazards
- RAST-MID/IFD/02: Lower the number of In-flight Damage accidents/incidents related to SOPs/SOPs Adherence by Flight Crew and Maintenance Personnel
- RAST-MID/IFD/03: Increase awareness on means and tools of handling situations where a natural disaster occurs

In-Flight Damage (IFD) DIP

- **MID-RAST/IFD/01: Improve aviation safety in the MID region through mitigation of bird strike, wildlife and FOD hazards**
- Safety Enhancement Action (expanded):
- Statement of Work
- Champion Organization
- Human Resources
- Financial Resources
- Relation with Current Aviation Community Initiative
- Performance Goal
- Indicators
- Key Milestones
- Potential Blockers
- Responsible [2013.03.07_IFD_DIP.xls](#)

Challenges

- The lack of focal points for the access information
- The lack of technical experts for SEIs & DIPs review
- The lack of multi-technical expert group for Cross-reference review of SEIs and DIPs
- The continues review and feedback of SEIs and DIPs

Summary

- MID-RAST introduction
- Objective
- **SAFETY RISK FOCUS AREAS (FAs)**
 - Runway and Ground Safety (RGS);
 - In-Flight Damage (IFD);
 - Loss of Control In-Flight (LOC-I); and
 - Controlled Flight Into Terrain (CFIT).
- Benefits
- Team Members & Responsibilities
- Safety Enhancement Initiatives (SEIS) & Guidelines
- Challenges
- Solution

Safety Needs Your Support

- MID-RAST encourage new members to join or support the current work in progress in the following areas:
 - As a focal point for your organization safety related information;
 - As a technical expert to review SEIs & DIPs;
 - As multi-technical expert group member for Cross-reference review of SEIs and DIPs; and
 - As a contributor group member to review and give feedback on produced SEIs and DIPs.
- If interested please email me your contact info, a brief history of your expertise, and what you are interested in to my email: hgauwas@gaca.gov.sa



MID State Safety Team

Tom Curran
Senior Air Accident Investigator
General Civil Aviation Authority
United Arab Emirates



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Purpose of the MID State Safety Team

- Support the Regional Air Safety Group - MID Steering Committee (RSC) in the development, implementation and monitoring of Safety Enhancement Initiatives (SEIs) related to identified safety issues...

MID – State Safety Team Initiatives

Accident and Incident Investigation

State Safety Oversight

State Safety Programs

Future Programs



State Safety Team Structure

MID Region Safety Committee (RSC)

MID Region State Safety Team (State Safety Team)

Accident Investigation

Safety Oversight

State Safety Program
Implementation

Regional Accident
Investigation Organization

Regional Safety Oversight
Organization

Safety Management System



MID State Safety Team Membership

States	Industry
Bahrain	AACO
Iran	Boeing
Lebanon	COSCAP-GS
Qatar	IATA
United Arab Emirates	World Food Program

MID - State Safety Team Objective

- Most of today's accidents could be eliminated.
- There will always be a few accidents that cannot be prevented because they will result from circumstances - or combinations of circumstances - that we have not yet encountered or predicted. But these accidents will be very rare.





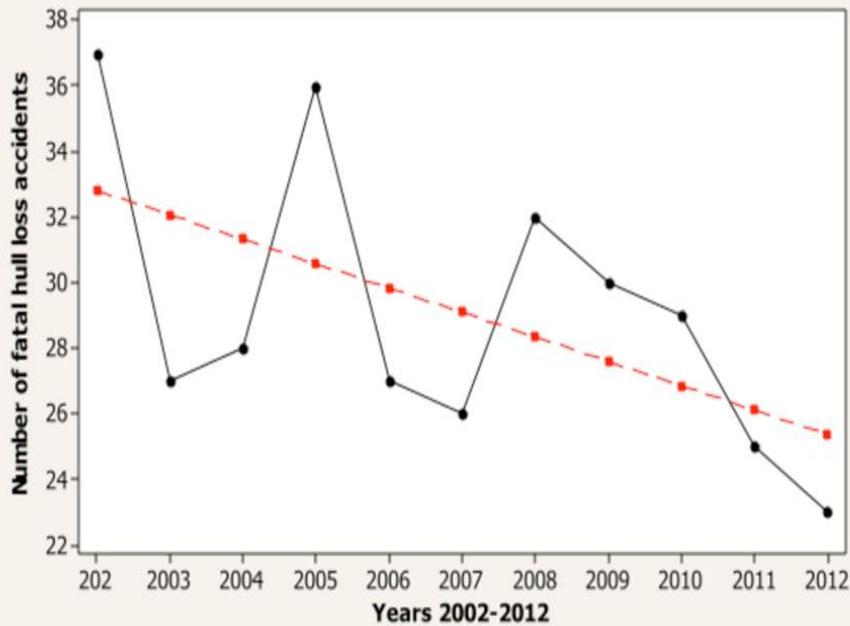
Global Safety Record

Fatal Airliner Hull-loss accidents and fatalities per year (2002-2012)

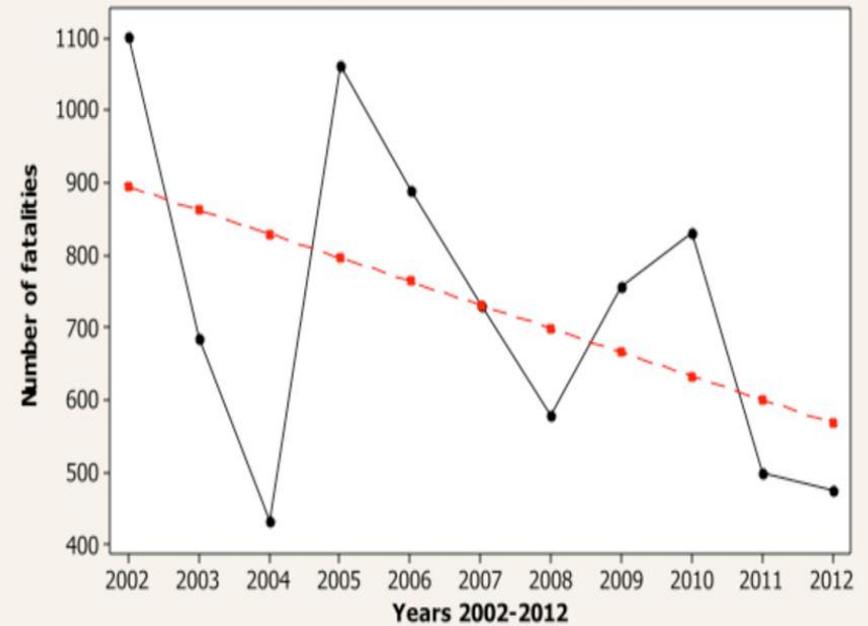
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fatal Hull Loss	37	27	28	36	27	26	32	30	29	28	23
Fatalities	1101	684	431	1062	889	750	577	757	831	507	475

Global Fatal Hull Loss and Fatality Trends

Trend Analysis Plot for fatal hull loss accidents per year

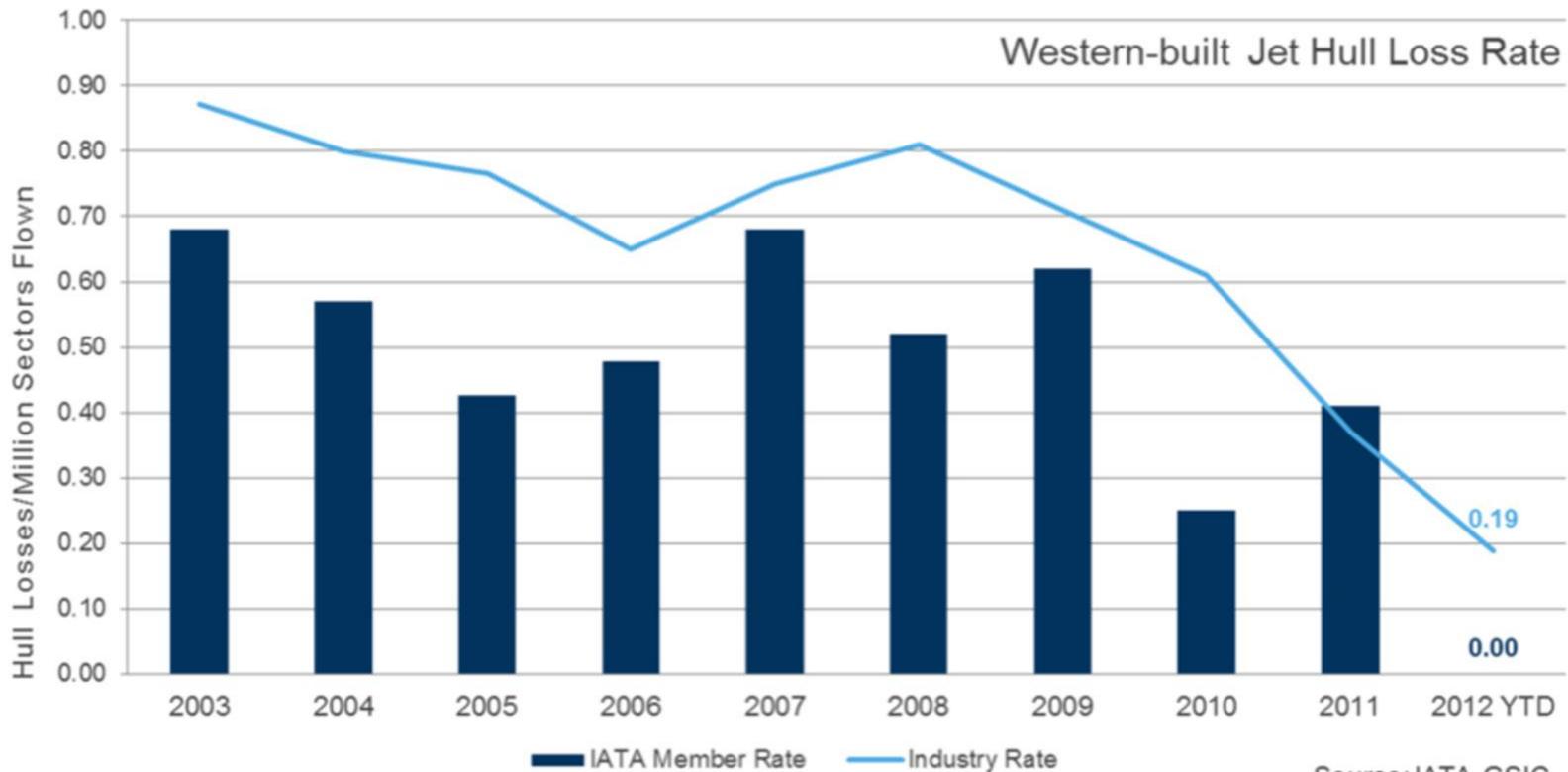


Trend Analysis Plot for fatalities



Safety performance (30 Nov 2012)

Western-built jet hull losses per million flights



Source: IATA GSIC



«We are very proud that 2012 was the safest year on record but that makes the challenge on keeping 2013 the same or an even better safety year. Our IOSA carrier's hull loss rate was zero and it can't be any better. For IOSA carriers I am expecting the 2013 rate to be zero again.»

GUNTHER MATSCHNIGG,
SVP SAFETY,
OPERATIONS AND INFRASTRUCTURE,
IATA



MID - State Safety Team Safety Enhancement Initiatives

- Improve regional cooperation for the provision of Accident and Incident investigation.
- Strengthening of States' safety oversight capabilities through the establishment of Regional Safety Oversight Organization(s).
- Improve status of implementation of State Safety Programs (State Safety Programs) in the MID.



Improve Regional Cooperation for Air Accident investigation

1. Develop a strategy for regional cooperation to enhance accident and incident investigation
2. Carry out a study related to regional capabilities
3. Establish a Regional Accident & Incident Investigation Organization (Regional Accident Investigation Organization)
4. Establish MENASASI



States' safety oversight

- States generally have a system of regulations, **but do not require a safety risk analysis** as a pre-requisite for regulatory development
- States may not monitor the effectiveness of regulations as safety risk controls
- A State's safety oversight system may not include safety risk controls



States' Safety Oversight

- Regulation development under a State Safety Program observes safety risk management principles, as follows
 - 1) Hazard identification
 - 2) Safety risk analysis
 - 3) Mitigation of hazard consequences
 - 4) Measurement of mitigation effectiveness and efficiency
- The State Safety Program ensures **safety risk controls** are established



Strengthening of States' Safety Oversight Capabilities

1. Define a study related to establishment of regional/sub-regional safety oversight organization(s)
2. Evolution of COSCAP-GS into a Regional Safety Oversight Organisation



State Safety Program

- State Safety Program is the bridge that closes the gap that could potentially develop between the internal and external safety processes of a State and the internal safety processes of service providers
- The State Safety Program can only be effectively implemented as part of an overall framework of accountabilities and responsibilities within the State
- The selection of appropriate safety indicators is an essential foundation for the development and implementation of ALoS

Implementation of SSP and SMS





Improve status of implementation of State Safety Programs

1. Carry out a gap analysis, supplemented by targeted questionnaire or visit to specific States.
2. Sharing of experience through workshops, and seminars.
3. Establish a mechanism for safety data sharing and promoting a safety culture.
4. Seek options to address any lack of expertise for the effective implementation of the State Safety Program.

Challenges at the State level





Requirements for State Safety Team

success

- Leadership from senior State and Industry officials
- Industry partner involvement in the State Safety Team
- Active State participation in this safety initiative is vital for success



MID - State Safety Team Accomplishments

- First Regional Accident Investigation Organisation workshop was held in Abu Dhabi in 2012.
- Accident Investigation MoU between Bahrain and the UAE in the final signature process.
- Middle East and North Africa Society of Air Safety Investigators (MENASASI) being established.



MID - State Safety Team Accomplishments

- Survey of States Accident Investigation capabilities
- State Safety Program / Safety Management System
Safety Management Workshop



Conclusion



- Improve regional cooperation for the provision of Accident and Incident investigation.
- Strengthening of States' safety oversight capabilities through the establishment of Regional Safety Oversight Organization(s).
- Improve status of implementation of State Safety Programs (State Safety Programs) in the MID.



- To join the MID - State Safety Team contact Ismaeil Abdel Wahed at:

iwahed@gcaa.gov.ae

Mighty oaks from little acorns grow.







Building on the work of RASG- MID: Developing a Regional Safety Strategy



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INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

BUILDING ON THE WORK OF RASG-MID

Developing a regional safety strategy

Mohamed Elamiri, Deputy Director

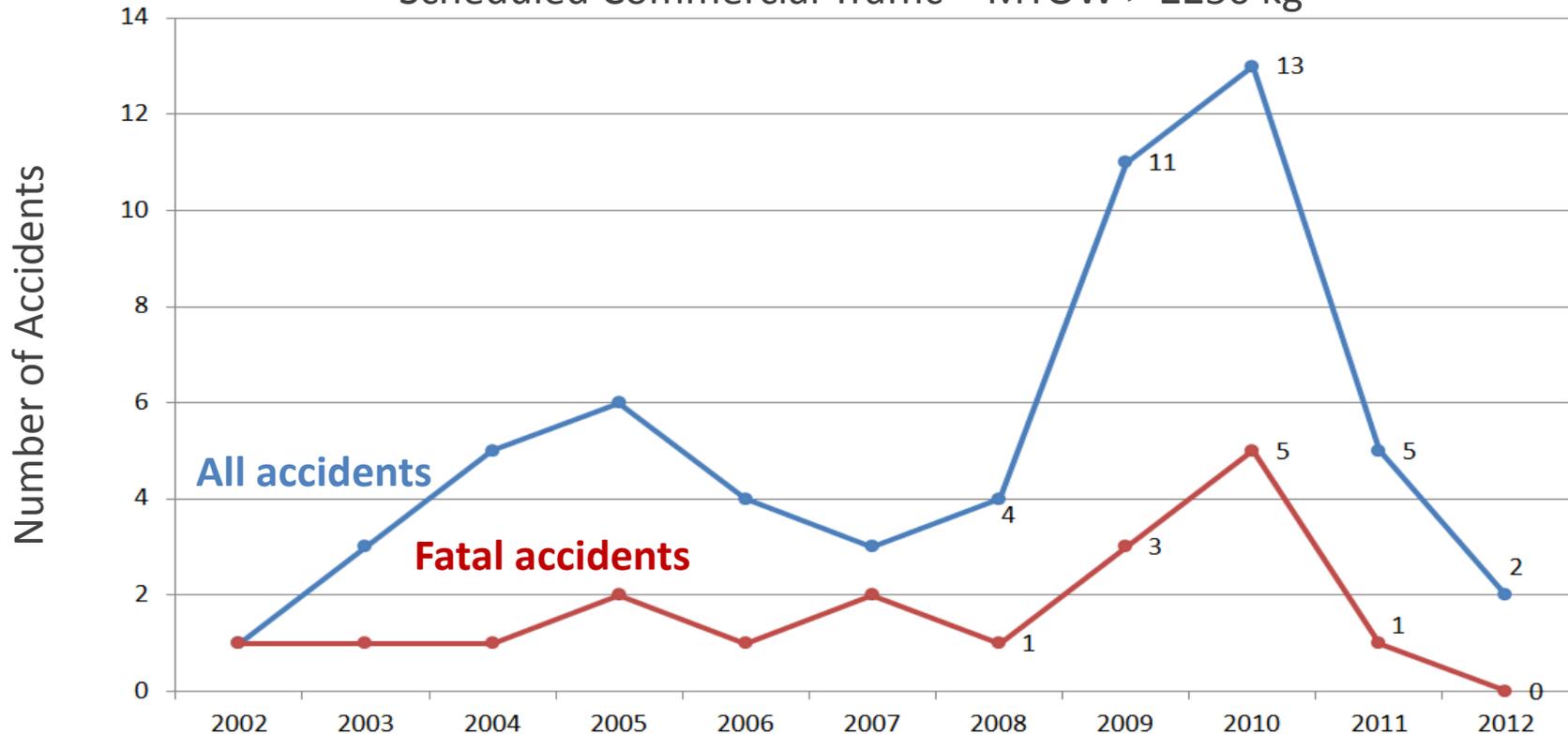
Air Navigation Bureau

MID accidents (2002-2012)

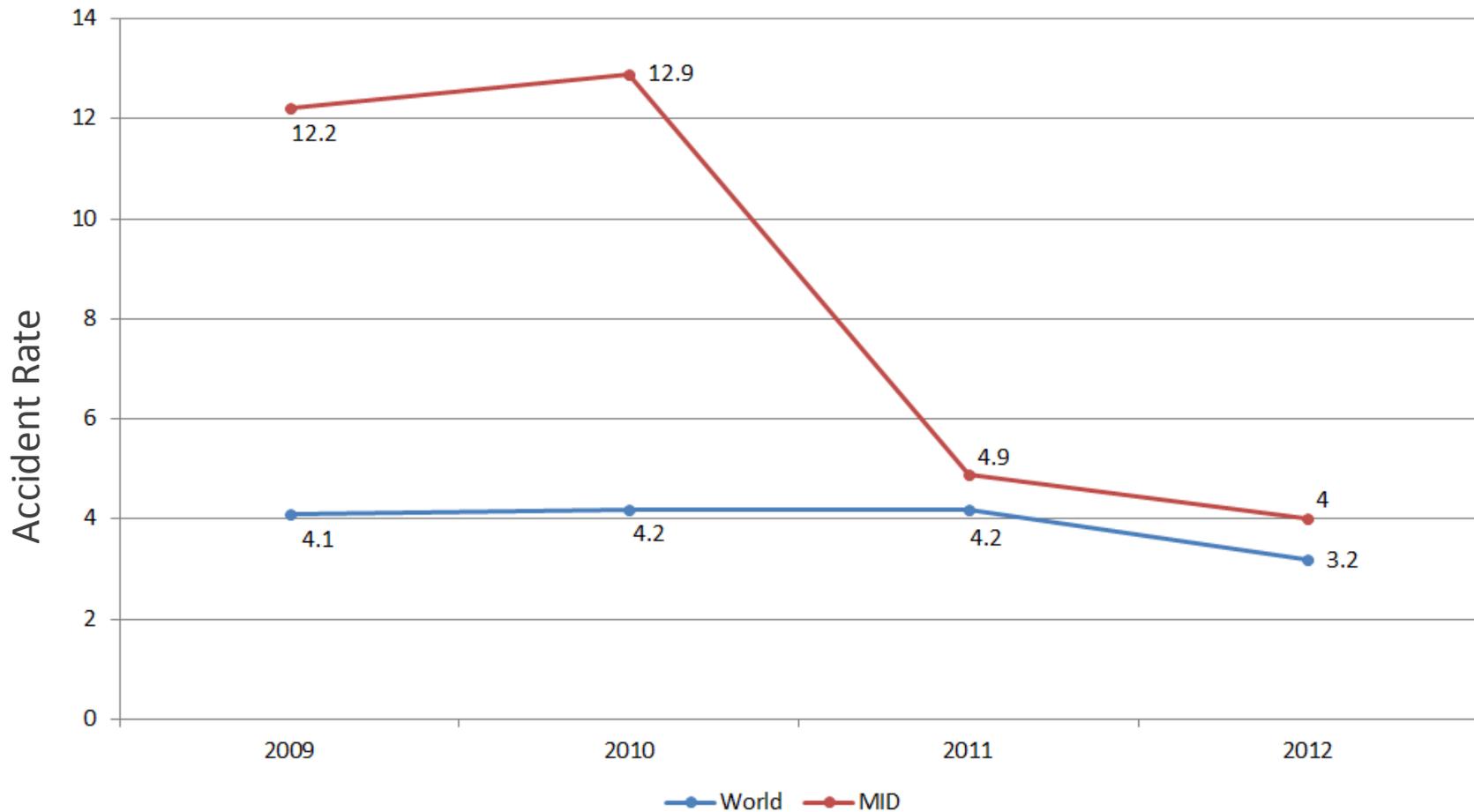


Accidents and Fatal Accidents per Year

Scheduled Commercial Traffic – MTOW > 2250 kg



Global vs. MID accident rate

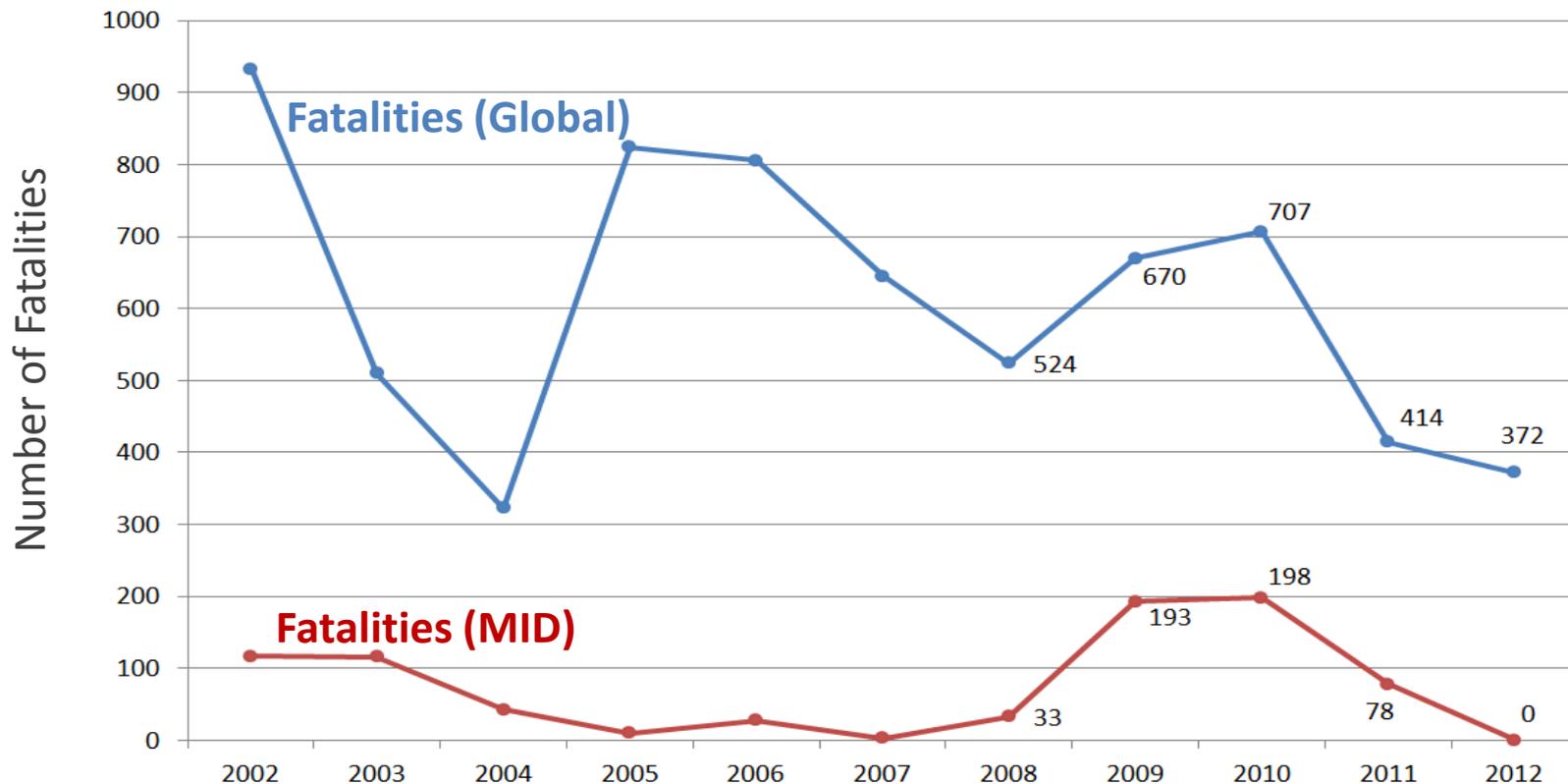


Overall fatalities (2002-2012)



Fatalities per Year

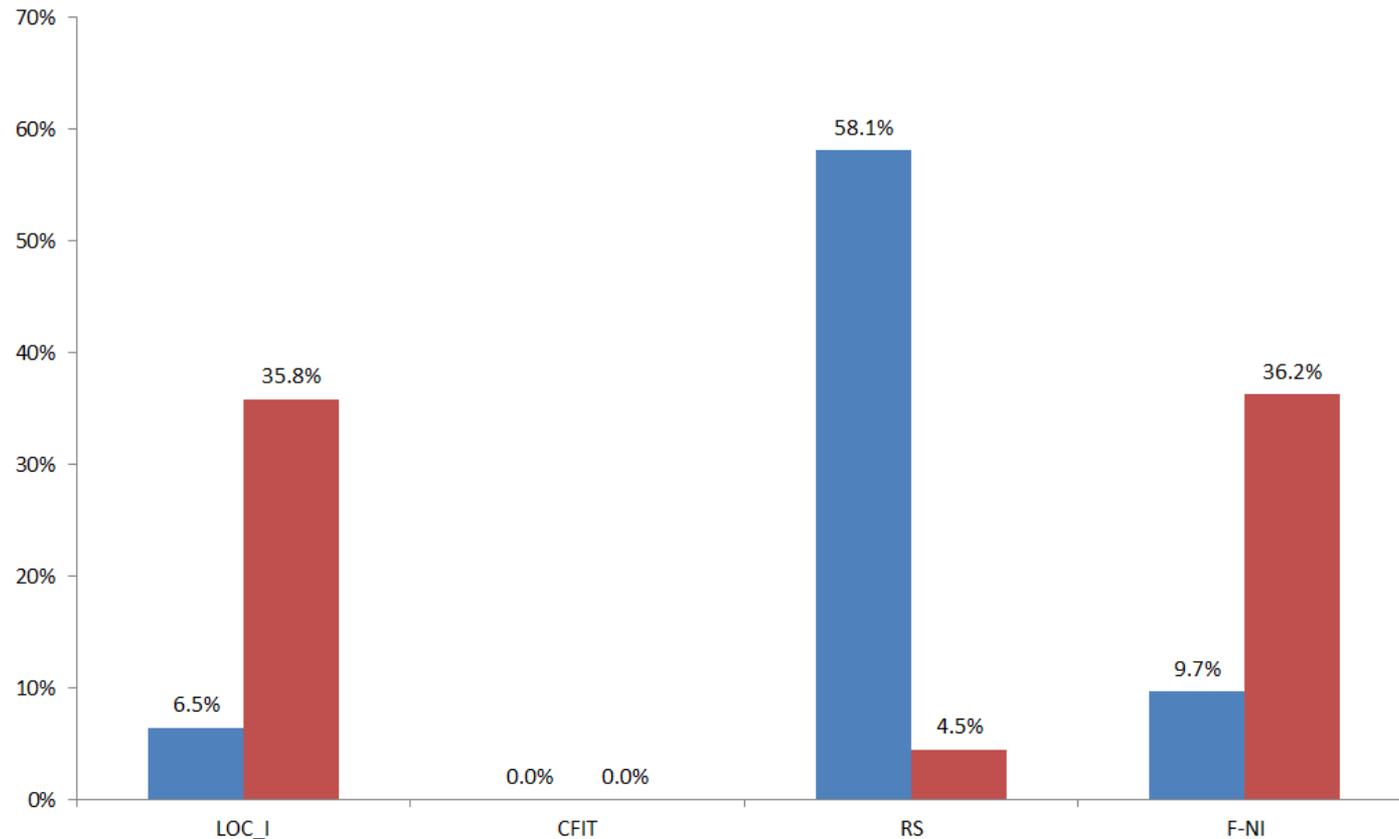
Scheduled Commercial Traffic – MTOW > 2250 kg



MID overview of accident categories



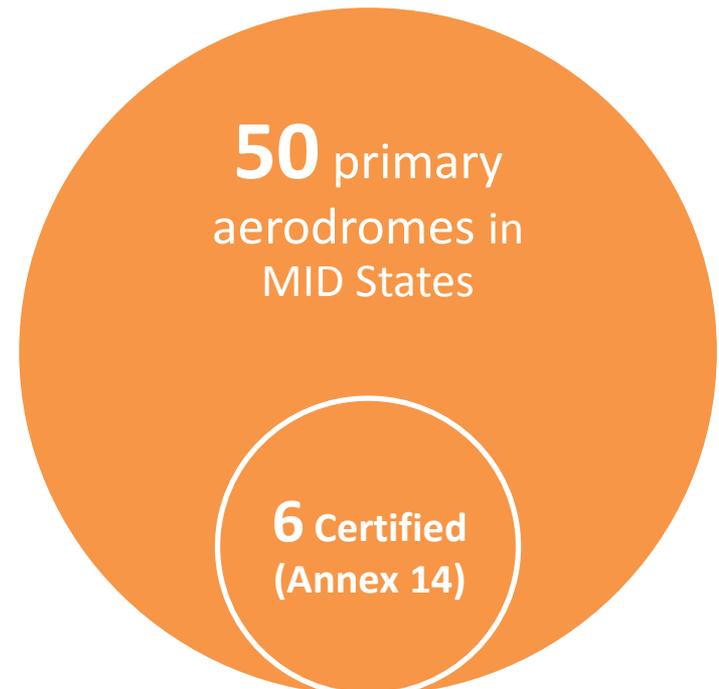
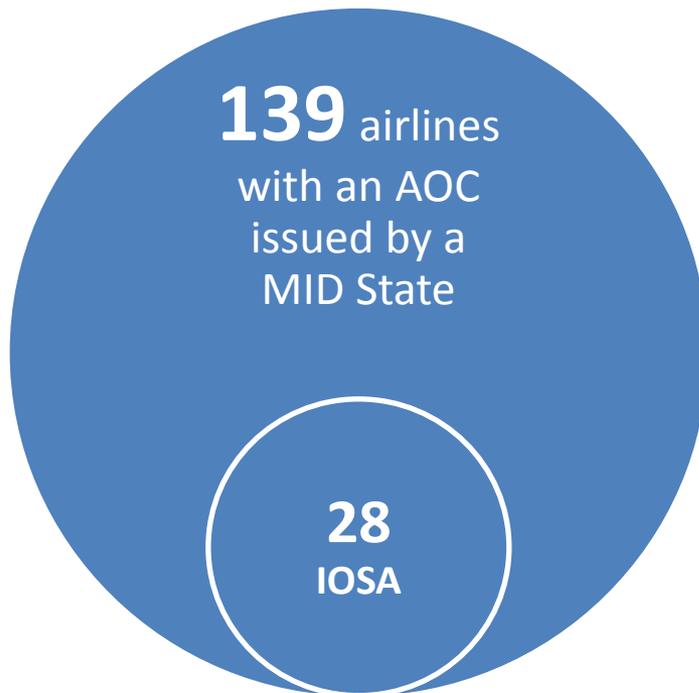
2009-2012 Scheduled Commercial Traffic – MTOW > 2250 kg
31 Accidents, 469 Fatalities



Airlines and aerodromes certifications



- An integrated analysis conducted at ICAO HQ yielded the following figures:







Mohamed Smaoui

ICAO MID Office



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GASP - A Tiered Approach to Safety



- The GASP objectives and associated target dates are developed for the global aviation community as a whole. Each objective includes specific initiatives to be implemented by States in a progressive manner in accordance with defined timelines.
- The monitoring of safety performance and its enhancement is achieved through identification of relevant safety indicators as well as the adoption and attainment of aviation safety targets.



GASP Objectives

Near-term

2017

- All States establish effective safety oversight systems
- States with effective safety oversight (over 60% Effective Implementation) proceed to fully implement SSP

Mid-term

2022

- All Member States fully implement the ICAO SSP Framework

Long-term

2027

- Member States implement safety capabilities as necessary to support future Air Navigation needs



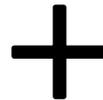
Safety performance monitoring



SAFETY

Global Metrics

- 1. Safety Oversight**
Effective Implementation by States
- 2. Accidents and serious incidents**
Number of accidents per million departures
- 3. Runway Excursions and Incursions**
Runway excursion and incursion accidents as a percentage of all accidents
- 4. Aerodrome certification**
Number of certified international aerodromes
- 5. SSP/SMS Implementation**
Implement Phase 1 of State Safety Programmes (SSP) and ensure that all Service Providers implement a Safety Management System (SMS)



Regional Metrics

- 1. In-Flight Damage**
In-flight Damage accidents as a percentage of all accidents
- 2. Loss of Control In-Flight**
LOC-I accidents as a percentage of all accidents
- 3. Controlled Flight Into Terrain**
CFIT accidents as a percentage of all accidents
- 4. IOSA, etc**

Need to agree on safety indicators, targets & action plans 

High level MID Region Safety Strategy, further development and monitoring of implementation by RASG-MID



Regional Aviation Safety (OEM perspective)

Mr. Chamsou Andjorin
Director Africa and Middle East
Aviation Safety

Bahrain, 28-30 April 2013
(Session 5: Regional Safety Strategy)

Collaborative efforts

- **CAST**
- **ISSG**
- **RASGs**



Proactive Safety Management

(% of reduction in incidents by 2017, 2022, 2027)

In-Service Safety Data Management

- Improved reporting culture

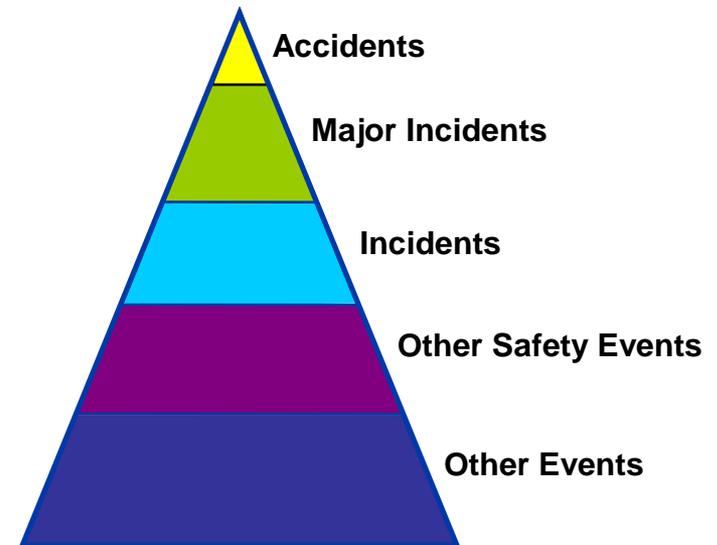
(% of reported incidents)

- Data Governance system

(% of reported incidents)

- Data sharing mechanism

(% of reduction in incidents)



Knowledge of all levels of events helps assess the operational environment

Addressing Safety Risks

(% of reduction by 2017, 2022, 2027)

Runway Excursions

Runway Situation Awareness Tools

- Procedures for every landing**
- Perform a landing distance calculation
 - Calculate and brief a go-round point
 - A thrust reverser callout has been added to the FCTM and the FCOM

Procedures

Flight Deck Technology

Training Aid Video

- Flight Deck Technology**
- Enhanced approach planning tools
 - Aural and visual runway positional awareness and alerting
 - Stability guidance and alerting
 - Predicted runway stop location display
 - Overrun alerting

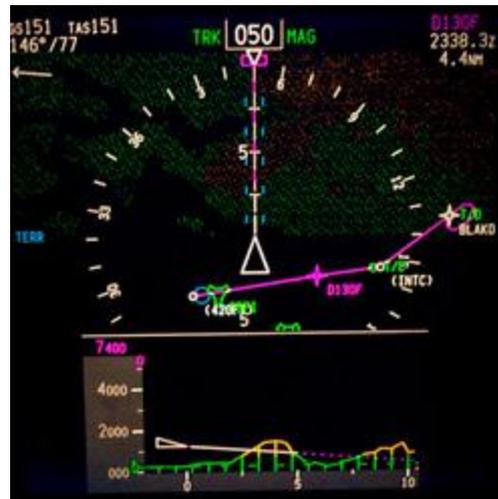
- Approach & Landing Training Aid Video**
- Flying a stable approach
 - Runway contamination
 - Checking the runway length available vs. required
 - Reported conditions can vary from actual conditions
 - Approach speed additives
 - Proper, timely use of all deceleration devices



LOC-I



Control Flight into Terrain





Thank you

MID Safety Summit

Bahrain, 28-29 April 2013





ACI's Safety Priorities

- Runway Safety
 - Incursions
 - Excursions
- Apron Safety
- Wildlife Management



Proposed Safety Objectives and Indicators

Critical Importance

- No. of aircraft occurrences (*)
- No of runway crossings
- No. of runway and/or taxiway incursions
- No. of occurrences (*) in the maneuvering area and on aprons
- No. of vehicle/mobile equipment occurrences (*),
- No. of critical systems' failures (electrical, communications, A-SMGC)
- No. of FOD events
- No. of airside occurrences (*) due to construction works



Other Useful Indicators

- Fuel and other spills
- prop wash or jet blast events
- passenger/staff injuries fatalities
- Non-compliant signs markings and lights
- access to life safety devices blocked
- infrastructure events (e.g. damaged pavement)
- **Efficient reporting, data collection and analysis system in place (How to quantify?)**
- **Demonstrated commitment by management to safety (How to quantify?)**
- Completed inspections, audits
- wildlife incidents
- training courses conducted
- violations of airside safety rules
- hazard reports
- cyclical review on airside work procedures established ?
- % employees with specific safety responsibilities



ACI Surveys Planned

- Aerodrome Certification Regime
 - To better understand and help airports
- Safety Culture
 - To promote safety culture



ACI's Safety Strategy

1. **APEX for Safety Review**

- Runway Safety
- Wildlife management
- SMS
- Airfield signs, lightings and markings
- Operations and Maintenance
- Others, e.g. emergency response

2. **Guidance Materials**

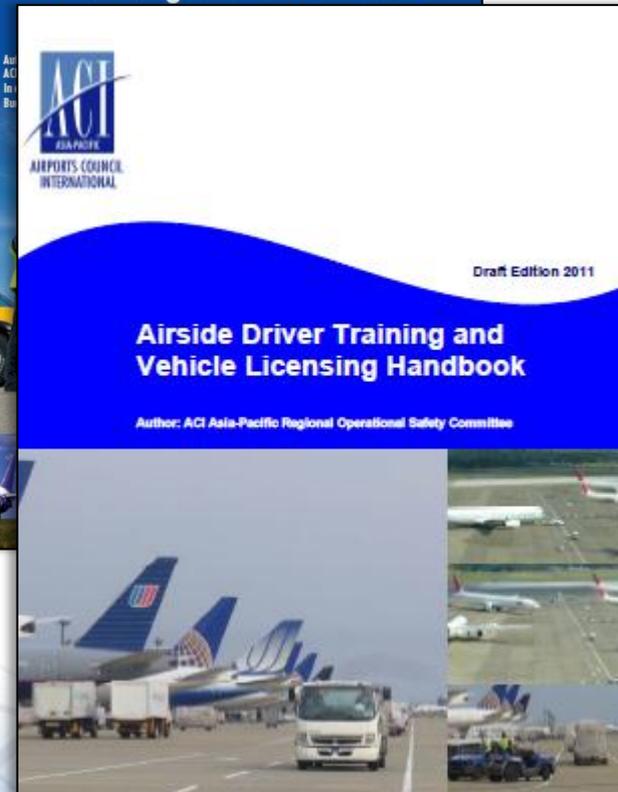
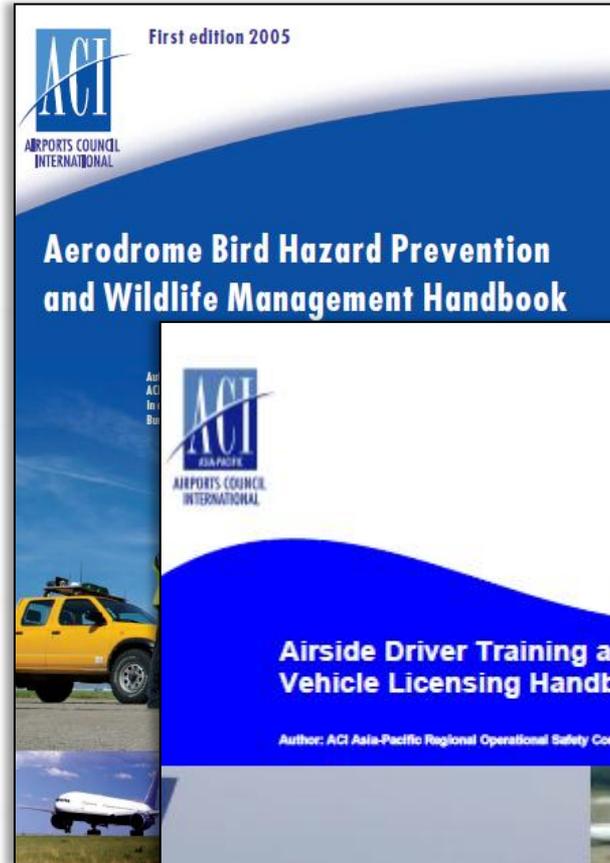
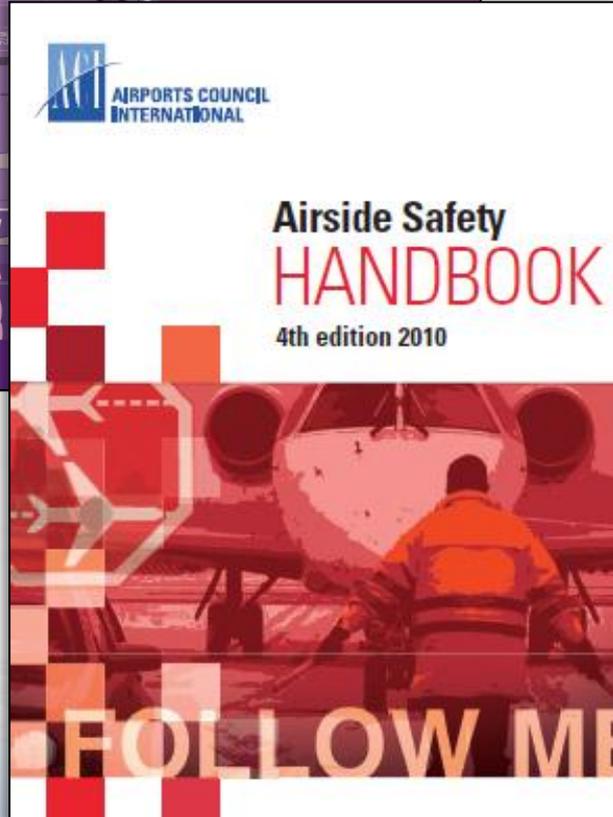
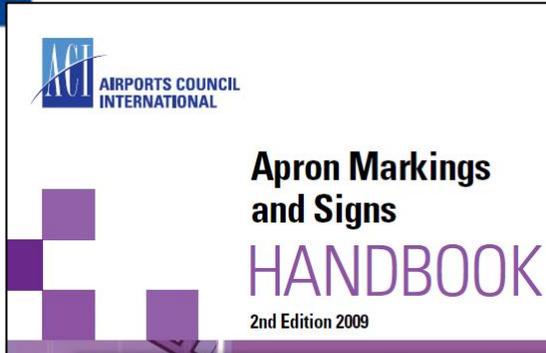
3. **Training**



Strategy 1: APEX for Safety

- Peer safety review
- No cost to airport
- Host only needs to pay for travel and accommodation
- Schedule of Reviews
 - 2012: 6 (done)
 - 2013: 18
 - 2014: 28
 - 2015: 48
 - Total: 100
- MID Airports welcomed to participate either as host or safety partner

Strategy 2: Guidance Materials





Strategy 2: Guidance Materials (cont') New ACI Handbooks

- Runway Safety Handbook
- Emergency Planning Handbook
- First draft: end of 2013



Strategy 3: Training

- 13 ACI Training Centres
- 3 in MID
 - Cairo
 - Abu Dhabi
 - Cairo



Strategy 3 (Cont')

Training Courses Offered

- Accident & Incident Investigation
- Advanced Airport Operations
- Aerodrome Auditing
- ACI/ICAO Aerodrome Certification
- Airport Airside Capacity Enhancement
- Airport Safety Management Systems Implementation *
- Airport Safety Management Systems Implementation Workshop
- Annex 14 for Advanced Users
- Apron Management
- Aviation English - RTF Phraseology for Airside Drivers
- Collaborative Decision Making (CDM)
- Collaborative Decision Making (CDM) Workshop
- Global Safety Network (GSN) Diploma (Initial and Advanced)



MID Safety Summit

Bahrain

28-29 April 2013

Maggie Geraghty
CANSO Safety Manager



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CANSO Middle East Region Priorities

- **SMS Implementation and Measuring**
- **Runway Safety**
- **Safety Culture**

Organised by

CANSO Middle East Region Priorities

➤ **SMS Implementation**

- Increase implementation in member states
- Increase annual SMS Maturity Measurement Survey Participation
 - Provide training on the completion of the survey and the benefits of measuring
- Provide effective and targeted SMS training
 - Implementation
 - Risk Analysis and Management
 - Safety Assessments
 - Developing Safety Cases

Organised by

CANSO Middle East Region Priorities

➤ Runway Safety

- **Complete Runway Safety Maturity Surveys – Annually**
 - **Areas include: Runway Safety Team Implementation; tracking of incidents and mitigation effectiveness**
- **Establish and monitor Key Performance Indicators**
 - **Track Causal Factors**
- **Submit data upon request for global trending**

Organised by

CANSO Middle East Region Priorities

➤ **Safety Culture**

- Enhance regional safety culture
- Address resistance through Safety Culture training
- Encourage Just Culture regulatory framework
 - Provide training and information identifying the safety and financial benefits of a Just Culture

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Bahrain

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Achim Baumann

IATA



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Safety Strategy – a holistic approach



Safety Oversight

Processes and Best Practices

Key Performance Indicators

Day to day safety work



We need a ...



- Regional approach within the global context
- Industry wide approach
- Tangible targets
- Suitable KPIs
- Tools and structure
- Cooperation and communication



IATA expectations



- Safe and efficient operations
- As little as possible and as much as necessary
- IATA can contribute information from
 - IOSA
 - ISAGO
 - Other Audit programs
 - Airline data submissions to IATA





Enjoy the coffee break



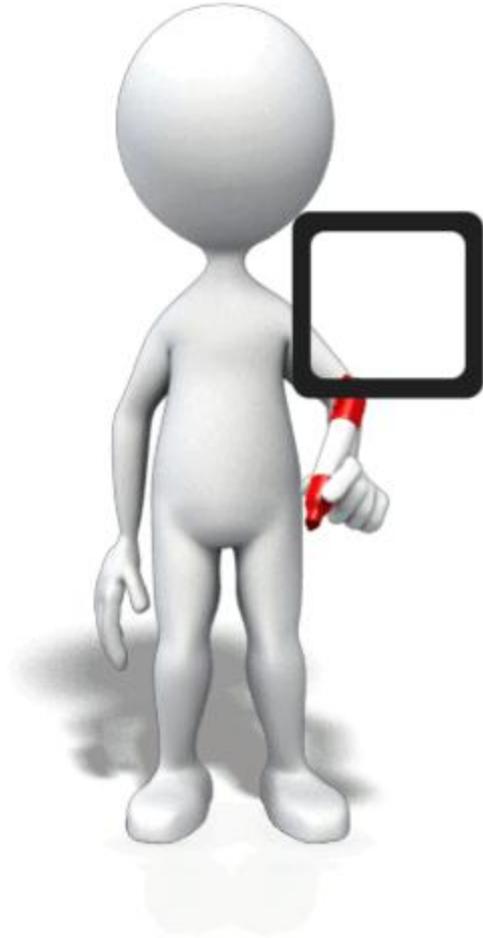
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Conclusions & Preparations for Day 1





See you at the dinner
at the Gulf Hotel Poolside at 19:30

A coach will leave Intercontinental
Regency at 19:15



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