ICAO

SAFETY

Safety Report

2014 Edition

A Coordinated, Risk-based Approach to Improving Global Aviation Safety

The air transport industry plays a major role in world economic activity. One of the key elements to maintaining the vitality of civil aviation is to ensure safe, secure, efficient and environmentally sustainable operations at the global, regional and national levels.

A specialized agency of the United Nations, the International Civil Aviation Organization (ICAO) was created in 1944 to promote the safe and orderly development of international civil aviation throughout the world.

ICAO sets the Standards and Recommended Practices (SARPs) necessary for aviation safety, security, efficiency and environmental protection on a global basis. ICAO serves as the primary forum for co-operation in all fields of civil aviation among its 191 Member States.

Improving the safety of the global air transport system is ICAO's guiding and most fundamental Strategic Objective. The Organization works constantly to address and enhance global aviation safety through the following coordinated activities:

Policy and Standardization initiatives.
Monitoring of key safety trends and indicators.
Safety **Analysis**.
Implementing programmes to address safety issues.

In every case, these activities are augmented by ICAO's detailed appraisal of global and regional aviation safety metrics on the basis of established risk management principles — a core component of contemporary State Safety Programmes (SSP) and Safety Management Systems (SMS). Applying these principles in the field of aviation safety requires ICAO to pursue a strategy comprised of proactive and reactive safety analysis and risk management processes.

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In all of its coordinated safety activities, ICAO strives to achieve a balance between assessed risk and the requirements of practical, achievable and effective risk mitigation strategies.

This report provides updates on safety indicators including accidents occurring in 2013 and related risk factors, taking as a benchmark the analysis in previous reports.

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Note:

The United Nations' definitions of regions are used in the report and are listed in Appendix 2. This document focuses primarily on scheduled commercial flights. The scheduled commercial flights data was based on the Official Airline Guide (OAG) combined with internal ICAO preliminary estimates.

Contents

Executive Summary

Scheduled commercial international and domestic operations accounted for approximately 3.1 billion passengers in 2013, up from 2.9 billion passengers in 2012. Total scheduled passenger traffic included approximately 32.1 million sectors flown.

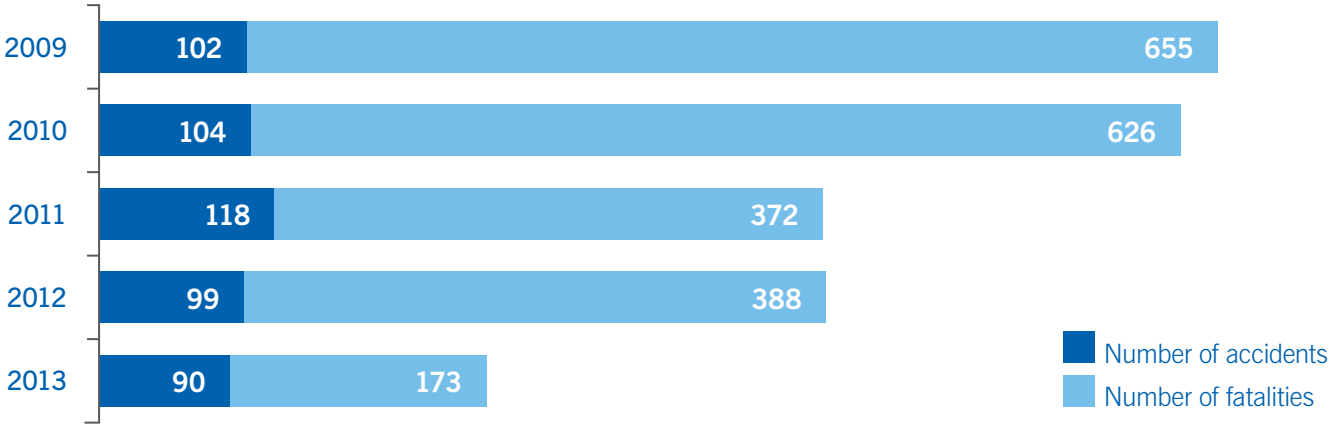
The year-over-year accident statistics indicate a reduction in the overall number of accidents as well as the accident rate, a positive trend for air transportation safety. Compared to 2012, the number of accidents (as defined in ICAO Annex 13 involving aircraft with a maximum certificated take-off weight of over 5700kg and reviewed by the ICAO Safety Indicators Study Group) decreased by 10% in 2013. In addition, the global accident rate involving scheduled commercial operations decreased by 13%, from 3.2 accidents per million departures in 2012 to 2.8 accidents per million departures in 2013.

The 173 fatalities in 2013 represent the fewest number of fatalities in commercial scheduled air transport since the year 2000. When compared to previous years, the number of fatalities in 2013 represent a decrease of 53% from 2012 and is 65% below the average number of fatalities over the previous five year period.

The aviation community remains focused on achieving the highest level of cooperation among the various stakeholders. To keep pace with expansion and progress sector-wide, ICAO continues to promote the implementation and development of new safety initiatives. The Runway Safety Programme and Fatigue Risk Management Systems are examples of how ICAO is working with stakeholders to identify hazards and manage risk.

ICAO is committed to improving aviation safety and enabling seamless co-operation and communication between stakeholders. ICAO continues to collaborate with established regional organizations, such as Regional Aviation Safety Groups (RASGs) and Regional Safety Oversight Organizations (RSOOs), and to promote the training and support necessary to address emerging safety issues.

Accident Records: 2009–2013 Scheduled Commercial Flights



The Bottom Line

The marginal growth in traffic experienced in 2013 was coupled with a decline in the number of accidents, resulting in an accident rate of 2.8 per million departures — a 13% decrease compared to the previous year and the second consecutive year in which significant reductions have been achieved. The RASG-AFI region experienced a single fatal accident in 2013 and fatalities in RASG-AFI were reduced by a factor of 5 compared with 2012.

ICAO is working in partnership with the international aviation community to achieve future safety improvements, with an emphasis to improve safety performance in those regions experiencing significantly higher accident rates or having specific safety challenges. This report provides a summary of key indicators with reference to the 2009–2013 benchmark period.

Safety Oversight

USOAP Status

Each ICAO Member State should establish and implement an effective safety oversight system that reflects the shared responsibility of States and the broader aviation community, to address all areas of aviation activities. The Universal Safety Oversight Audit Programme (USOAP) measures the effective implementation of protocols that cover the entire spectrum of a State's civil aviation oversight activities.

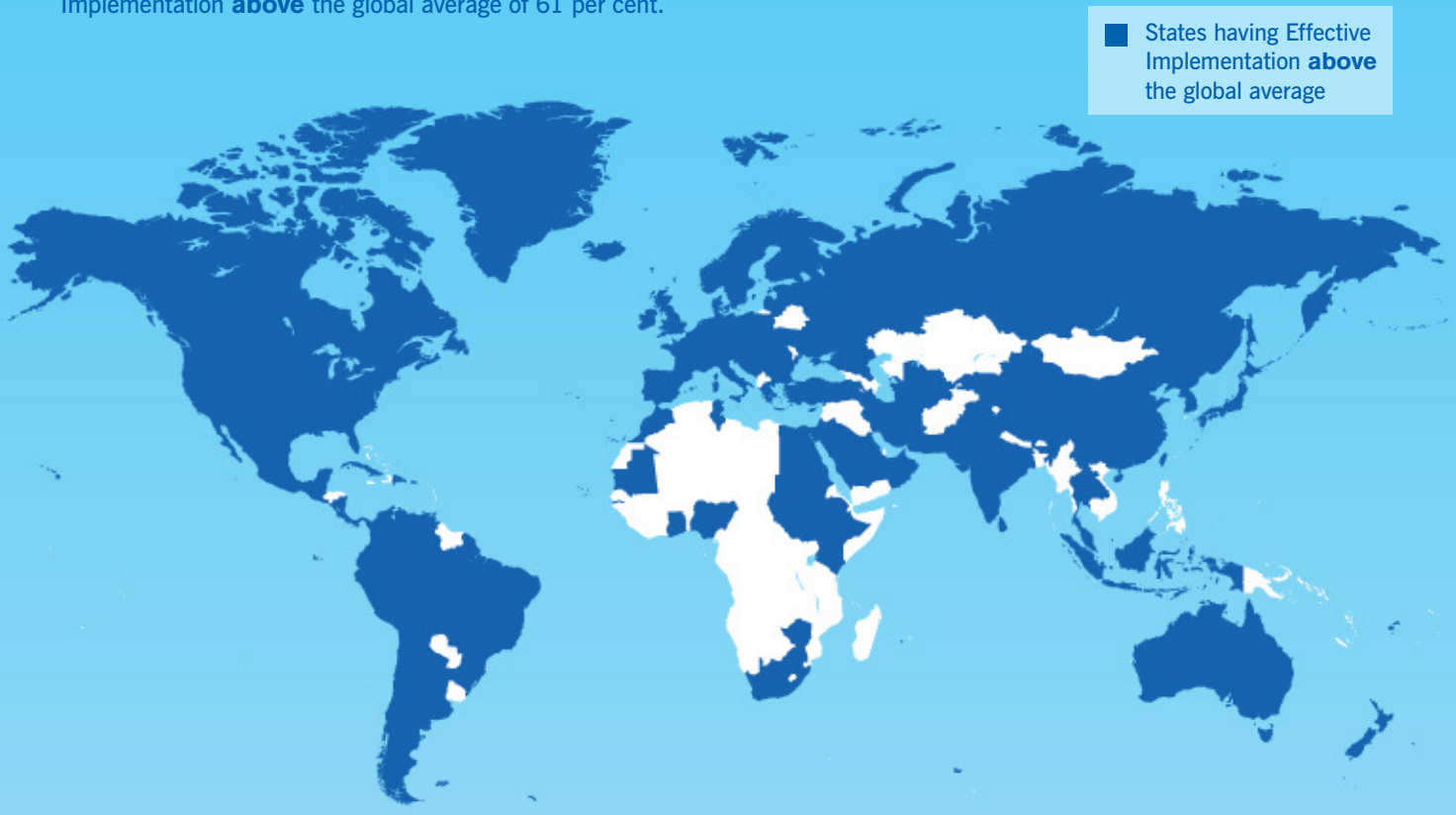
To standardize the conduct of audits conducted under USOAP, ICAO has established protocol questions that are based on the Chicago Convention, SARPs established in the safety-related Annexes to the Convention, as well as associated ICAO guidance material including, but not limited to, the ICAO Safety Oversight Manual (Doc 9734—*The Establishment and Management of a State's Safety Oversight System) and Safety Management Manual* (Doc 9859 Safety Management Manual, 3rd ed)

Each audit protocol is a comprehensive checklist covering all areas of a State's safety oversight system subject to the USOAP audit process. Using the audit protocol as a guideline, ICAO is then able to determine a State's capability for safety oversight.

Average Effective Implementation in Percentage of Safety Oversight Systems by Area

USOAP State Performance

States, listed in alphabetical order, having Effective Implementation **above** the global average of 61 per cent.



Argentina
Armenia
Australia
Austria
Bahrain
Belgium
Belize
Bolivia (Plurinational State of)
Bosnia and Herzegovina
Brazil
Brunei Darussalam
Bulgaria
Canada
Cape Verde
Chile
China
Colombia
Costa Rica
Croatia
Cuba
Cyprus
Czech Republic
Democratic People's Republic of Korea
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Estonia
Ethiopia
Fiji
Finland
France
Gambia
Germany
Ghana
Greece
Guatemala
Honduras
Hungary
Iceland
India
Indonesia
Iran (Islamic Republic of)
Ireland
Israel
Italy
Japan
Jordan
Kenya
Kuwait
Kyrgyzstan
Lao People's Democratic Republic
Latvia
Lithuania
Luxembourg
Malaysia
Malta
Mauritania
Mexico
Mongolia
Montenegro
Morocco
Netherlands
New Zealand
Nicaragua
Nigeria
Norway
Oman
Pakistan
Panama
Peru
Poland
Portugal
Republic of Korea
Romania
Russian Federation
Saudi Arabia
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sri Lanka
Sudan
Sweden
Switzerland
Thailand
Togo
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Uzbekistan
Venezuela (Bolivarian Republic of)
Zimbabwe

Accident Statistics

ICAO's primary indicator of safety in the global air transport sector, is the accident rate based on scheduled commercial operations involving aircraft having a Maximum Take-off Weight (MTOW) above 5700 kg. Aircraft accidents are reviewed by the ICAO Safety Indicators Study Group and categorized using the definition provided in Annex 13 to the Chicago Convention—*Aircraft Accident and Incident Investigation*.

Exposure data is comprised of scheduled commercial operations that involve the transportation of passengers, cargo and mail for remuneration or hire, and is a preliminary estimate solely for the calculation of the accident rates. Figures by ICAO statistical region of airline registration are published in the ICAO Annual Report of the Council.

The chart below shows the accident rate trend (per million departures) over the previous five years, with 2013 having an accident rate of 2.8 accidents per million departures, the lowest recorded since ICAO began tracking the global accident rate.

Global Accident Rate (accidents per million departures)

Regional Accident Statistics

To further analyze the state of aviation safety, the accident data for scheduled commercial air transport is categorized according to Regional Aviation Safety Group regions. The table below provides insight into the state of aviation safety in different RASGs in the context of global outcomes.

While the RASG-AFI had the highest regional accident rate, it also accounted for the lowest percentage of global traffic volume. Furthermore, the RASG-AFI region experienced a single fatal accident in 2013. The distribution of accidents, fatal accidents and fatalities by RASG region is shown in the table below (page 9).

RASG-APAC saw a decrease in its accident rate in 2013, due mainly to the continuing growth in traffic in the region while the number of accidents increased slightly for the year. RASG-EUR saw a significant drop in its accident rate from 4.1 in 2012 to 2.7 in 2013, a 41% decrease. The RASG-MID region's performance was virtually the same as in 2012, with a slight rate decrease caused by higher traffic volume. Finally, RASG-PA experienced a small decrease in its accident rate, however fatal accidents and fatalities were higher than in 2012.

Please note that the RASG regions used in this report are indicated in Appendix 2.

RASG	Estimated Departures (in millions)	Number of accidents	Accident rate (per million departures)	Fatal accidents	Fatalities
AFI	0.7	9	12.9	1	33
APAC	8.6	19	2.2	1	49
EUR	7.9	21	2.7	2	71
MID	1.1	2	1.8	0	0
PA	13.8	39	2.8	5	20
WORLD	**32.1**	**90**	**2.8**	**9**	**173**

RASG	Share of Traffic	Share of Accidents
AFI	2%	10%
APAC	27%	21%
EUR	25%	23%
MID	3%	3%
PA	43%	43%

ICAO is also committed to working with its partners through the Global Safety Information Exchange (GSIE) to publish a harmonized accident analysis, based on common criteria. Details on the GSIE harmonized accident rate can be found later in this report. This rate is calculated using harmonized exposure data and accident criteria, and will therefore vary from the traditional ICAO accident rate.

GSIE Harmonized Accident Rate

In the spirit of promoting aviation safety, the Department of Transportation of the United States, the Commission of the European Union, the International Air Transport Association (IATA) and ICAO signed a Memorandum of Understanding (MoU) on a Global Safety Information Exchange (GSIE) on 28 September 2010 during the 37th Session of the ICAO Assembly. The objective of the GSIE is to identify information that can be exchanged between the parties to enhance risk reduction activities in the area of aviation safety.

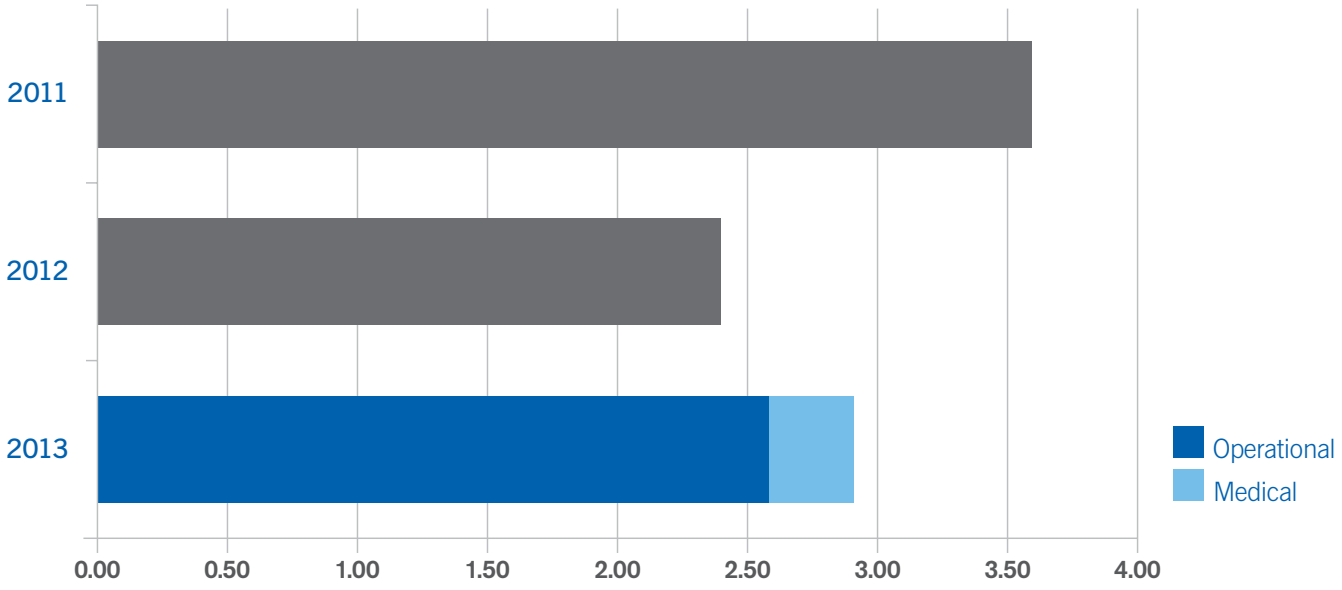
The GSIE developed a harmonized accident rate beginning in 2011. This was accomplished through close co-operation between ICAO and IATA to align accident definitions, criteria and analysis methods used to calculate the harmonized rate, which is considered a key safety indicator for commercial aviation operations worldwide. The joint analysis includes accidents meeting the ICAO Annex 13 criteria for all typical commercial airline operations for scheduled and non-scheduled flights.

For 2013, ICAO and IATA have further harmonized the accident analysis process and have developed a common list of flight phases and accident categories to facilitate the sharing and integration of safety data between the two organizations.

Analysis of Harmonized Accidents

A total of 103 accidents were considered as part of the harmonized accident criteria. These include scheduled and non-scheduled commercial operations, including ferry flights, for aircraft with a maximum certificated take-off weight above 5700kg. The GSIE harmonized accident rate for the period from 2011 (the first year the rate was calculated) to 2013 is shown below. New for 2013 is a breakdown of the rate in terms of the operational safety component, covering accidents involving damage to aircraft and the medical/injury component pertaining to accidents with serious or fatal injuries to persons but little or no damage to the aircraft itself.

GSIE Harmonized Accident Rate



Definitions and Methods

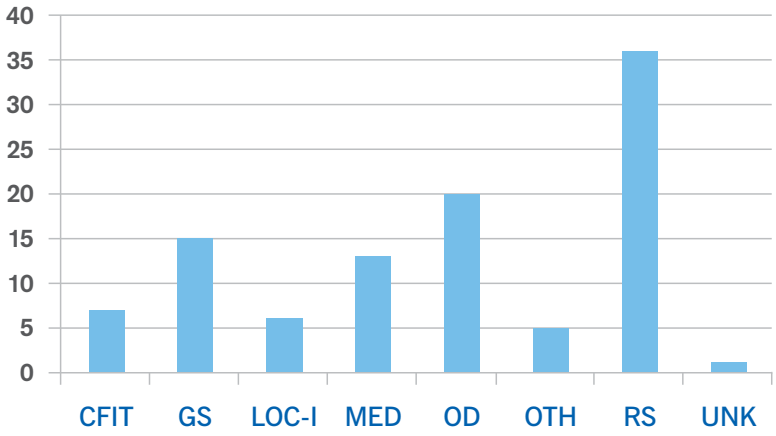
In order to build upon the harmonized accident rate presented in the last two safety reports, ICAO and IATA worked closely to develop a common taxonomy that would allow for a seamless integration of accident data between the two organizations. A detailed explanation of the harmonized accident categories and how the relate to the Commercial Aviation Safety Team/ICAO Common Taxonomy Team (CICTT) occurrence categories can be found in Appendix 3.

A common list was developed by ICAO and IATA using the CICTT Phases of Flight.

Harmonized Accident Categories

The fundamental differences in the approaches of the ICAO (CICTT Occurrence Categories) and IATA (Flight-crew centric Threat and Error Management Model) classification systems required the harmonization of accident criteria being used. The breakdown of accidents by harmonized category can be seen in the figure below.

Accidents by Category



Accident Categories

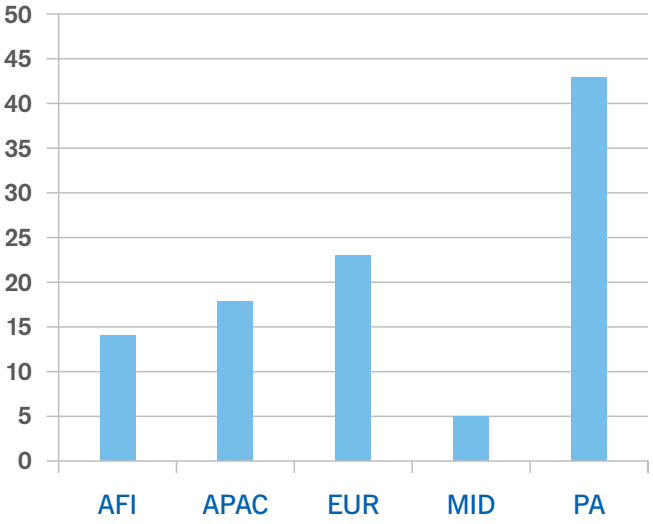
Controlled Flight into Terrain (CFIT)
Loss of Control in-Flight (LOC-I)
Runway Safety (RS)
Ground Safety (GS)
Operational Damage (OD)
Injuries to and/or Incapacitation of Persons (MED)
Other (OTH)
Unknown (UNK)

Full details of categories can be found in Appendix 3

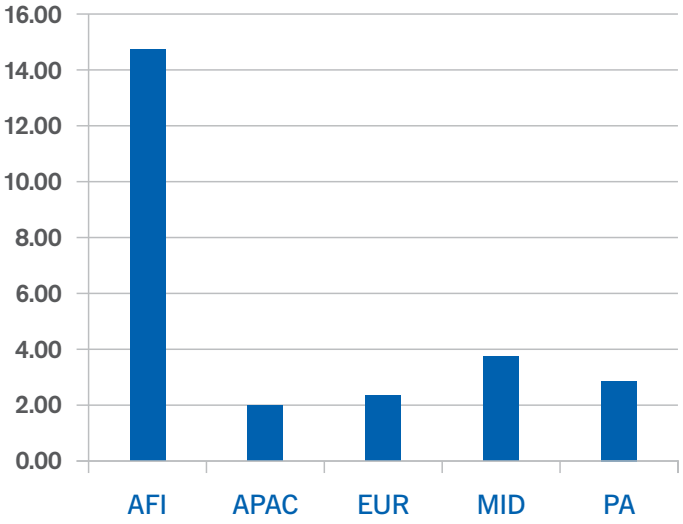
Accidents by Region of Occurrence

A harmonized regional analysis is provided using the ICAO Regional Aviation Safety Group regions. The number of accidents and harmonized accident rate by region are shown in the figure below:

Number of Accidents

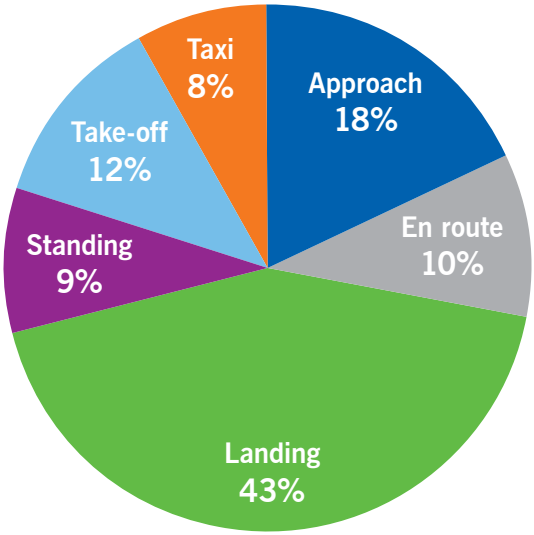


Accident Rate



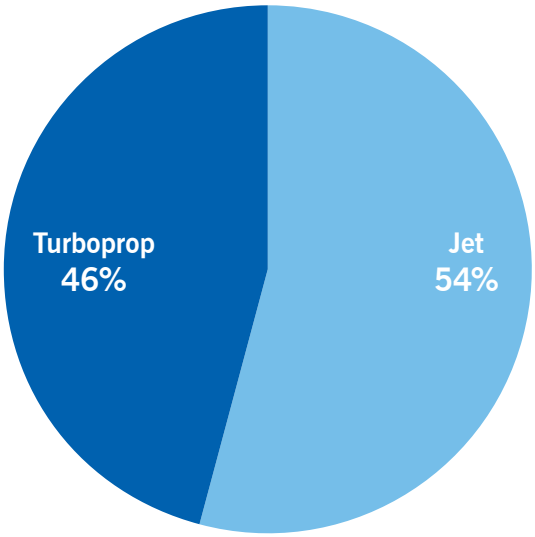
Phase of Flight

As mentioned earlier, the CICTT Phases of Flight are used for ICAO/IATA harmonized safety analysis. When evaluating the 103 accidents in 2013 by phase of flight, the following distribution is obtained:



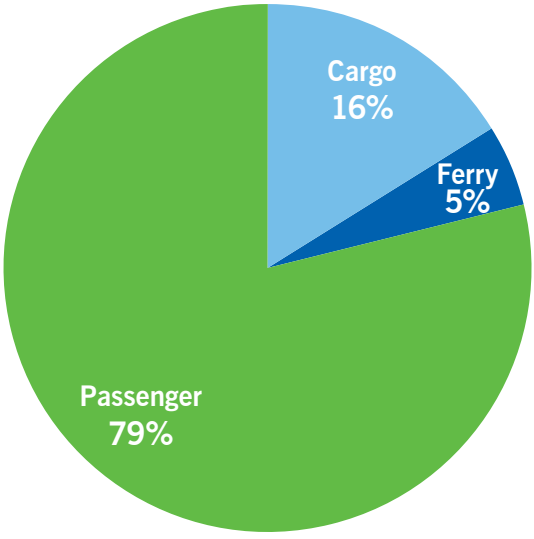
Aircraft Propulsion

The type of propulsion was also considered as part of the analysis. While 46% of accidents occurred to turboprop aircraft, they represent a much smaller percentage of the global commercial fleet than jet aircraft do.



Type of Service

The breakdown of accidents with respect to the type of service is shown below. The majority (79%) of accidents involved passenger flights, while cargo represented 16% of the harmonized accidents reviewed.



Future Development

Both ICAO and IATA continue to work closely together and, through their respective expert groups, provide greater alignment in their analysis methods and metrics for the future. This ongoing work will be shared with GSIE participants, States, international organizations and safety stakeholders in the interest of promoting common, harmonized safety reporting at the global level.

Focus on Small Aircraft

While the ICAO safety report has traditionally focused on large, commercial operations involving aircraft above 5700kg, aircraft below this mass limit are also an important part of commercial aviation. Analysis of data related to the operation of small aircraft is therefore an important component of annual safety reporting. Accordingly, the 2014 Safety Report is the first to include a section dedicated to the analysis of accidents involving aircraft below the 5700kg limit. It should be noted that, due to the limitations in acquiring data, only two regions are considered in this analysis.

Smaller aircraft are often used between regional airports in less densely populated areas, for cargo flights to more remote areas, and for service where sending larger aircraft would not be commercially viable. While the number of departures for smaller aircraft is harder to measure and is thus less reliable than data related to operations involving aircraft having a MTOW above 5700kg, the number of accidents are well documented. A summary of the accidents for fixed-wing aircraft with a maximum take-off weight of less than 5700kg, performing scheduled commercial operations are shown below:

ICAO Region	Number of accidents	Fatal accidents	Fatalities	% accidents	% fatal accidents	% fatalities
APAC	4	1	2	33%	17%	9%
NACC	8	5	20	67%	83%	91%
WORLD	**12**	**6**	**22**			

In the North America, Central America and Caribbean regions there were as many fatalities involving small aircraft as there were aircraft with a maximum take-off weight the exceeds 5700kg. This preliminary analysis has demonstrated that there is a significant need to consider small aircraft in statistical evaluations for flight safety. ICAO will continue to monitor this area in the future.

Success Stories

Assistance Success Stories

ICAO is committed to render assistance and advice to ICAO Member States in carrying out their safety oversight responsibilities. The Organization plays a pivotal role coordinating and building agreements with aviation safety partners to support ICAO's Member States to build their capacity to regulate and oversee civil aviation activities.

AFI Plan

The Comprehensive Regional Implementation Plan for Aviation Safety in Africa (AFI Plan) was established in January 2008 with the aim to support African States in addressing aviation safety deficiencies. The implementation of the AFI Plan is led by the ICAO Regional Offices in Dakar and Nairobi supported by ICAO Headquarters, member States and aviation safety partners.

In 2013, the 38th Session of ICAO Assembly acknowledged that actions taken by ICAO under the AFI Plan had begun to demonstrate positive progress in enhancing aviation safety in the continent. Taking into consideration the aviation safety targets adopted during the Ministerial Conference on Aviation Safety in Africa, held in Abuja, Nigeria, in July 2012, and endorsed by the Assembly of Heads of State and Government of the African Union in January 2013, the AFI Plan was also aligned with the aviation safety targets, resulting in an expansion of the Plan to include the technical areas of Air Navigation Services (ANS), Aerodromes and Ground Aids (AGA) and Aircraft Accident and Incident Investigation (AIG) while maintaining the primary focus on the areas of Personnel Licensing and Training (PEL), Aircraft Operations (OPS) and Airworthiness of Aircraft (AIR).

The AFI Plan has supported numerous initiatives to assist States in enhancing their civil aviation systems. 28 ICAO Plans of Action have been developed for States with Significant Safety Concerns and a low level of effective implementation of the critical elements of a safety oversight system with the objective of assisting those States in addressing their serious safety deficiencies in a prioritized manner. Assistance activities included in the Plans are performed by ICAO in conjunction with aviation safety partners, including the Africa-Indian Ocean Cooperative Inspectorate Scheme (AFI-CIS) missions implemented by the African Civil Aviation Commission (AFCAC).

In the area of training, the AFI Plan supported the establishment and evolvement of the Association of African Aviation Training Organisation (AATO) and continues to provide several courses and workshops. Assistance is also provided to States in their efforts to meet regional safety targets and address emerging safety issues. The Plan has promoted the establishment and strengthening of Regional Safety Oversight Organizations, such as the Banjul Accord Group Aviation Safety Organisation (BAGASOO) and the East African Community Civil Aviation Safety and Security Oversight Agency (CASSOA), as a means to facilitate the pooling of scarce resources.

These efforts have already shown tangible results. Congo, Guinea, Guinea-Bissau, Mali, Mozambique, Rwanda, Seychelles, Sudan and Zambia have addressed their Significant Safety Concerns; Mauritania and Sudan have met the target of 60 per cent of effective implementation of the critical elements of a safety oversight system and significant improvements were also noted by the Universal Safety Oversight Audit Programme (USOAP) in Benin and Madagascar. Although progress has been made and numerous actions have been undertaken to enhance safety in Africa, it should also be recognized that continuous support of ICAO, States, industry and donors will still be required for safety concerns to be fully addressed and resolved. The AFI Plan will continue to provide assistance to African States through ICAO and its aviation safety partners.

Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA)

In 2013, the 100th State/Territory joined CAPSCA (www.capsca.org). The CAPSCA programme has now completed 54 State and Airport Assistance Visits and trained 26 State personnel to participate as team members in the visits. Multi-sector regional meetings are organised annually in each of five regions. In 2013, the revised Universal Safety Oversight Audit Programme (USOAP) Protocol Questions incorporated public health related SARPs. The 2013 ICAO Assembly emphasized the significant benefits of CAPSCA to States, recognized ICAO's collaboration with the World Health Organization (WHO)

and twelve other UN Agency and Aviation International Organization partners in implementing the programme, supported ICAO to continue the CAPSCA programme, and encouraged States and international organizations to contribute to CAPSCA financially and/or in kind.

COSCAPs in Asia

There are three Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs) in the Asia-Pacific region: COSCAP South Asia, established in 1998 with 8 members (Nepal, Bhutan, India, Pakistan, Sri Lanka, Bangladesh, Maldives, Afghanistan); COSCAP North Asia, established in 2003 with 4 Members (China, Republic of Korea, Mongolia, Democratic People's Republic of Korea); and, COSCAP South East Asia, established in 1998 with 13 members (Thailand, Cambodia, Viet Nam, Lao, Myanmar, Indonesia, Malaysia, Hong Kong (SAR), Macao (SAR), Singapore, Brunei Darussalam, Philippines, Timor-Leste).

The primary objective of the Asian COSCAPs is to improve aviation safety and the key strengths of the COSCAPs are cooperation and efficiency. Each COSCAP is established under agreement between its respective Members, under the leadership of a Steering Committee comprised of the Directors General/Heads of Aviation for its Member's administration. The Steering Committee determines programme priorities, which are then managed by the Chief Technical Advisor. Core funding is provided by member contribution, which is administered by the ICAO Technical Cooperation Bureau (TCB) through trust funds, as well as funds provided by aviation safety partners. The COSCAPs focus on flight operations, continuing airworthiness, aerodrome, air navigation services and accident investigation.

Aviation safety partners, such as Airbus, Boeing and Transport Canada, have provided their technical experts at no charge to deliver training and participate in workshops and have generously provided both technical expertise and funding. The COSCAPs in Asia are truly cooperative in nature and practice, providing a forum and means for a broad cross-section of stakeholders to work collectively toward the common goal of improving aviation safety in the APAC Region.

ICAO Sample Law and Regulations

The USOAP Comprehensive Systems Approach (CSA) audits revealed a 28% global lack of effective implementation of ICAO Standards and Recommended Practices (SARPs) relating to Primary Aviation Legislation (CE 1) and 34% lack of effective implementation of SARPs relating to Specific Operating Regulations (CE 2). Recognizing that many States lacked the capability to develop adequate legislation and related regulations, the U.S. Federal Aviation Administration (FAA) developed in cooperation with ICAO in 1991 and published a Model Civil Aviation Safety Act and Regulations (MCARs). The MCARs however are not comprehensive because they do not include the technical areas of aerodromes (AGA), accident and incident investigation (AIG) and air navigation services (ANS). In order for ICAO to address the deficiencies identified by the USOAP as well as assist some States having difficulties developing their own legislation and regulations, ICAO developed Sample Law and Regulations in the areas of aerodromes (AGA), accident and incident investigation (AIG) and air navigation services (ANS), to complement the model regulations for PEL, OPS and AIR developed by the FAA. These documents are available as unedited documents on the ICAO public website at www.icao.int/safety/Implementation/.

Government Safety Inspector Training Programme

The USOAP has identified that many States lack qualified technical personnel to provide the necessary aviation safety oversight. As a result, in 1999, ICAO embarked on a partnership with the U.S. Federal Aviation Administration (FAA) for the development of training for Government Safety Inspectors. These training courses have been developed to provide inspectors with uniform skills and knowledge so that they can perform their jobs consistent with the Convention on International Civil Aviation and its Annexes. At the request of ICAO, these competency based training courses were developed by the FAA based on ICAO SARPs and relevant guidance materials, and use the Model Regulations and ICAO Course Development Methodology.

To meet the training demand for inspectors, the course materials have been distributed to some States' aviation training centers with the objective of establishing standardized Government safety inspector training capabilities within each ICAO region. Presently there are three courses that are provided in the areas of Airworthiness, Flight Operations and

Personnel Licensing. The regular provision of this training enhances the skills and knowledge of aviation personnel, thereby strengthening the oversight capacity of States and enabling them to rectify safety oversight deficiencies.

In order to enhance the training capability of inspectors in Africa, in cooperation with the FAA and the African CAA's, ICAO has established a cadre of ICAO recognized GSI instructors from the region that have the necessary skills and experience to teach these technical courses. These instructors will play an integral role in the conduct of GSI training and will help enhance aviation safety within the region.

RASG-MID

The Middle East Regional Aviation Safety Group (RASG-MID) was established in September 2011 and has successfully developed annual safety reports for the region. This group has contributed to the conduct of the first safety summit and developed a safety strategy for the Region. The actions taken by the RASG-MID have supported the improvement of the safety record in the Middle East. The accident rate in the Region has been decreasing continuously since 2009 from 11.78 accidents per million departures to 2.13 in 2013, with no fatal accidents in the region in 2013. The average USOAP effective implementation of the critical elements of a safety oversight system of audited States in the MID Region is 70%, which is above the World average 62 %. 10 States out of the 13 audited States have an overall EI over 60%.

In addition, this initiative has supported the successful certification of international aerodromes in 5 States and 3 States have already established Runway Safety Teams (RSTs) in the main aerodromes.

RASG-PA

The Regional Aviation Safety Group – Pan America (RASG-PA), initiative led by the ICAO Regional Office in Mexico City, was established in November 2008 in accordance with Global Aviation Safety Plan, which identified the need to establish a regional focal point to coordinate regional safety programs both within and across regions. RASG-PA has become the focal point for harmonization of safety efforts in the Pan American Region. Using 2010 as a baseline, RASG-PA initiatives have reduced the fatal accident risk for Part 121 or equivalent operations in the CAR/SAM Regions by approximately 24%. RASG-PA has developed and delivered numerous safety enhancement initiatives with associated detailed implementation plans and safety seminars aimed at the top three aviation risk areas in the region, namely runway excursions, loss of control in-flight, and controlled flight into terrain. RASG-PA membership includes representatives from all NAM/CAR/SAM Regions States/Territories, ICAO, international organizations and industry. RASG-PA success is based on a data-driven approach and the collaboration of all aviation stakeholders. More detailed information can be found on the RASG-PA website www.rasg-pa.org.

State-to-State Assistance

The cooperative spirit of ICAO's Member States has been consistently demonstrated through financial and technical assistance projects that have succeeded in raising the level of aviation safety. The following represent a cross-section of some of the State-to-State assistance success stories that have resulted in positive aviation safety outcomes.

Australia

Five Australian government agencies are involved in programmes of co-operation and assistance with States in the Asia Pacific region, in particular with Indonesia and Papua New Guinea. These agencies are the Department of Infrastructure and Regional Development, the Civil Aviation Safety Authority, the Australian Transport Safety Bureau, Airservices Australia and the Australian Maritime Safety Authority. The co-operation and assistance programmes enhance regional aviation safety through training, mentoring, and capacity building activities. Australia actively supports the Pacific Aviation Safety Office (PASO), a cooperative regional safety oversight organization created to assist its Member States in meeting international obligations. As a non-voting member on the PASO Council, Australia is providing support and practical assistance to the Organization.

Canada

Canada believes that supporting regional initiatives is an ideal method of building capacity and extending the outreach of its assistance resources. Through the ICAO Technical Cooperation Bureau, Canada participates in the ICAO Co-operative Development of Operation Safety and Continuing Airworthiness Programmes (COSCAP) as a financial and in-kind contributor, with its latest efforts focused on North Asia (NA). Since 2005, Transport Canada

Civil Aviation (TCCA) has contributed more than 1 million USD to this programme. As an in-kind contributor, TCCA employees have been working in cooperation with the COSCAPs, collaborating with COSCAP-NA and the COSCAP in South East Asia (SEA). Canada has also provided training in different regions, including regular training by a dangerous goods specialist. Canada subject matter experts are assigned to various locations as opportunities arise. Most recently, in January 2014, TCCA provided a Civil Aviation Medical Examiners (CAME) seminar for the Caribbean Aviation Safety and Security Oversight System (CASSOS). Foreign civil aviation authorities also meet with TCCA to share information on a variety of aviation safety topics.

Latvia

The Civil Aviation Agency of Latvia has been involved in the capacity building and assessment activities of the European Commission within the framework of existing partnership agreements between the European Union and its Member States and the neighbouring countries of the EU. The Deputy Head of Aviation Security Department has participated since 2010 in several expert missions on the implementation of EU aviation legislation in the context of the European Civil Aviation Area Agreement to the following States: Albania, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia, Kosovo, Montenegro and Serbia.

Latvia has also been involved in ICAO's technical cooperation project in Kazakhstan. The Head of Training and Examination Section has worked as an ICAO Personnel Licensing Expert (OPAS) during six months in 2013, to support Kazakhstan's removal from the EU Safety List. During this project, Latvia also advised and assisted Kazakhstan in drafting procedures and guidance for issuance of licenses, ratings and certificates; the designation of organizations and/or individuals for licensing related tasks; and the establishment of a formal training programme for personnel licensing staff. Latvia is member of the Rotation Agreement for Representation on the ICAO Council of NORDIC States on the ICAO Council.

The Netherlands

The Netherlands Ministry of Infrastructure and the Environment has financed a programme to improve aviation safety in the East African Community (Kenya, Tanzania, Uganda, Burundi and Rwanda). In 2013, the programme's main areas of focus were the improvement of language skills by offering an Aviation English course, the improvement of the safe use of airports concentrated on a yearly rescue and firefighting training and a training on Runway Safety. Through participating organizations, the programme also contributed to maturing safety management systems in the African region, focusing on safety policy and objectives as well as safety promotion components. This was mainly done by supporting the organization of a safety seminar in Africa.

Another area of focus is the improvement of aviation safety in the Caribbean part of the Kingdom of the Netherlands, where several missions were conducted by the Ministry to the Civil Aviation Authorities of Curaçao and Sint Maarten to improve their organization and develop regulations and procedures for civil aviation. The Ministry organized a seminar in 2013 on regional cooperation, with the involvement of EASA, CASSOS and the ICAO Regional Office.

Romania

In November 2013, an ICAO European Regional Medical Seminar/Workshop was held in Bucharest, Romania, organized by ICAO together with the Romanian Civil Aviation Authority, in cooperation with the National Institute of Aeronautical and Space Medicine. This event brought together more than 70 participants from 16 States, representatives of national aviation authorities, aeromedical examiners, airlines, air traffic services providers and airports. This event was the first Seminar/Workshop held on the medical field in Europe in the last decade. The main topics discussed were the ICAO medical certification requirements and the CAPSCA Programme.

Also, two ICAO safety management system (SMS) training courses took place in Bucharest, Romania, in April and September 2013, which benefitted safety practitioners in the region. Romania is member of the Rotation Agreement for Representation on the ICAO Council of the Central European Rotation Group (CERG).

Singapore

Through the Singapore Aviation Academy (SAA), an ICAO TRAINAIR *PLUS* Programme Full Member and an ICAO Government Safety Inspector (GSI) training center, Singapore has provided training to over 80,000 personnel from 200 countries and territories. Of these, more than 6,000 from over 170 countries have attended SAA programmes under fellowships provided by the Singapore Government. An active member of COSCAP-SEA, Singapore has contributed more than USD 1 million towards training and technical

assistance to enhance aviation safety in the region. In addition, Singapore has provided technical expertise to ICAO for the development and enhancement of standards and recommended practices in aviation safety.

United Arab Emirates

Through the General Civil Aviation Authority (GCAA), the United Arab Emirates (UAE) has contributed to better coordination of accident and incident investigation activities in the Middle East and Arab Civil Aviation Commission (ACAC) States. Three workshops on this subject were held in 2012 and 2013 attended by officers representing Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Saudi Arabia, Tunisia, and UAE; as well as the following aviation safety partners: Airbus, ACAC, Boeing, COSCAP-GS, IATA, ICAO, Air Accident Investigation-Singapore. These activities led to the establishment of the Middle East and North Africa Society of Air Safety Investigators (MENASASI), affiliated as a regional chapter of the International Society of Air Safety Investigators (ISASI), which held its inaugural workshop on 27 May 2013. This initiative is intended to promote the spirit of cooperation and work in proactively establishing effective cooperation in air accident investigation across the Middle East and ACAC States.

United States

The U.S. Trade and Development Agency (USTDA) has entered into bilateral agreements with China, India and Brazil for technical cooperation in the aviation sector, supporting airport expansion, airspace management and safety. The 2013 U.S.-China Aviation Symposium served as a technical, policy and commercial forum to assist the Civil Aviation Authority of China and other Chinese aviation industry representatives in identifying advanced U.S. technologies that best suit their infrastructure modernization needs. Topics at this summit included air traffic management and safety, the future of airports, general aviation cooperation, energy conservation, emissions reduction and air carrier priorities. In India, USTDA supported a Performance Based Navigation project to assist the Airports Authority of India in adopting technologies to increase aviation airspace capacity and energy efficiency. USTDA also supported the second phase of the Technical, Management and Operational Development Training Program with India's Directorate General of Civil Aviation (DGCA) to offer industry-based training to enhance DGCA's regulatory and safety capacities. In the Latin America and Caribbean region, USTDA launched Phase I of the U.S.-Brazil Aviation Partnership, which aims to familiarize Brazilian aviation sector officials with U.S. aviation technologies and best practices through a series of workshops and training activities. USTDA also commenced Phase I of the U.S.-South Africa Aviation Training Program in 2013. This series of aviation sector training activities supports the growth of safe and reliable aviation services in South Africa through the development of critical human capacity resources, as well as closer commercial partnerships between the U.S. and South African aviation sectors.

In 2013, under the Safe Skies for Africa (SSFA) Program, the FAA Academy continued a wide range of training activities focused primarily at three Regional Safety Oversight Organizations (RSOOs)/Co-operative Development of Operation Safety and Continuing Airworthiness Programmes (COSCAPs) in Africa, including CASSOA, COSCAP-SADC (future RSOO-SASO), and BAGASOO. As part of a multi-year package, FAA Academy hosted several in-region training courses on safety management systems, instructor training systems, and resolution of safety concerns (a compliance and enforcement course). These courses came with follow-up technical assistance that ensures each member Civil Aviation Authority can adequately integrate the material into their procedures and operations. Additionally, the FAA Academy continues to work with ICAO, the Next Generation of Aviation Professionals group, and the Africa Association of Aviation Training Organizations (AATO) to expand the footprint of the SSFA program.

Manufacturers

Aircraft manufacturers contribute significantly to global aviation safety programmes. The following summarizes the contributions of Boeing to recent safety-related challenges.

Boeing

Boeing has entered into a Memorandum of Agreement with the government of Indonesia to cooperate in the regulatory, industrial, infrastructure and personnel development as well as safety and operational assessments. Boeing regulatory affairs representatives work with the Indonesian Civil Aviation Authority in regaining FAA International Aviation Safety Assessments (IASA) Category 1 status. Similarly, Boeing supported Ethiopia in maintaining a FAA IASA Category 1 rating and is assisting India with the goal of restoration their Category 1 ranking before the end of 2014.

Boeing delivers in-kind support for COSCAPs in Asia, Africa, and the Middle East by sending subject matter experts to conduct training activities on aviation safety topics and has contributed funds to the voluntary Safety Fund (SAFE) to support ICAO-led projects to improve aviation safety in States. Assistance is also provided to the RASGs by co-chairing industry-government sub teams in Asia and Pan America, with both financial and in-kind support and serving as a liaison with CAST to promote information sharing initiatives, having completed information sharing agreements between RASG-PA and CAST, as well as with RASG-APAC and CAST.

Investment Institutions

Investment institutions play an important role in raising global aviation safety levels, as evidenced by the following successes achieved through their support.

European Investment Bank

As the financing arm of the European Union (EU), the European Investment Bank (EIB) supports long-term investment projects both inside and outside Europe, including airport development projects, air traffic management programmes, aviation research and development, and in special circumstances, the acquisition of aircraft. The objectives of these projects are to increase service levels, improve compliance with aviation safety standards, enhance environmental performance and promote economic growth and development. As of 2012, the EIB is acting as the lead financier for the extension of the European Geostationary Overlay Service (EGNOS) coverage to L'Agence pour la Sécurité de la Navigation aérienne en Afrique et à Madagascar (ASECNA) area in Central and West Africa. The EIB is also currently assessing the possibility of financing an airfield upgrade project in Liberia and a safety critical equipment replacement project in Malawi. The EIB is also currently funding a study to look at how the barriers to greater liberalization of air services in Africa might be addressed.

World Bank Group

The World Bank Group is a source for financial and technical assistance to developing countries through low interest loans, grants and credits. In fiscal year 2013, the World Bank's Air Transport Portfolio was around US$1.36 billion. This included around 30 projects or project components in all six World Bank regions through the International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA), as well as the International Finance Corporation (IFC)'s portfolio of lending and investment advisories in the aviation sector.

Particular highlights in 2013 include the approval of a US$50 million IBRD loan to China to improve airline connectivity in the Northeastern Jiangxi Providence and to demonstrate the environmental sustainability of the development and operation of the Shangrao Sanqingshan Airport. Other major ongoing projects include the Pacific Aviation Investment Program, with current implementation covering Tonga, Kiribati, and Tuvalu. Subsequent phases will focus on Vanuatu, Samoa and the Solomon Islands. The World Bank also continues its active engagements in other regions, particularly in Africa, where it has ongoing commitments in Tanzania, Burkina Faso and the Democratic Republic of Congo.

Other Organizations

Additional stakeholders play a key role in enhancing aviation safety. Together they support the improvement of the global and regional air transport system.

AFCAC

In August 2011, the African Civil Aviation Commission (AFCAC), a specialized agency of the AU, launched the AFI-CIS project with technical support from ICAO. The aim of AFI-CIS is to create a pool of qualified and experienced aviation safety inspectors from within the AFI Region to provide assistance to African States in addressing their safety oversight deficiencies. AFI-CIS is focused on States with Significant Safety Concerns (SSCs) and with low effective implementation of safety-related standards. To date, 32 States have joined the AFI-CIS programme and 17 assistance missions have been conducted in 8 States. AFCAC has funded most of the missions and coordinates with COSCAPs and RSOOs to facilitate follow-up activities. The successful AFI-CIS contributed to the resolution of SSCs and/or improvement of the EI in certain African States.

AFCAC also organizes, coordinates and hosts meetings, courses and seminars on aviation safety, human resources development, regional challenges and initiatives in capacity building and security.

BAGASOO

The Banjul Accord Group Aviation Safety Oversight Organization (BAGASOO) is the outcome of a cooperative agreement between the Cape Verde, Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone to institutionalize the COSCAP Project. The objective is to enhance the safety and efficiency of air transport in the sub region by: establishing a regional core of highly qualified safety inspectors, serving as cost effective means for participating governments to meet international safety oversight obligations; providing on-site training of national inspectors; promoting harmonization of regulations and procedures; and coordinating technical assistance programmes for member States.

While BAGASOO still face financial challenges to sustain its operations, this Organization has managed to establish agreements with aviation safety partners. With the collaboration of FAA and support from the U.S. Safe Skies for Africa (SSFA) and EASA's Support to the Improvement of Aviation Safety in Africa (SIASA) programme, a total of 258 aviation personnel received training in the areas of Safety Management Systems (SMS), Inspector Training System (ITS), Resolution of Safety Concerns and AOC Operations Specifications. Assistance is provided to Guinea, Sierra Leone and Liberia to resolve their safety oversight deficiencies and in preparation for USOAP activities.

BAGASOO is also developing an array of aviation database applications for its member States, including an ITS database, the Inspector Training Records and Qualification System (ITRAQS), the Foreign Aircraft Safety Assessment Programme (FASAP), and the Work Tracking System (WTS) to support the implementation of the AFI-CIS.

CASSOA

The Civil Aviation Safety and Security Oversight Agency (CASSOA) provides a forum and coordinates activities as a Regional Safety Oversight Organization (RSOO) for the East African Community (EAC) Partner States (Burundi, Kenya, Rwanda, Tanzania and Uganda). CASSOA has steered the harmonization of Civil Aviation Regulations and technical guidance material on flight safety, aviation security, aerodromes, air navigation services and safety management systems. The Agency in partnership with EASA has installed the Safety Oversight Facilitated Integration Application (SOFIA) as a working tool for certification, licensing and inspection in all EAC Partner States. The EAC aviation examination system which will culminate in a common licensing process is in the final stages of realization with the role out in May 2014. The aviation technical experts sharing scheme within the East Africa region continues to yield tangible results. As a measure to address the challenges related to Aviation medicine in the region, the Centre for Aviation Medicine has been established with a temporary base at Entebbe, Uganda, and will ultimately relocate to Nairobi, Kenya. CASSOA maintains close liaison with the ICAO Regional Office for Eastern and Southern Africa.

IATA

Aviation supports nearly 7 million jobs in Africa. The continent's governments have much to gain from pursuing air transport growth and connectivity. But for a region where a number States still have safety deficiencies that pose a challenge to the growth of civil aviation, improved safety is central to that goal.

In May 2012, IATA, in collaboration with ICAO and a host of other organizations, committed to an Africa Strategic Safety Improvement Action Plan aimed at addressing safety deficiencies and strengthening regulatory oversight in the region by 2015. The safety plan was further enhanced by the commitment of Africa's Directors General of Civil Aviation and by the Extraordinary Session of the Conference of Ministers of Transport held in Abuja, Nigeria, July 2012. This commitment, has been formalized in a document referred to as the 'Abuja Declaration'. The Abuja Declaration sets a number of safety targets including a call for all African carriers to complete an IATA Operational Safety Audit (IOSA). IATA has furthermore committed to assisting 20 African operators in their preparation to achieve IOSA certification. In 2013, 10 operators received training while additional 10 operators were identified for same training in 2014.

At the global level, the IATA Global Aviation Data Management statistics show that runway safety remains an area of concern for the industry; while there is a downward trend in accidents overall, the trend for runway safety has remained relatively unchanged. IATA has been continuously involved in supporting the aviation industry and States in an effort to reduce the number of runway safety accidents and has developed a strategy to improve performance related to runway safety worldwide. IATA, as a partner in the ICAO-led Runway Safety Programme, has embarked on a series of programs to improve runway safety including:

- Outreach, awareness, lessons learned and shared information, focusing on runway safety issues, hazards, and mitigating risks;

- Studying and developing a common taxonomy for runway safety together with safety partners, in the view of developing key performance indicators;
- Working in close coordination with and supporting the activities related to ICAO Regional Aviation Safety Groups (RASGs) through the provision safety analysis; and
- Production and global distribution of the IATA/ICAO Runway Excursion Risk Reduction Toolkit.

WFP

As the world's leading humanitarian aviation service, the World Food Programme (WFP) managed United Nations Humanitarian Air Service (UNHAS) has direct access to a diverse global fleet from about 100 registered operators worldwide, and have more than 50 chartered airplanes and helicopters contracted on a daily basis, all ready for deployment upon request. Aid workers in the deep field, with no other means of transportation, rely on UNHAS to bring them to some of the world's most remote and isolated communities in need of humanitarian needs, where no other airline operates. WFP Aviation's objective of having safe air transport for humanitarian workers mean that WFP have to work closely with ICAO and other partners to improve safety in the developing countries where WFP manage and operate the humanitarian air service.

As capacity building to empower states and organization is a main goal of WFP; WFP Aviation Safety Unit, in collaboration with ICAO, continues to promote flight safety worldwide by conducting workshops, seminars, trainings and conferences, and by partnering with various aviation key stake holders such as ICAO regional offices, EASA, DFS, ICRC, FAA, FSF, IFALPA in addition to many civil aviation authorities and other partners from around the globe. This enables WFP to deliver and facilitate essential safety events that facilitates safety improvement in the developing countries, which includes the Global Humanitarian Aviation Conference, State Safety Program and Safety Management System trainings and workshops, and highly effective Safety Awareness campaigns in various parts of the world like Nepal, Sudan, Kenya, Afghanistan, Mexico, South Africa, United Arab Emirates, Jordan among many other countries.

Coordinating Global Assistance for Aviation's High-priority Safety Targets

Financial support or in-kind resources are essential to driving continued progress on global aviation safety targets – especially in least developed nations. ICAO coordinates assistance to States for safety project and programme implementation, supported by a global Safety Fund (SAFE) that manages voluntary contributions from donors.

If your State or donor organization wishes to assist ICAO and the aviation community to address serious safety deficiencies in States in need, please visit the SAFE website today or contact ICAO via the details provided below. No matter how large or how small your intended contribution, it's never too late to make safety your priority.

ICAO

SAFETY

www.icao.int/safety/scan/Pages/Safety-Fund-SAFE.aspx

safefund@icao.int

Appendix 1

Analysis of Accidents–Scheduled Commercial Air Transport

This Appendix provides a detailed analysis of accidents that occurred in 2013 as well as a review of accident statistics from the past five years.

The data used in this analysis are for operations involving aircraft providing scheduled commercial air transport having a maximum take-off weight exceeding 5700 kg.

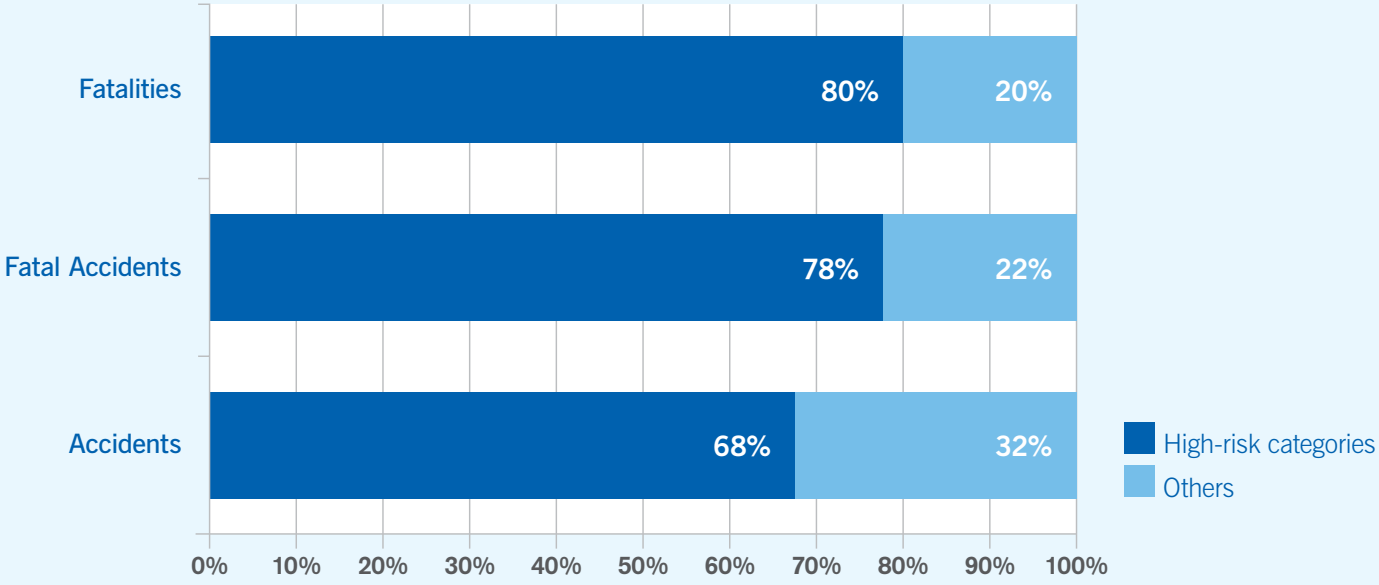
High-Risk Accident Occurrence Categories

Based on an analysis of historic accident data, ICAO identified three high-risk accident occurrence categories:

- runway safety related events[1]
- loss of control in-flight (LOC-I)
- controlled flight into terrain (CFIT)

ICAO uses these high-risk accident categories as a baseline in its safety analysis.

As the first chart below indicates, these three categories represented 68% of the total number of accidents, 78% of fatal accidents and 80% of all fatalities in 2013.

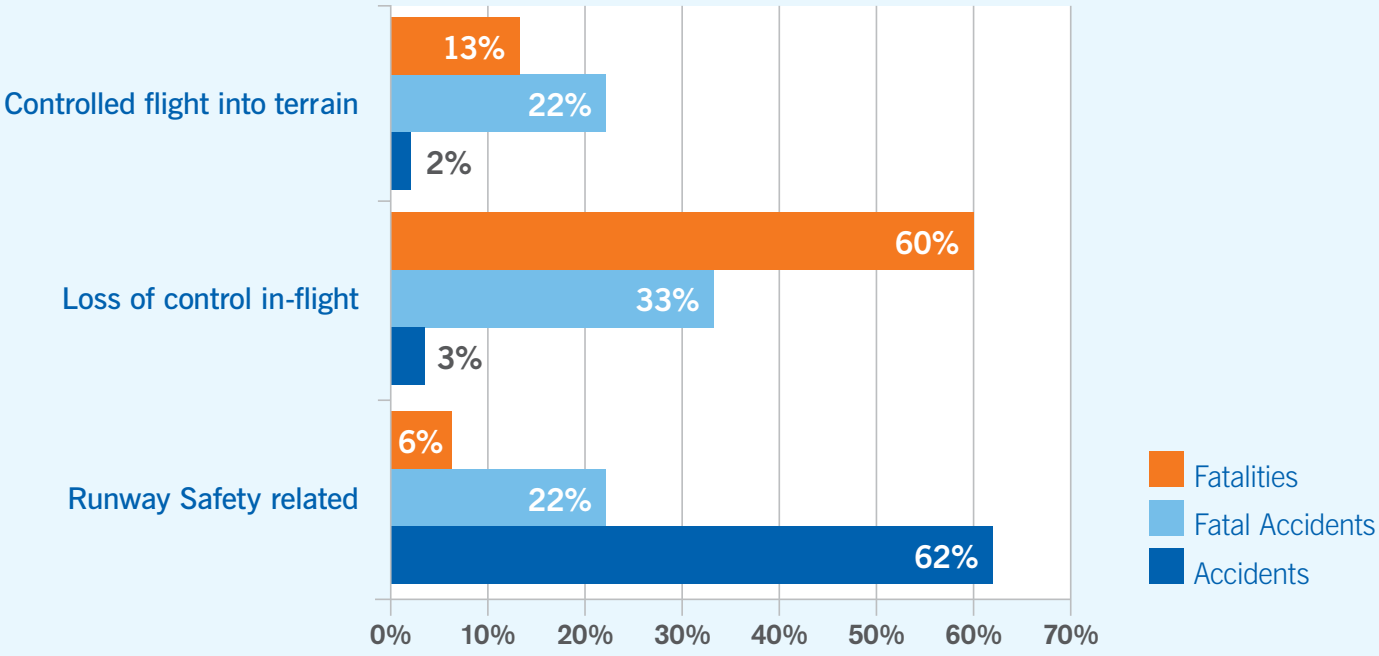


[1] Runway safety related events include the following ICAO accident occurrence categories: Abnormal Runway Contact, Bird strike, Ground Collision, Ground Handling, Runway Excursion, Runway Incursion, Loss of Control on Ground, Collision with obstacle(s), Undershoot / Overshoot, Aerodrome

The figure below provides a comparison of the distribution of accidents, fatal accidents and fatalities related to the three high-risk occurrence categories in 2013. Runway safety related accidents accounted for the majority of all accidents during 2013 (62%), but only 6% of all fatalities.

Notable observations from 2013 accidents include:

- Runway safety related accidents have a resulted in a relatively low number of fatalities, despite having the highest percentage of accidents.
- While the loss of control in-flight occurrence category represented only 3% of all accidents, this category is of significant concern as it accounts for 33% of all fatal accidents and 60% of all fatalities.
- CFIT accidents were responsible for 13% of fatalities recorded in 2013.



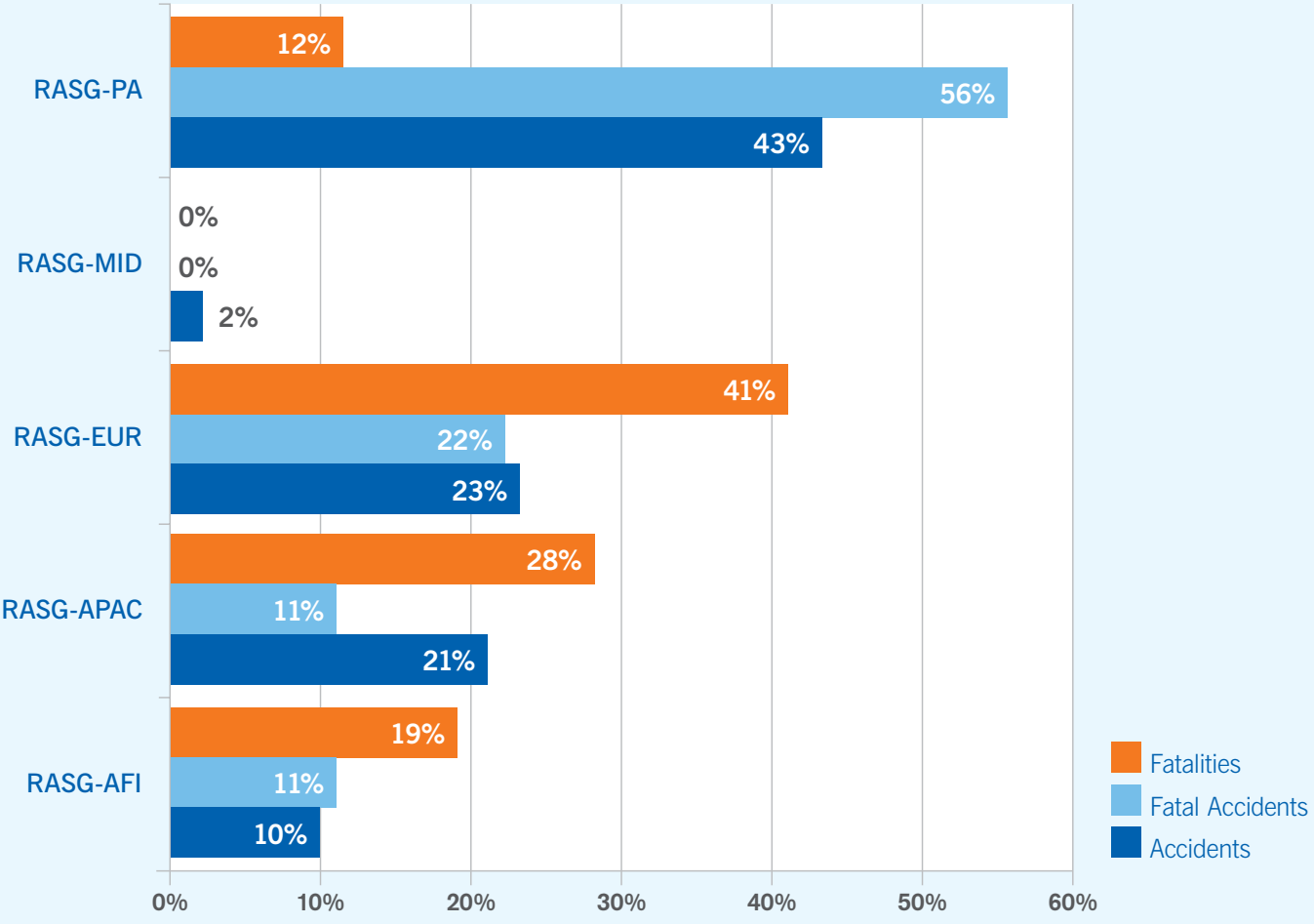
2013 Accidents by Region

The chart below indicates the percentage of accidents and related fatalities by RASG region.

The RASG-PA region is one of the largest regions geographically, and also represents the highest volume of air traffic flown globally. Therefore, the share of accidents is understandably higher than when compared to other regions. However, RASG-PA only represents 12% of all fatalities in 2013.

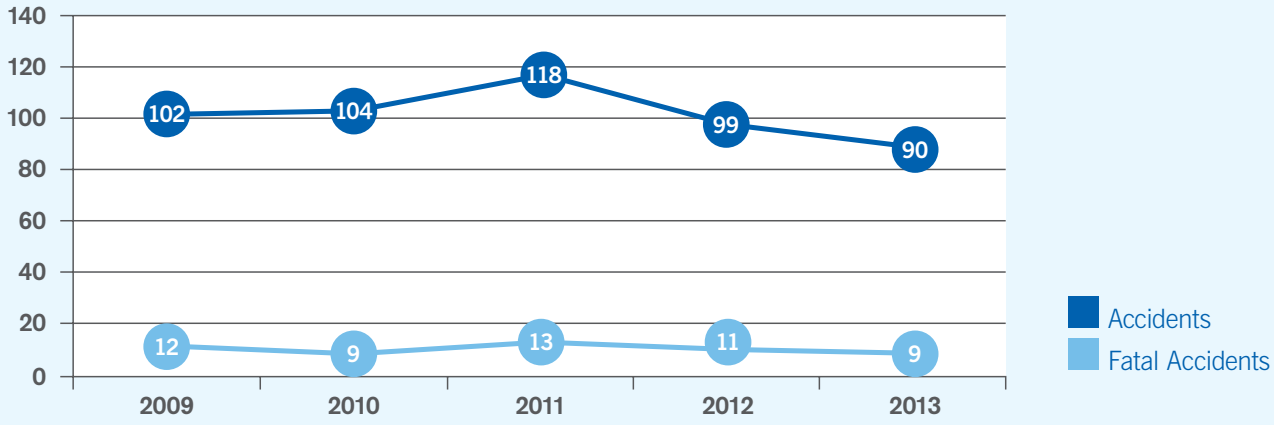
It is also notable that the RASG-MID region experienced no fatal accidents in 2013.

The composition of each RASG region can be found in Appendix 2.



2009–2013 Accident Trends

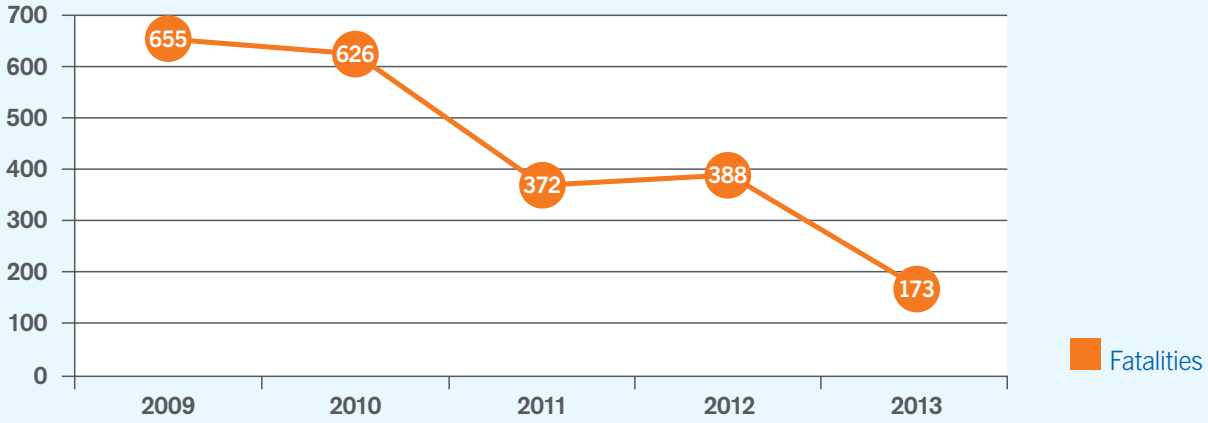
The chart below shows the number of total and fatal accidents on commercial scheduled flights during the 2009–2013 period.



The number of accidents experienced annually was generally stable from 2009 to 2012, varying between 99 and 126 per year, resulting in an equivalently stable accident rate of approximately 4 accidents per million departures until 2012 when the rate dropped to 3.2 accidents per million departures. There was a decrease in the number of accidents for 2013 with an accompanying reduction in the accident rate to 2.8 accidents per million departures.

2013 experienced a 10% year-over-year decrease in the total number of accidents in scheduled commercial air transport when compared to 2012. Meanwhile, traffic growth was essentially flat during the same period. As a result, the 2103 accident rate decreased to 2.8 accidents per million departures, a 13% decrease.

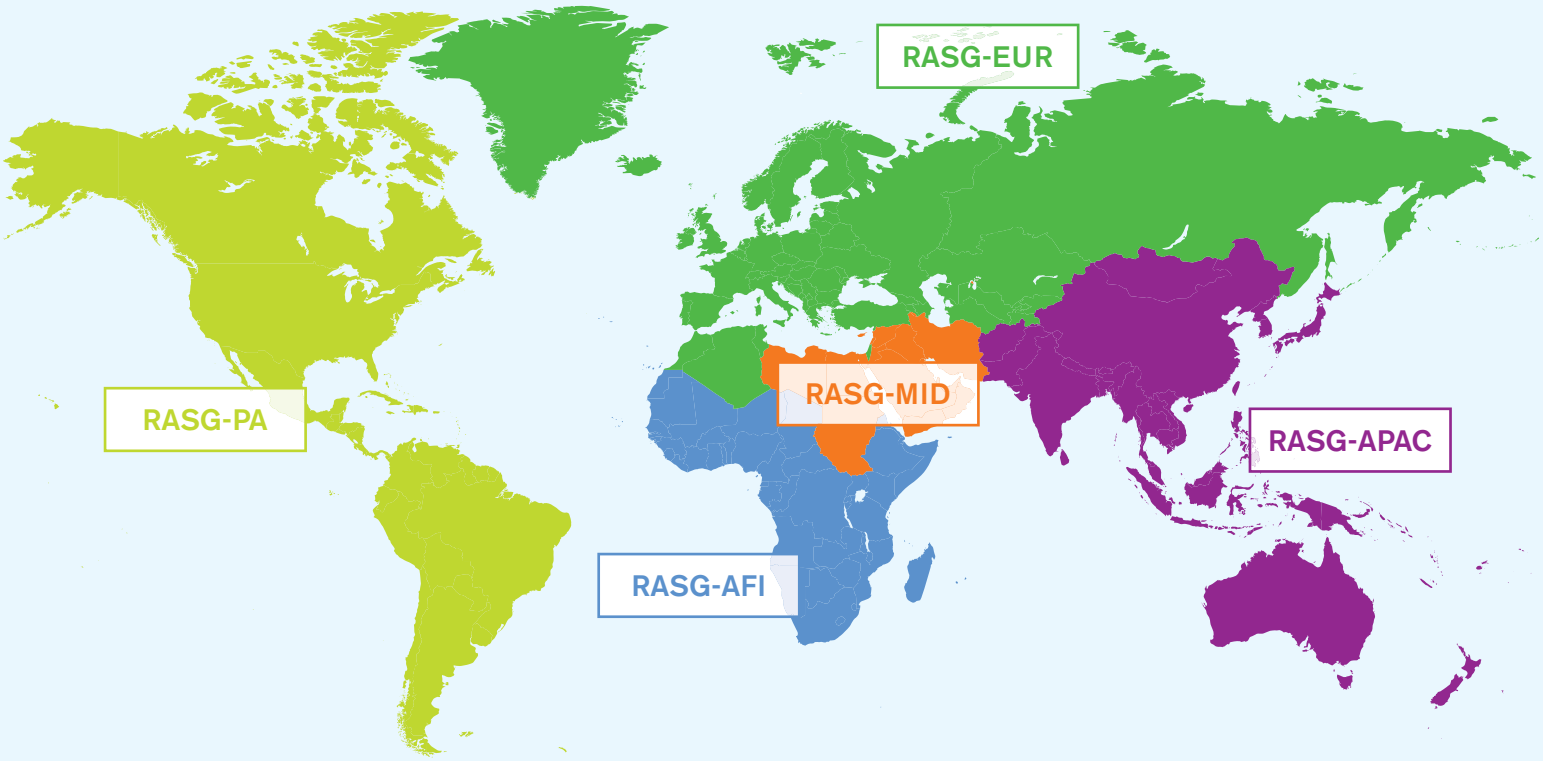
The chart below shows the number of fatalities associated with the above-mentioned fatal accidents.



Appendix 2

Regional Aviation Safety Group Regions

The assignment of countries or areas to specific groupings is for statistical convenience and does not imply any assumption regarding political or other affiliation of countries or territories by ICAO.



RASG-AFI

Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Congo
Côte d'Ívoire
Democratic Republic of the Congo
Djibouti
Equatorial Guinea
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
South Sudan
Swaziland
Togo
Uganda
United Republic of Tanzania
Zambia
Zimbabwe

RASG-APAC

Afghanistan
Australia
Bangladesh
Bhutan
Brunei Darussalam
Cambodia
China
Cook Islands
Democratic People's Republic of Korea
Federated States of Micronesia
Fiji
India
Indonesia
Japan
Kiribati
Lao People's Democratic Republic
Malaysia
Maldives
Marshall Islands
Mongolia
Myanmar
Nauru
Nepal
New Zealand
Pakistan
Palau
Papua New Guinea
Philippines
Republic of Korea
Samoa
Singapore
Solomon Islands
Sri Lanka
Thailand
Timor-Leste
Tonga
Tuvalu
Vanuatu
Viet Nam

RASG-EUR

Albania
Algeria
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Morocco
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
Tunisia
Turkey
Turkmenistan
Ukraine
United Kingdom of Great Britain and Northern Ireland
Uzbekistan

RASG-MID

- Bahrain
- Egypt
- Iraq
- Islamic Republic of Iran
- Jordan
- Kuwait
- Lebanon
- Libyan Arab Jamahiriya
- Oman
- Qatar
- Saudi Arabia
- Sudan
- Syrian Arab Republic
- United Arab Emirates
- Yemen

RASG-PA

- Antigua and Barbuda
- Argentina
- Bahamas
- Barbados
- Belize
- Bolivia
- Brazil
- Canada
- Chile
- Colombia
- Costa Rica
- Cuba
- Dominica
- Dominican Republic
- Ecuador
- El Salvador
- Grenada
- Guatemala
- Guyana
- Haiti
- Honduras
- Jamaica
- Mexico
- Nicaragua
- Panama
- Paraguay
- Peru
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- United States
- Uruguay
- Venezuela

Appendix 3

GSIE Harmonized Accident Categories

Category	Description
Controlled Flight into Terrain (CFIT)	Includes all instances where the aircraft was flown into terrain in a controlled manner, regardless of the crew's situational awareness. Does not include undershoots, overshoots or collisions with obstacles on take-off and landing which are included in Runway Safety.
Loss of Control in-Flight (LOC-I)	Loss of control in-flight that is not recoverable.
Runway Safety (RS)	Includes runway excursions and incursions, undershoot/overshoot, tailstrike and hard landing events.
Ground Safety (GS)	Includes ramp safety, ground collisions, all ground servicing, pre-flight, engine start/departure and arrival events. Taxi and towing events are also included.
Operational Damage (OD)	Damage sustained by the aircraft while operating under its own power. This includes in-flight damage, foreign object debris (FOD) and all system or component failures including gear-up landing and gear collapse.
Injuries to and/or Incapacitation of Persons (MED)	All injuries or incapacitations sustained by anyone in direct contact with the aircraft. Includes turbulence-related injuries, injuries to ground staff coming into contact with the aircraft and on-board incapacitations and fatalities not related to unlawful external interference.
Other (OTH)	Any event that does not fit into the categories listed above.
Unknown (UNK)	Any event whereby the exact cause cannot be reasonably determined through information or inference, or when there are insufficient facts to make a conclusive decision regarding classification.

Category	CICTT Occurrence Catogies	IATA Classification End States
Controlled Flight into Terrain (CFIT)	CFIT, CTOL	CFIT
Loss of Control in-Flight (LOC-I)	LOC-I	Loss of Control In-flight
Runway Safety (RS)	RE, RI, ARC, USOS	Runway Excursion, Runway Collision, Tailstrike, Hard Landing, Undershoot
Ground Safety (GS)	G-COL, RAMP, LOC-G	Ground Damage
Operational Damage (OD)	SCF-NP, SCF-PP	In-flight Damage
Injuries to and/or Incapacitation of Persons (MED)	CABIN, MED, TURB	None (excluded in IATA Safety Report)
Other (OTH)	All other CICTT Occurrence Categories	All other IATA end-states
Unknown (UNK)	UNK	Insufficient Information

Appendix 4

Table of Scheduled Commercial Accidents for 2013

Date	Aircraft Type	State of Occurrence	RASG Region	Fatalities	Accident Category
02/01/2013	Saab 340	Argentina	PA		RS
17/01/2013	BAe ATP	Germany	EUR		RS
17/01/2013	Boeing 777	United States of America	PA		RS
25/01/2013	McDonnell Douglas MD-11	United States of America	PA		RS
29/01/2013	Bombardier CRJ-200	Kazakhstan	EUR	21	CFIT
02/02/2013	ATR 72	Italy	EUR		RS
06/02/2013	Airbus A320	Tunisia	EUR		RS
09/02/2013	Beechcraft 1900	Canada	PA		RS
11/02/2013	Boeing 737	Oman	MID		SCF
13/02/2013	Airbus A330	China	APAC		TURB
19/02/2013	Boeing 747	United States of America	PA		TURB
19/02/2013	Embraer ERJ-145	United States of America	PA		OTH
05/03/2013	ATR 72	France	EUR		RS
07/03/2013	Boeing 757	United States of America	PA		RS
20/03/2013	Boeing 777	Zambia	AFI		RS
05/04/2013	Airbus A321	United States of America	PA		RS
07/04/2013	Boeing 737	Indonesia	APAC		RS
13/04/2013	Boeing 737	Indonesia	APAC		RS
16/04/2013	Boeing 767	Spain	EUR		RS
28/04/2013	Bombardier Dash 8	Canada	PA		RS
28/04/2013	Boeing 777	Saudi Arabia	MID		RS
01/05/2013	Embraer ERJ-145	United States of America	PA		RS
09/05/2013	Airbus A320	United States of America	PA		OTH
11/05/2013	Bombardier CRJ-200	United States of America	PA		RS
11/05/2013	Embraer EMB-170	United States of America	PA		OTH
16/05/2013	Xian MA-60	Myanmar	APAC		RS
18/05/2013	Bombardier Dash 8	United States of America	PA		SCF

Date	Aircraft Type	State of Occurrence	RASG Region	Fatalities	Accident Category
24/05/2013	Airbus A319	United Kingdom	EUR		SCF
26/05/2013	Bombardier Dash 8	Canada	PA		RS
01/06/2013	Dornier 228	Nepal	APAC		RS
02/06/2013	Airbus A320	Philippines	APAC		RS
07/06/2013	Embraer ERJ-145	China	APAC		RS
08/06/2013	Airbus A320	Italy	EUR		RS
10/06/2013	Xian MA-60	Indonesia	APAC		RS
10/06/2013	Xian Y7	Myanmar	APAC		RS
13/06/2013	Saab 340	Bahamas	PA		RS
13/06/2013	McDonnel Douglas MD-88	United States of America	PA		RS
14/06/2013	Airbus A320	Germany	EUR		RS
14/06/2013	Boeing 727	Canada	PA		RS
26/06/2013	Bombardier CRJ-200	South Africa	AFI		SCF
02/07/2013	Airbus A340	Sri Lanka	APAC		RS
06/07/2013	Boeing 777	United States of America	PA	3	RS
12/07/2013	Boeing 777	United States of America	PA		TURB
18/07/2013	Boeing 737	Ireland	EUR		TURB
22/07/2013	Boeing 737	United States of America	PA		RS
28/07/2013	Boeing 777	France	EUR		F-NI
28/07/2013	Bombardier Dash 8	India	APAC		RS
29/07/2013	Saab 340	Congo, the Democratic Republic of	AFI		RS
31/07/2013	Boeing 737	Mexico	PA		TURB
31/07/2013	Boeing 737	Thailand	APAC		RS
04/08/2013	ATR 72	Spain	EUR		TURB
06/08/2013	Fokker F27	Sudan	AFI		RS
06/08/2013	Airbus A320	Czech Republic	EUR		RS
12/08/2013	Airbus A320	United States of America	PA		TURB
14/08/2013	Airbus A300	United States of America	PA	2	CFIT
19/08/2013	Douglas DC-3	Canada	PA		RS
20/08/2013	Swearingen Metro	Bolivia	PA		RS
30/08/2013	Airbus A380	China	APAC		TURB
01/09/2013	Beechcraft 1900	United States of America	PA		SCF
01/09/2013	Airbus A330	Brazil	PA		TURB
08/09/2013	Airbus A330	Thailand	APAC		RS
21/09/2013	Bombardier CRJ-200	Uganda	AFI		RS

Date	Aircraft Type	State of Occurrence	RASG Region	Fatalities	Accident Category
27/09/2013	Bombardier Dash 8	Switzerland	EUR		RS
27/09/2013	Let 410	Kenya	AFI		OTH
29/09/2013	Airbus A320	Italy	EUR		RS
29/09/2013	Bombardier Dash 8	United States of America	PA		TURB
06/10/2013	Saab 340	Thailand	APAC		RS
16/10/2013	ATR 72	Lao Peoples Democratic Republic	APAC	49	LOC-I
16/10/2013	Hawker Sideley HS.748	Canada	PA		SCF
16/10/2013	Boeing 767	United States of America	PA		TURB
19/10/2013	ATR 42	Papua New Guinea	APAC		RS
19/10/2013	BAe 146	Philippines	APAC		RS
20/10/2013	Boeing 757	Ireland	EUR		TURB
23/10/2013	Beechcraft 1900	United States of America	PA		SCF
25/10/2013	Fokker F27	France	EUR		SCF
03/11/2013	Swearingen Metro	Bolivia	PA	8	RS
07/11/2013	Embraer EMB-190	Argentina	PA		RS
10/11/2013	Swearingen Metro	Canada	PA	5	LOC-I
17/11/2013	Boeing 737	Russian Federation	EUR	50	LOC-I
24/11/2013	McDonnel Douglas MD-11	Brazil	PA		RS
24/11/2013	Bombardier Dash 8	United States of America	PA		RS
29/11/2013	Embraer EMB-190	Namibia	AFI	33	OTH
02/12/2013	Airbus A320	Argentina	PA		RS
02/12/2013	Swearingen Metro	United States of America	PA	2	SCF
03/12/2013	Airbus A320	United Kingdom	EUR		RS
03/12/2013	Bombardier Shorts 360	Guam	APAC		RS
05/12/2013	Boeing 767	Spain	EUR		RS
11/12/2013	ATR 72	Spain	EUR		OTH
22/12/2013	Boeing 747	South Africa	AFI		RS
19/12/2013	Boeing 737	Sudan	AFI		SCF

Accident Categories

Code	Description
CFIT	Controlled flight into/towards terrain
RS	Runway safety-related
LOC-I	Loss of control in-flight
F-NI	Fire – non-impact

Code	Description
TURB	Turbulence encounter
OTH	Other
UNK	Unknown
SCF	System component failure

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