

Statistical Summary of Commercial Jet Airplane Accidents

Worldwide Operations | 1959 – 2016



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Published by:

Aviation Safety
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www.boeing.com/news/techissues/pdf/statsum.pdf
July 2017

Introduction

The accident statistics presented in this summary are confined to worldwide commercial jet airplanes that are heavier than 60,000 pounds maximum gross weight. Within that set of airplanes, there are two groups excluded:

- 1) Airplanes manufactured in the Commonwealth of Independent States (CIS) or the Union of Soviet Socialist Republics (USSR) are excluded because of the lack of operational data.
- 2) Commercial airplanes operated in military service. (However, if a military-owned commercial jet transport is used for civilian commercial service, those data will be included in this summary.)

The following airplanes are included in the statistics:

707/720	717	A300	BAe146	F-28	Concorde	L-1011	BAC 1-11	Comet 4
727	DC-8	A300-600	Avro RJ-70/-85/-100	F-70				Trident
737	DC-9	A310	CRJ-700/-900/-1000	F-100				Caravelle
747	DC-10/MD-10	A320/321/319/318	C-Series					Mercure
757	MD-11	A330	EMB-170/-175					CV-880/-990
767	MD-80/-90	A340	EMB-190/-195					VC-10
777		A350						
787		A380						

Flight operations data for Boeing airplanes are developed internally from airline operator reports. Flight operations data for non-Boeing airplanes are compiled from www.ascendworldwide.com by Ascend. The source of jet airplane inventory data is Jet Information Services, Inc.

Accident data are obtained, when available, from government accident reports. Otherwise, information is from operators, manufacturers, various government and private information services, and press accounts.

Readers may note that cumulative accident totals from year to year may not exactly correlate with the expected change from the previous year's accidents. This is a result of periodic audits of the entire accident history for updates to the data.

Definitions related to development of statistics in this summary are primarily based on corresponding International Civil Aviation Organization (ICAO), U.S. National Transportation Safety Board (NTSB), and Flight Safety Foundation (FSF) terms, as explained in the next section.

Definitions

Airplane Accident

An occurrence associated with the operation of an airplane that takes place between the time any person boards the airplane with the intention of flight and such time as all such persons have disembarked, in which

- The airplane sustains substantial damage.
- The airplane is missing or is completely inaccessible.
 - An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.
- Death or serious injury results from
 - Being in the airplane.
 - Direct contact with the airplane or anything attached thereto.
 - Direct exposure to jet blast.

Excluded Events

- Fatal and nonfatal injuries from natural causes.
- Fatal and nonfatal self-inflicted injuries or injuries inflicted by other persons.
- Fatal and nonfatal injuries of stowaways hiding outside the areas normally available to the passengers and crew.
- Nonfatal injuries resulting from atmospheric turbulence, normal maneuvering, loose objects, boarding, disembarking, evacuation, and maintenance and servicing.
- Nonfatal injuries to persons not aboard the airplane.

The following occurrences are **not** considered airplane accidents: those that are the result of experimental test flights or the result of a hostile action, including sabotage, hijacking, terrorism, and military action.

Note 1: This is generally consistent with the ICAO and the NTSB definition of an accident (see the Referenced ICAO and NTSB Definitions section). The differences are

A) The ICAO and NTSB references to “aircraft” were changed to “airplane” and references to propellers and rotors were eliminated.

B) This publication excludes events that result in nonfatal injuries from atmospheric turbulence, normal maneuvering, etc.; nonfatal injuries to persons not aboard the airplane; and any events that result from an experimental test flight or from hostile action, such as sabotage, hijacking, terrorism, and military action.

Note 2: Within this publication, the term “accident” is used interchangeably with “airplane accident.”

Definitions

Destroyed

The estimated or likely cost of repairs would have exceeded 50 percent of the new value of the airplane had it still been in production at the time of the accident.

Note: This definition is consistent with the FSF definition. NTSB defines “destroyed” as damaged due to impact, fire, or in-flight failures to an extent not economically repairable.

Fatal Injury

Any injury that results in death within 30 days of the accident.

Note 1: This is consistent with both the ICAO and the NTSB definitions.

Note 2: External fatalities include on-ground fatalities as well as fatalities on other aircraft involved.

Major Accident

An accident in which any of three conditions is met:

- The airplane was destroyed.
- There were multiple fatalities.
- There was one fatality and the airplane was substantially damaged.

Note: This definition is consistent with the NTSB definition. It also is generally consistent with FSF, except that the FSF definition specifies that fatalities include only occupants of the airplane. ICAO does not normally define the term “major accident.”

Serious Injury

An injury that is sustained by a person in an accident and that

- Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received.
- Results in a fracture of any bone (except simple fractures of fingers, toes, or nose).
- Causes severe hemorrhage, nerve, muscle, or tendon damage.
- Involves injury to any internal organ.
- Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
- Involves verified exposure to infectious substances or injurious radiation.

Note: This is generally consistent with the ICAO definition. It is also consistent with the NTSB definition except for the last bullet item, which is not included in the NTSB definition.

Definitions

Substantial Damage

Damage or failure that adversely affects the structural strength, performance, or flight characteristics of the airplane, and that would normally require major repair or replacement of the affected component.

Substantial damage is **not** considered to be

- Engine failure or damage limited to an engine, if only one engine fails or is damaged.
- Bent fairings or cowlings.
- Dents in the skin.
- Small puncture holes in the skin.
- Damage to wheels.
- Damage to tires.
- Damage to flaps.
- Damage to engine accessories.
- Damage to brakes.
- Damage to wingtips.

Note 1: This definition is generally consistent with the NTSB definition of substantial damage except it (1) deletes reference to “small puncture holes in the fabric” and “ground damage to rotor or propeller blades,” and (2) deletes “damage to landing gear” from the list of items not considered to be substantial damage.”

Note 2: ICAO does not define the term “substantial damage.” Still, the above definition is generally consistent with the ICAO definition of damage or structural failure contained within part (B) of the ICAO accident definition.

Note 3: Boeing does not consider damage to be substantial if repairs to an event airplane enable it to be flown to a repair base within 48 hours of the event.

Boeing Terms

The terms on this page were created by Boeing for this publication and do not have corresponding equivalents in ICAO or NTSB.

Accident Rates

In general, this expression is a measure of accidents per million departures. Departures (or flight cycles) are used as the basis for calculating rates because there is a stronger statistical correlation between accidents and departures than there is between accidents and flight hours, or between accidents and the number of airplanes in service, or between accidents and passenger miles or freight miles. Airplane departures data are continually updated and revised as new information and estimating processes become available. These form the baseline for the measure of accident rates and, as a consequence, rates may vary between editions of this publication.

Airplane Collisions

Events involving two or more airplanes are counted as separate events, one for each airplane. For example, destruction of two airplanes in a collision is considered to be two separate accidents.

Fatal Accident

An accident that results in fatal injury.

Hull Loss

Airplane totally destroyed or damaged and not repaired. Hull loss also includes, but is not limited to, events in which

- The airplane is missing.
 - An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.
- The airplane is completely inaccessible.

Exclusions

Certain airplanes and events are excluded from consideration as accidents in this summary. This is a complete list of those exclusions.

Excluded Airplanes

Airplanes manufactured in the Commonwealth of Independent States (CIS) or the Union of Soviet Socialist Republics (USSR) are excluded because of the lack of operational data. Commercial airplanes operated in military service are also excluded. (However, if a military-owned commercial jet transport is used for civilian commercial service, those data are included in this summary.)

Excluded Events

- Fatal and nonfatal injuries from natural causes.
- Fatal and nonfatal self-inflicted injuries or injuries inflicted by other persons.
- Fatal and nonfatal injuries of stowaways hiding outside the areas normally available to the passengers and crew.
- Nonfatal injuries resulting from atmospheric turbulence, normal maneuvering, loose objects, boarding, disembarking, evacuation, and maintenance and servicing.
- Nonfatal injuries to persons not aboard the airplane.
- Experimental test flights (however, maintenance test flights, ferry, positioning, training, and demonstration flights are not excluded).
- Sabotage, hijacking, terrorism, and military action.

Referenced ICAO and NTSB Definitions

International Civil Aviation Organization (ICAO) and National Transportation Safety Board (NTSB) definitions are included below for reference.

Accident

ICAO defines an “accident” as follows:

Accident. An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

A) A person is fatally or seriously injured as a result of:

- Being in the aircraft, or
- Direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
- Direct exposure to jet blast,
except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew, or

B) The aircraft sustains damage or structural failure which:

- Adversely affects the structural strength, performance, or flight characteristics of the aircraft, and
- Would normally require major repair or replacement of the affected component,
except for engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories), to propellers, wingtips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome).

C) The aircraft is missing or is completely inaccessible.

NTSB defines an “aircraft accident” as follows:

Aircraft accident means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. For purposes of this part, the definition of “aircraft accident” includes “unmanned aircraft accident,” as defined in 49 CFR 830.2.

Referenced ICAO and NTSB Definitions

Serious Injury

ICAO defines “serious injury” as follows:

Serious Injury. An injury that is sustained by a person in an accident and which:

- A) Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or
- B) Results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- C) Involves lacerations that cause severe hemorrhage, nerve, muscle, or tendon damage; or
- D) Involves injury to any internal organ; or
- E) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface; or
- F) Involves verified exposure to infectious substances or injurious radiation.

NTSB defines “serious injury” as follows:

Serious injury means any injury that

- 1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received;
- 2) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose);
- 3) Causes severe hemorrhages, nerve, muscle, or tendon damage;
- 4) Involves any internal organ; or
- 5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Substantial Damage

NTSB defines “substantial damage” as follows:

Substantial damage means damage or failure that adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered “substantial damage” for the purpose of this part.

ICAO does not define the term “substantial damage.”

2016 Airplane Accidents

All Accidents | Worldwide Commercial Jet Fleet

Event Date	Airline	Model (Age in Years)	Type of Operation	Accident Location	Phase of Flight	Event Description	Damage Category	Hull Loss	Injury Category	Onboard Fatalities/ Occupants (External Fatalities)	Major Accident
24-Jan-16	Delta Air Lines	MD-88 (23)	Sched Pax	Newark, USA	Taxi	The airplane was damaged while waiting to taxi to a gate when another airplane being towed struck the horizontal stabilizer and elevator. There were no injuries.	Substantial				
28-Jan-16	Zagros Airlines	MD-83 (26)	Sched Pax	Mashhad, Iran	Landing	The airplane was damaged during landing when it veered off the side of the runway. All landing gear subsequently collapsed. There were no injuries.	Substantial	X			
3-Mar-16	Jet Airways	737-900 (12)	Sched Pax	Mumbai, India	Landing	The airplane was damaged during landing when the right main landing gear collapsed. There were no injuries.	Substantial				
5-Mar-16	UPS	767-300 (20)	Sched Cargo	Albuquerque, USA	Landing	The airplane was damaged due to a tail strike during landing. There were no injuries.	Substantial				
19-Mar-16	flydubai	737-800 (5)	Sched Pax	Rostov-on-Don, Russia	Go-Around	The airplane impacted the ground during an attempted go-around.	Destroyed	X	Fatal	62/62 (0)	X
23-Mar-17	CityJet	BAe 146-RJ85 (18)	Sched Pax	Florence, Italy	Landing	The airplane was damaged due to a tail strike during a hard landing. There were no injuries.	Substantial				
27-Mar-16	Bek Air	F-100 (23)	Sched Pax	Astana, Kazakhstan	Landing	The airplane was damaged when it landed without the nose landing gear extended. There were no injuries.	Substantial				
4-Apr-16	Batik Air	737-800 (1)	Sched Pax	Jakarta, Indonesia	Takeoff	The airplane was damaged during takeoff when its wing impacted the vertical stabilizer of an ATR-42 being towed across the runway. There were no injuries.	Substantial				
28-Apr-16	TAME	ERJ 190 (6)	Sched Pax	Cuenca, Ecuador	Landing	The airplane was damaged when it overran the end of the runway during landing and stopped with both main landing gear collapsed. There were no injuries.	Substantial	X			
3-May-16	MIAT Mongolian Airlines	737-800 (14)	Sched Pax	Khovd, Mongolia	Takeoff	The airplane was damaged during takeoff when it departed the left side of the runway, veered back onto the runway, departed the right side of the runway, then veered back onto the runway before stopping. There were no injuries.	Substantial				
6-Jun-16	UPS	MD-11 (21)	Sched Cargo	Seoul, South Korea	Takeoff	The airplane was damaged following a rejected takeoff after V1. The airplane subsequently went off the end of the runway and came to a stop with the nose landing gear collapsed. One crew member received minor injuries.	Substantial	X			
19-Jun-16	Mahan Air	BAe 146 (26)	Sched Pax	Khark, Iran	Landing	The airplane was damaged when it overran the end of the runway and came to a stop with the nose landing gear collapsed. There were no injuries.	Substantial	X			

2016 Airplane Accidents

All Accidents | Worldwide Commercial Jet Fleet

Event Date	Airline	Model (Age in Years)	Type of Operation	Accident Location	Phase of Flight	Event Description	Damage Category	Hull Loss	Injury Category	Onboard Fatalities/ Occupants (External Fatalities)	Major Accident
27-Jun-16	Singapore Airlines	777-300ER (10)	Sched Pax	Singapore	Landing	The airplane was damaged after landing due to a fire associated with a fuel system leak on the right engine. There were no injuries.	Substantial				
2-Aug-16	Gomair	737-300 (28)	Sched Pax	Mbuji-Mayi, Democratic Republic of the Congo	Landing	The airplane was damaged during a hard landing and runway excursion. There were no injuries.	Substantial				
3-Aug-16	Emirates	777-300 (13)	Sched Pax	Dubai, United Arab Emirates	Go-Around	The airplane impacted the ground while attempting to perform a go-around. Injuries were sustained during the evacuation. One firefighter was fatally injured.	Destroyed	X	Fatal	0/300 (1)	X
5-Aug-16	ASL Airlines Hungary	737-400 (25)	Sched Cargo	Bergamo, Italy	Landing	The airplane was damaged when it overran the end of the runway and came to rest on a road with all landing gear collapsed. There were no injuries.	Destroyed	X			X
11-Sep-16	Air France	A320 (4)	Sched Pax	Bastia, France	Load/Unload	A ground worker was injured by a severe electrical shock while attempting to connect ground power to the airplane.	None		Serious		
13-Sep-16	Trigana Air Service	737-300 (30)	Sched Cargo	Wamena, Indonesia	Landing	The airplane was damaged when it landed hard on the runway, collapsing both main landing gear. There were no injuries.	Substantial	X			
1-Oct-16	China Airlines	A330 (11)	Sched Pax	Taipei, Taiwan	Go-Around	The airplane was damaged due to a tail strike while performing a go-around. There were no injuries.	Substantial				
21-Oct-16	Sterna Linhas Aéreas	A300 (32)	Sched Cargo	Recife, Brazil	Landing	The airplane was damaged when the nose landing gear collapsed, and the airplane subsequently veered off the runway. There were no injuries.	Substantial	X			
28-Oct-16	American Airlines	767-300 (13)	Sched Pax	Chicago, USA	Takeoff	The airplane experienced an uncontained engine failure during the takeoff run, which initiated a fire that damaged the right hand engine, wing, and fuselage. There were minor injuries during the evacuation.	Destroyed	X			X
28-Oct-16	FedEx	MD-10 (45)	Sched Cargo	Fort Lauderdale, USA	Landing	The airplane was damaged during landing when the left main landing gear collapsed with a subsequent fire. The airplane came to rest off the left side of the runway. There were no injuries.	Destroyed	X			X
10-Nov-16	Lufthansa Cargo	MD-11 (16)	Sched Cargo	Bueno Aires, Argentina	Landing	The airplane was damaged during landing when the left nose landing gear wheel departed the airplane and subsequently impacted the fuselage. There were no injuries.	Substantial				

2016 Airplane Accidents

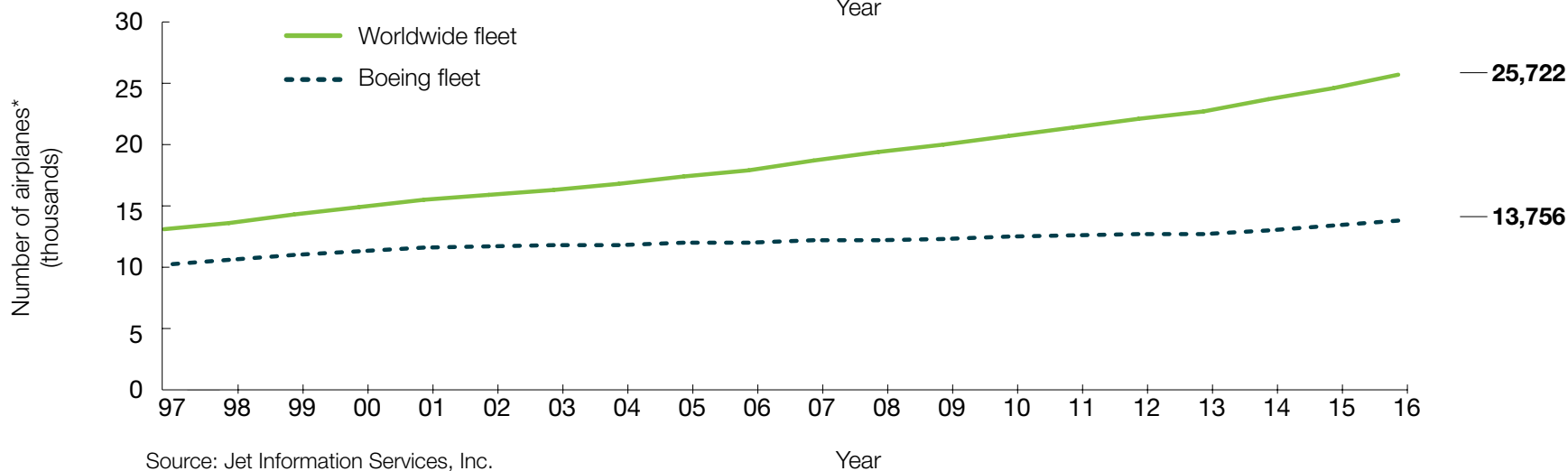
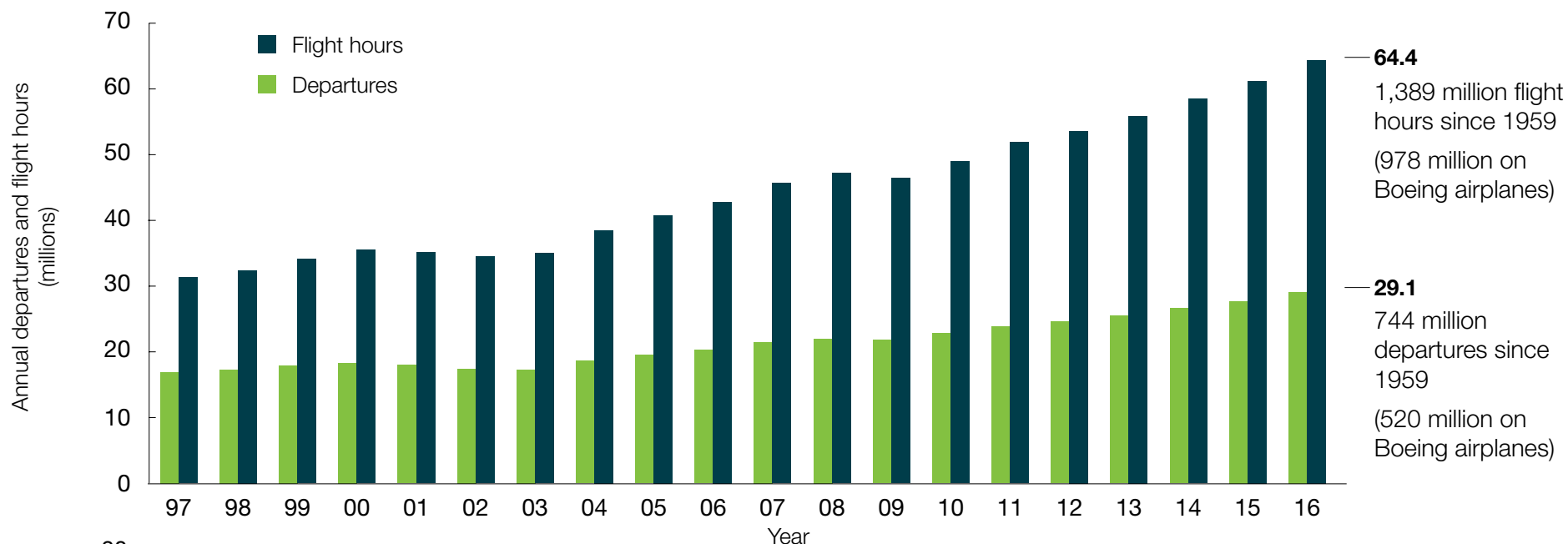
All Accidents | Worldwide Commercial Jet Fleet

Event Date	Airline	Model (Age in Years)	Type of Operation	Accident Location	Phase of Flight	Event Description	Damage Category	Hull Loss	Injury Category	Onboard Fatalities/ Occupants (External Fatalities)	Major Accident
28-Nov-16	LaMia	BAe 146-RJ85 (18)	Charter Pax	Medellín, Colombia	Descent	The airplane impacted the ground after the fuel was exhausted.	Destroyed	X	Fatal	71/77 (0)	X
4-Dec-16	SkyWest Airlines	ERJ 175 (0)	Sched Pax	San Antonio, USA	Landing	The airplane was damaged during landing when the nose landing gear collapsed. One passenger received a minor injury during evacuation.	Substantial				
10-Dec-16	Safi Airways	737-400 (22)	Sched Pax	Kabul, Afghanistan	Landing	The airplane was damaged when the right main landing gear collapsed. There were no injuries.	Substantial				
20-Dec-16	Aerosucre	727-200 (41)	Charter Cargo	Puerto Carreño, Colombia	Initial Climb	The aircraft was damaged during takeoff when it struck the airport perimeter fence, a small earthen structure, and a tree. It impacted the ground a short time later in a field.	Destroyed	X	Fatal	5/6 (0)	X
21-Dec-16	Philippine Airlines	A321 (0)	Sched Pax	Cebu, Philippines	Landing	The airplane was damaged due to a tail strike while landing. There were no injuries.	Substantial				
24-Dec-16	EgyptAir	737-800 (6)	Sched Pax	Addis Ababa, Ethiopia	Landing	The aircraft was damaged during a hard landing. There were no injuries.	Substantial				
27-Dec-16	Jet Airways	737-800 (9)	Sched Pax	Goa, India	Takeoff	During takeoff, the aircraft veered off the side of the runway and came to a stop with the nose gear collapsed. There were minor injuries during the evacuation.	Substantial				
30	Total Accidents							13		138 Onboard (1 External)	7

Note: At the time this statistical summary was compiled, missing Malaysia Airlines Flight 370 did not meet the criteria for being categorized as an airplane accident, per the definition of this publication. Although the search has been suspended, it has not been officially terminated, and therefore Flight 370 is not included in the summary's accident statistics.

Departures, Flight Hours, and Jet Airplanes in Service*

Worldwide Operations | 1997 through 2016



Source: Jet Information Services, Inc.

* Certified jet airplanes greater than 60,000 pounds maximum gross weight, including those in temporary non-flying status and those in use by non-airline operators. Excluded are commercial airplanes operated in military service and CIS/USSR-manufactured airplanes.

Accident Summary by Type of Operation

Worldwide Commercial Jet Fleet

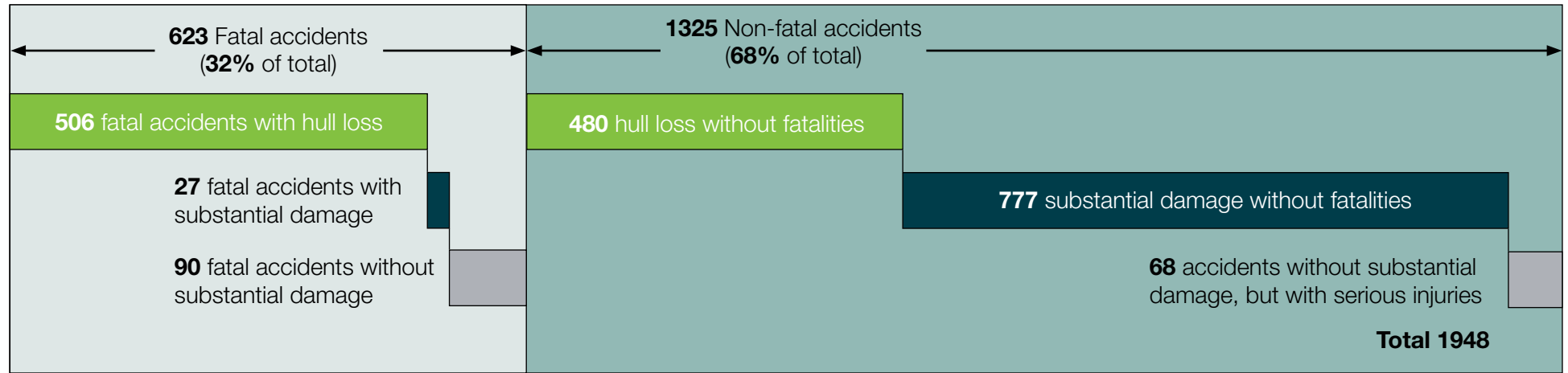
Type of Operation	All Accidents		Fatal Accidents		Onboard Fatalities (External Fatalities)*		Hull Loss Accidents	
	1959-2016	2007-2016	1959-2016	2007-2016	1959-2016	2007-2016	1959-2016	2007-2016
Passenger	1,548	316	498	45	29,298 (801)	2,774 (81)	725	115
■ <i>Scheduled</i>	1,426	294	451	42	25,101	2,691	654	108
■ <i>Charter</i>	122	22	47	3	4,197	83	71	7
Cargo	277	61	81	14	278 (350)	41 (23)	186	35
Maintenance test, ferry, positioning, training, and demonstration	123	11	44	3	208 (66)	17 (0)	75	7
Totals	1,948	388	623	62	29,784 (1,217)	2,832 (104)	986	157
U.S. and Canadian operators	577	66	182	10	6,202 (381)	26 (5)	233	24
Rest of the world	1,371	322	441	52	23,582 (836)	2,806 (99)	753	133
Totals	1,948	388	623	62	29,784 (1,217)	2,832 (104)	986	157

*External fatalities include on-ground fatalities as well as fatalities on other aircraft involved.

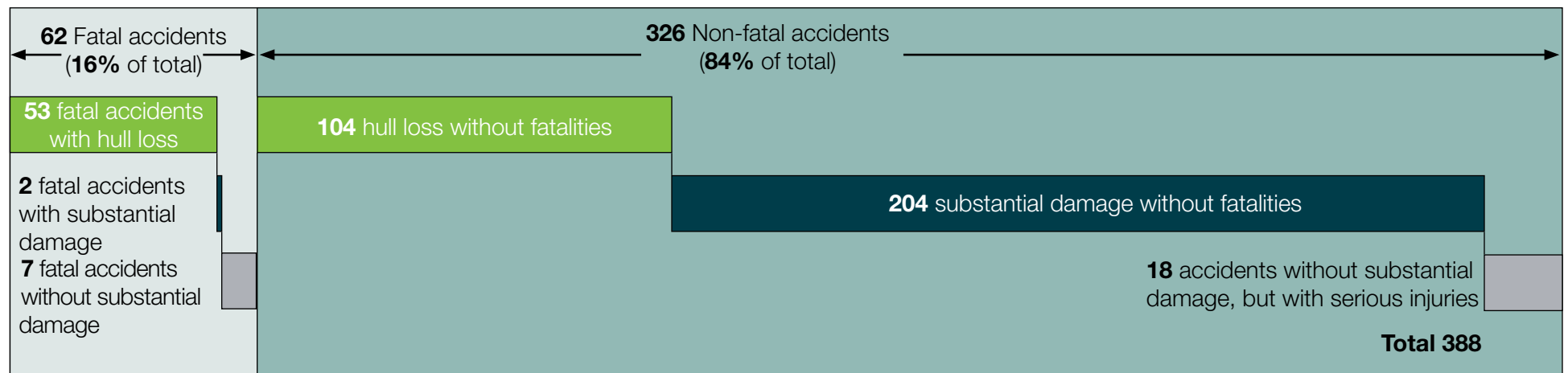
Accident Summary by Injury and Damage

Worldwide Commercial Jet Fleet

Number of Accidents | 1959 through 2016

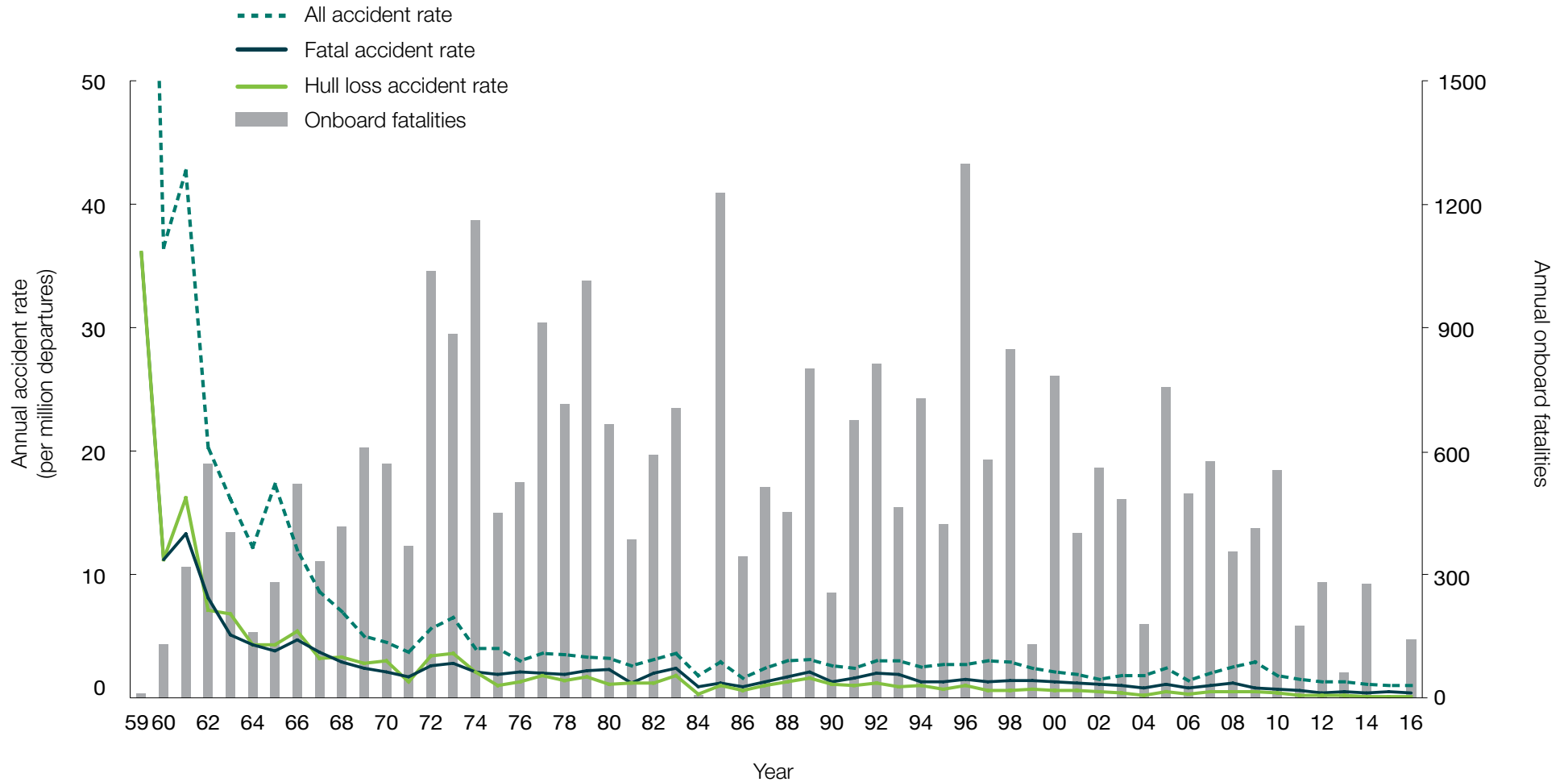


Number of Accidents | 2007 through 2016



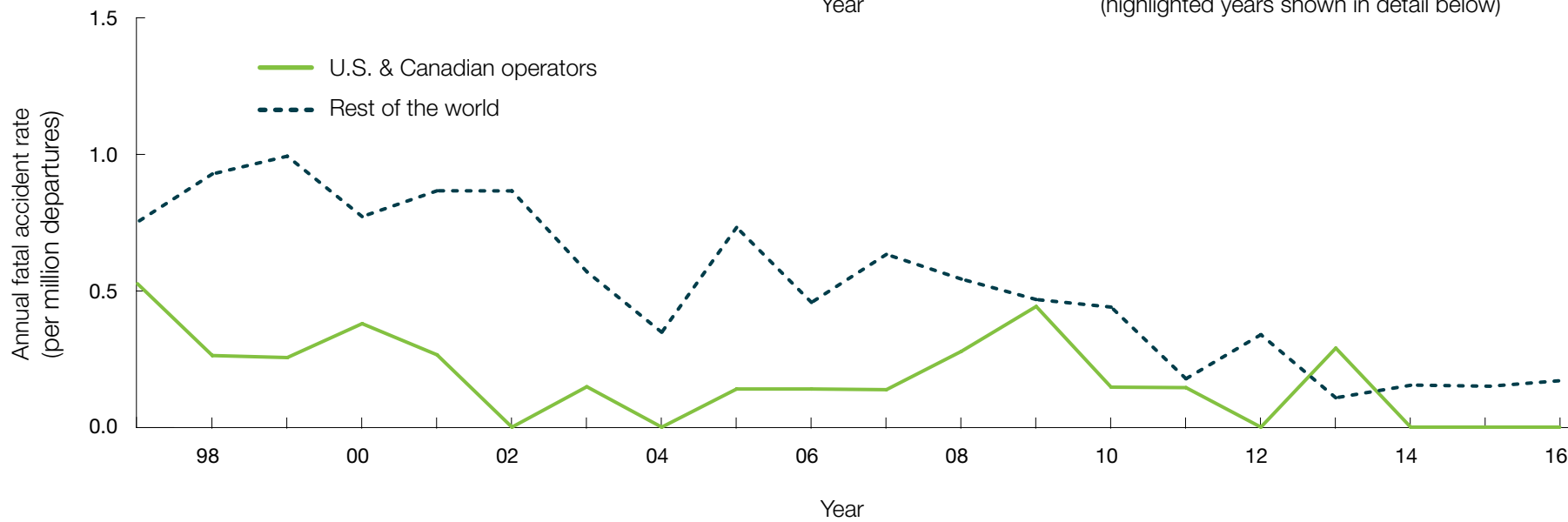
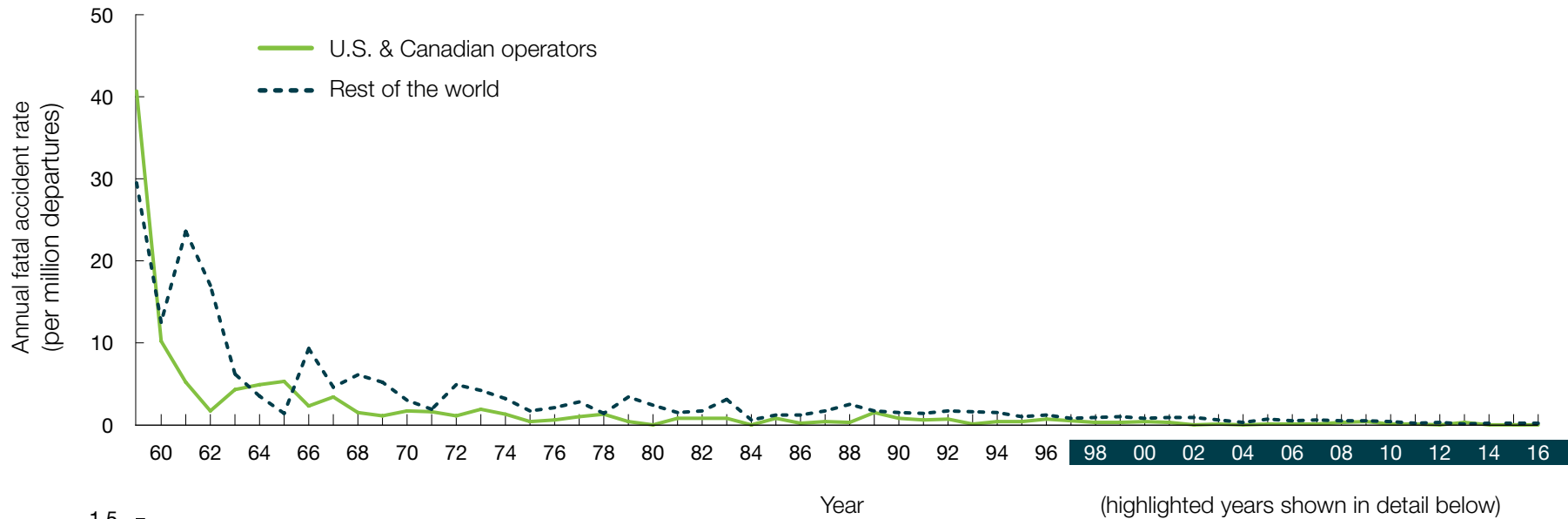
Accident Rates and Onboard Fatalities by Year

Worldwide Commercial Jet Fleet | 1959 through 2016



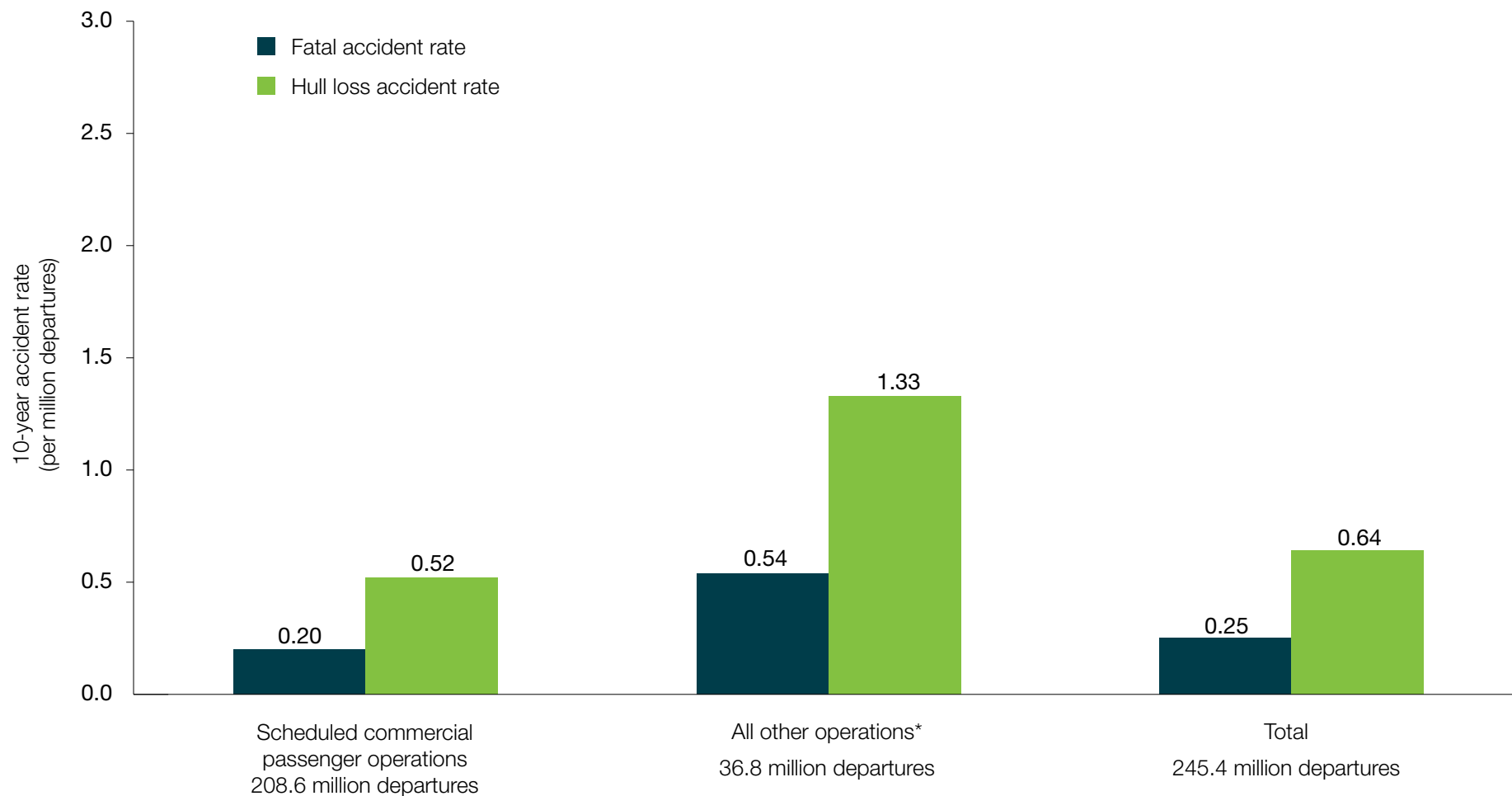
U.S. and Canadian Operators Accident Rates by Year

Fatal Accidents | Worldwide Commercial Jet Fleet | 1959 through 2016



10-Year Accident Rates by Type of Operation

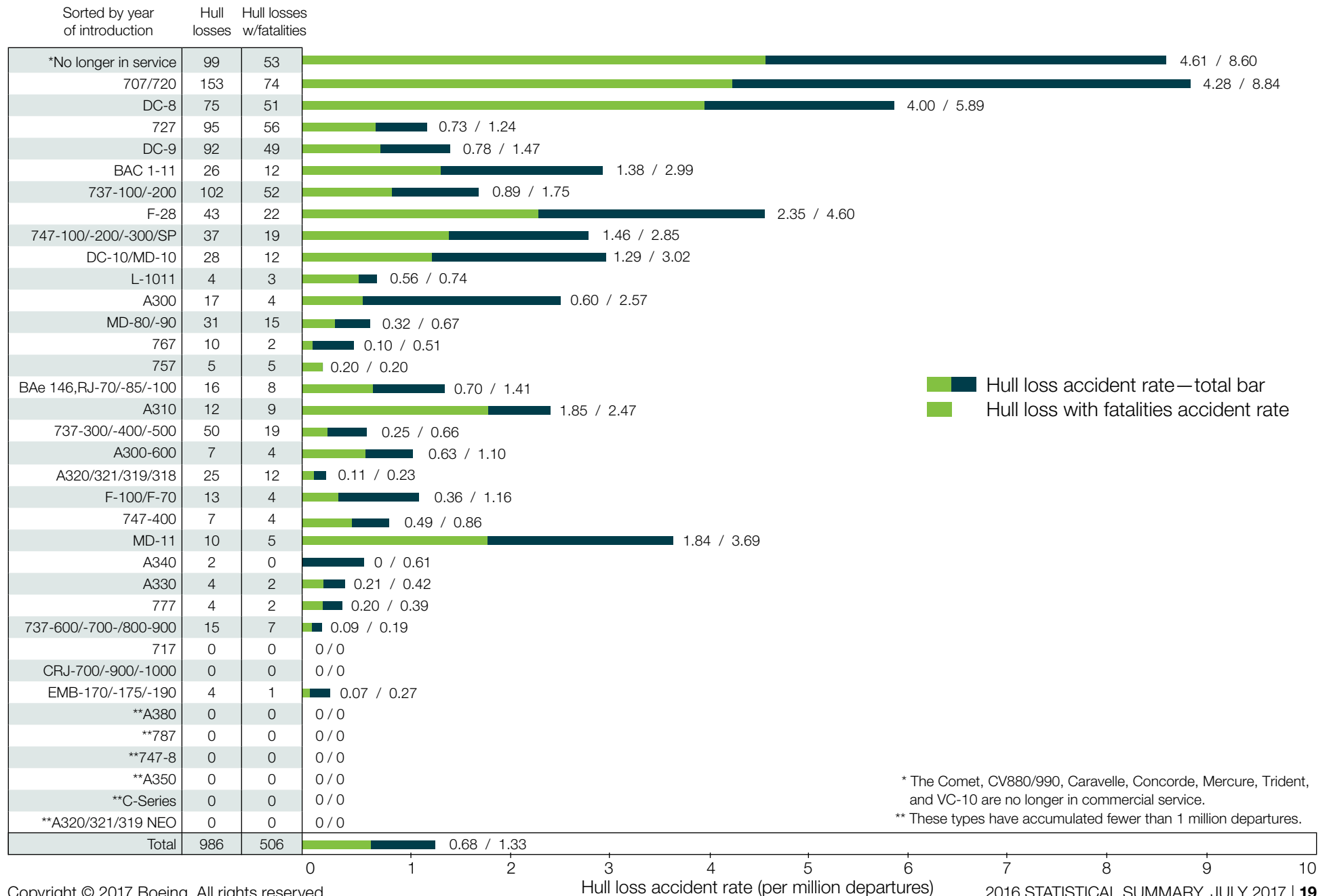
Fatal and Hull Loss Accidents | Worldwide Commercial Jet Fleet | 2007 through 2016



*Charter passenger, charter cargo, scheduled cargo, maintenance test, ferry, positioning, training, and demonstration flights

Accident Rates by Airplane Type

Hull Loss Accidents | Worldwide Commercial Jet Fleet | 1959 through 2016



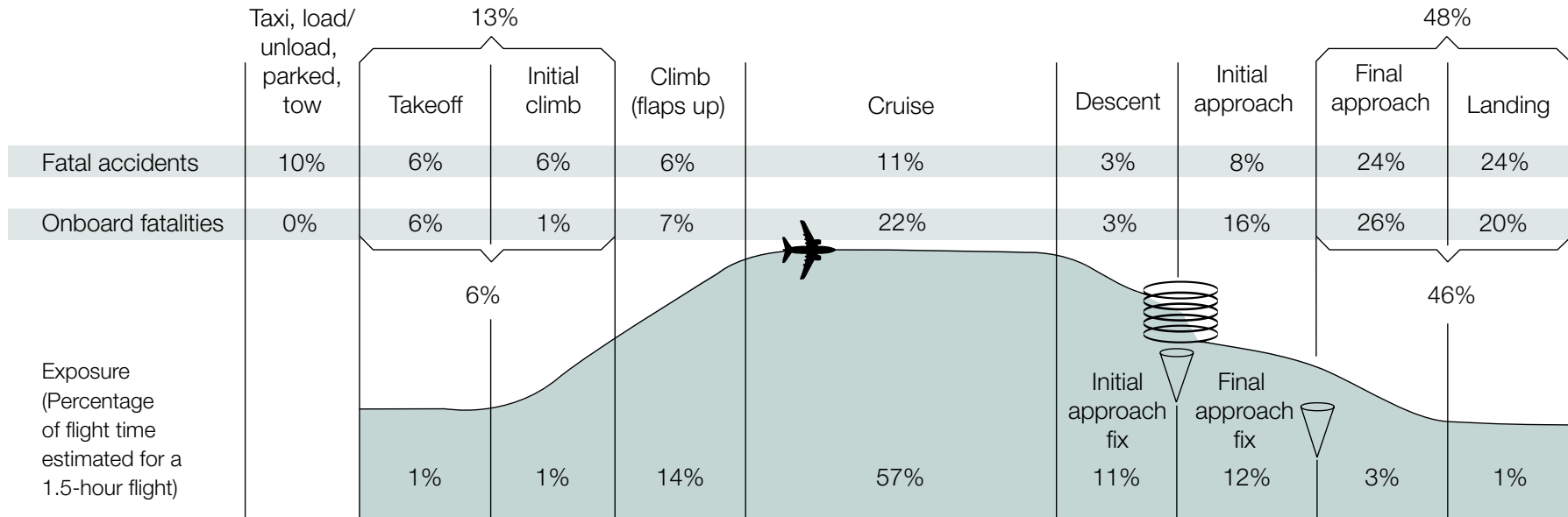
* The Comet, CV880/990, Caravelle, Concorde, Mercure, Trident, and VC-10 are no longer in commercial service.

** These types have accumulated fewer than 1 million departures.

Fatal Accidents and Onboard Fatalities by Phase of Flight

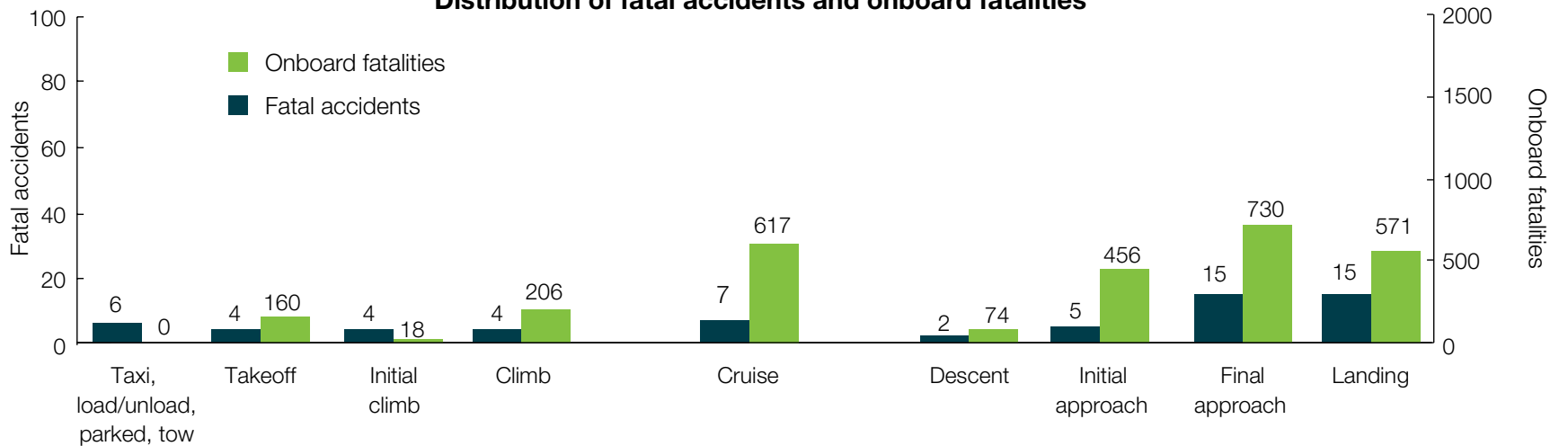
Fatal Accidents | Worldwide Commercial Jet Fleet | 2007 through 2016

Percentage of fatal accidents and onboard fatalities



Note: Percentages may not sum to 100% due to numerical rounding.

Distribution of fatal accidents and onboard fatalities



CAST/ICAO Common Taxonomy Team (CICTT) Aviation Occurrence Categories

The International Civil Aviation Organization (ICAO) and the Commercial Aviation Safety Team (CAST), which includes government officials and aviation industry leaders, have jointly chartered the CAST/ICAO Common Taxonomy Team (CICTT). CICTT includes experts from several air carriers, aircraft manufacturers, engine manufacturers, pilot associations, regulatory authorities, transportation safety boards, ICAO, and members from Canada, the European Union, France, Italy, the Netherlands, the United Kingdom, and the United States. CICTT is co-chaired by one representative each from ICAO and CAST.

The team is charged with developing common taxonomies and definitions for aviation accident and incident reporting systems. Common taxonomies and definitions establish a standard industry language, thereby improving the quality of information and communication. With this common language, the aviation community's capacity to focus on common safety issues is greatly enhanced.

The CICTT Aviation Occurrence Taxonomy is designed to permit the assignment of multiple categories as necessary to describe the accident or incident. Since 2001, the Safety Indicator Steering Group (SISG) has met annually to assign CICTT occurrence categories to the prior year's accidents.

In a separate activity, the CAST assigned each fatal accident to a single principal category. Those accident assignments and a brief description of the categories are reported in the following chart.

The CAST use of principal categories has been instrumental in focusing industry and government efforts and resources on accident prevention. Charts using principal categories are used by CAST to identify changes to historical risk and to help to determine if the safety enhancements put in place are effective.

For a complete description of the categories, go to www.intlaviationstandards.org.

Fatalities by CICTT Aviation Occurrence Categories

Fatal Accidents | Worldwide Commercial Jet Fleet | 2007 through 2016



Note: Principal categories as assigned by CAST.

For a complete description of CAST/ICAO Common Taxonomy Team (CICTT) Aviation Occurrence Categories, go to www.intlaviationstandards.org.

Notes

Notes



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