



Regional Aviation Safety Group – Pan America

Update to APRAST

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Boeing Commercial Airplanes

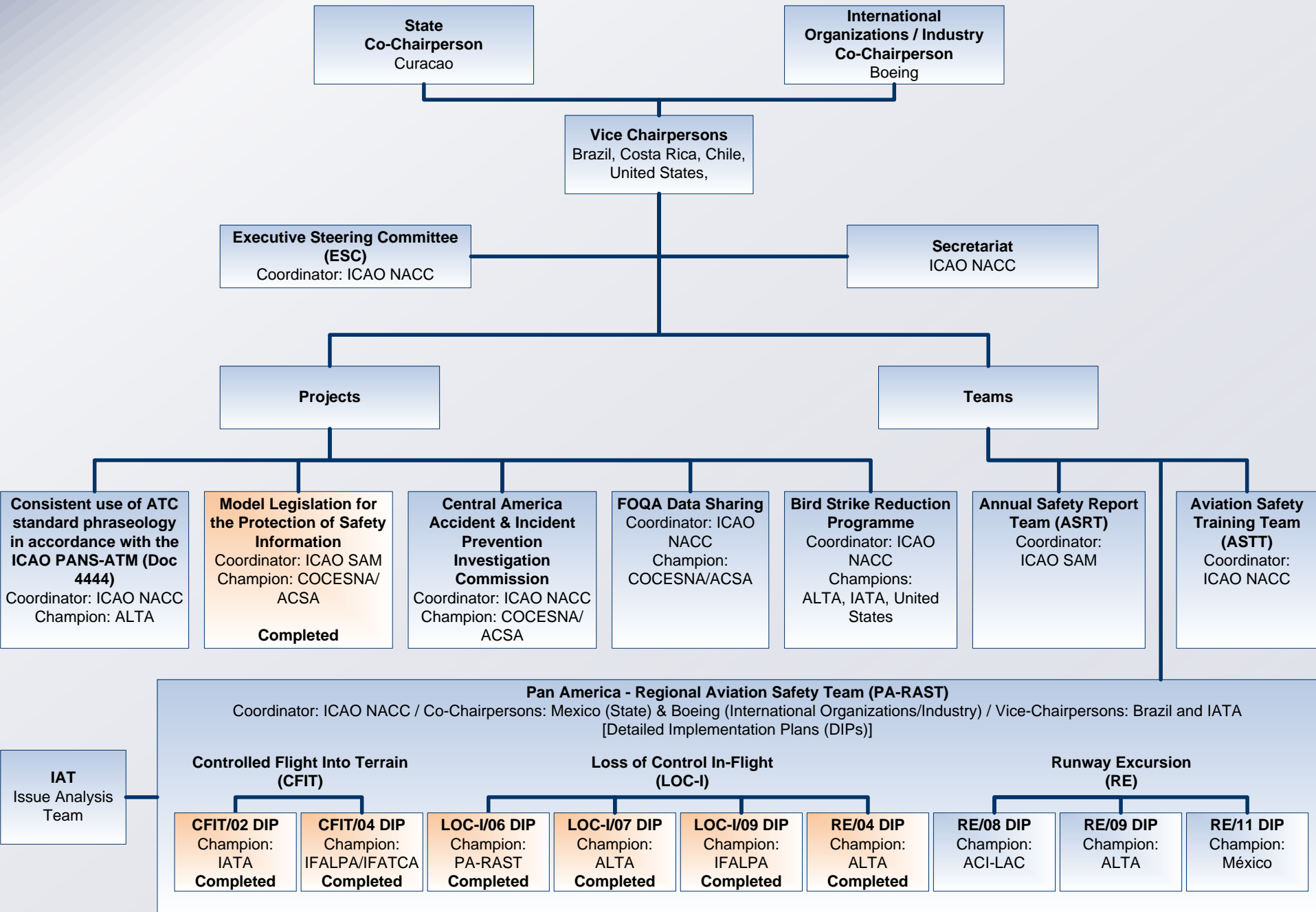
RASG-PA Industry Co-Chair

RASG-PA MEMBERSHIP

NAM/CAR/SAM States/Territories and...



RASG-PA Organization



The RASG-PA Annual Safety Report Shows that the Number of Accidents in the Pan American Region is Decreasing...



PAN AMERICA Scheduled Commercial Air Transport Operations² Accidents
Aircraft Maximum Take-off Mass above 27,000 kilograms
Sources: Boeing - ICAO ADREP/ECCAIRS

Year	Total Accidents ³	Fatal accidents ⁴	Total fatalities
2002-2011 avg.	23.9	1.2	59.9
2011	27	0	0
2012	4	0	0

A Key Contributor
to this Record is the
Regional Aviation
Safety Group – Pan
America (RASG-PA)



RASG-PA is a Data-Driven, Results-Oriented Organization with a Specific Risk Reduction Goal



RASG-PA uses Safety Data from Different Sources

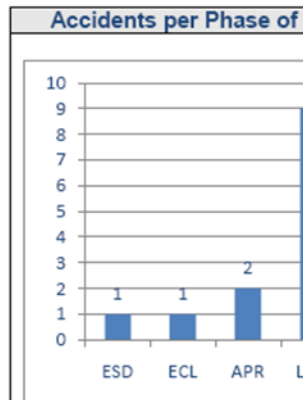
Fatal Accidents by CAST/ICAO Taxonomy Accident
Pan American* Airline Domicile – 2000 through 2006

Accident Type	2000	2001	2002	2003	2004	2005	2006	Total
CFIT	1	1	1	1	1	1	1	6
LOC-I	1	1	1	1	1	1	1	6
RE-Landing + ARC	1	1	1	1	1	1	1	6
RAMP	1	1	1	1	1	1	1	6
MIC	1	1	1	1	1	1	1	6
SCF-NP	1	1	1	1	1	1	1	6
OTHER	1	1	1	1	1	1	1	6
SCF-PP	1	1	1	1	1	1	1	6

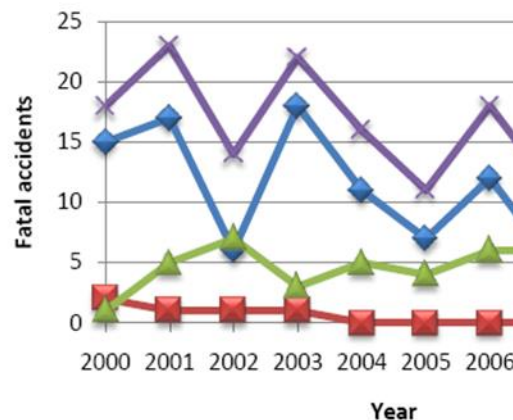
ARG: Abnormal Run
CFIT: Controlled Flight Into Terrain
LOC-I: Loss of Control
MAG: Midair Collision
RAMP: Ground Handling



North America		IATA Members	
14 Accidents (2009)		Hull Losses	
		Fatal	
Passenger	Cargo	Ferry	Jet
64%	36%	0%	100%



Fatal Accidents Distribution



ASIAS Members

44 Airlines

ABX Air	GoJet Airlines
Air Wisconsin Airlines	Hawaiian Airlines
Alaska Airlines	*Horizon Air
Aloha Air Cargo	JetBlue Airways
American Airlines	Mesa Airlines
American Eagle Airlines	Miami Air International
Atlas Air	North American Airlines
Cape Air	Omni Air International
Chautauqua Airlines	Piedmont Airlines
CitationAir	Pinnacle Airlines
CommutAir	Polar Air Cargo
Compass Airlines	PSA Airlines
Delta Air Lines	Republic Airlines
Empire Airlines	Shuttle America
Evergreen International Airlines	Silver Airways
ExpressJet	SkyWest Airlines
FedEx Express	Southern Air
Frontier Airlines	Southwest Airlines
	Spirit Airlines



Trans States Airlines
United Airlines
United Parcel Service
US Airways
Virgin America
World Airways

Government
FAA, NASA,
Naval Air Force Atlantic,
USAF Safety Center

Industry
AIA, Airbus, ALPA,
A4A, Boeing, CAPA, NACA,
NATCA, RAA, SWAPA

*Newest Member

As of 14 February 2013

RASG-PA has Produced an Annual Safety Report for the Pan America Region: 2009, 2010, 2011 & 2012



Measuring Results

RASG-PA uses Different Types of Safety Information

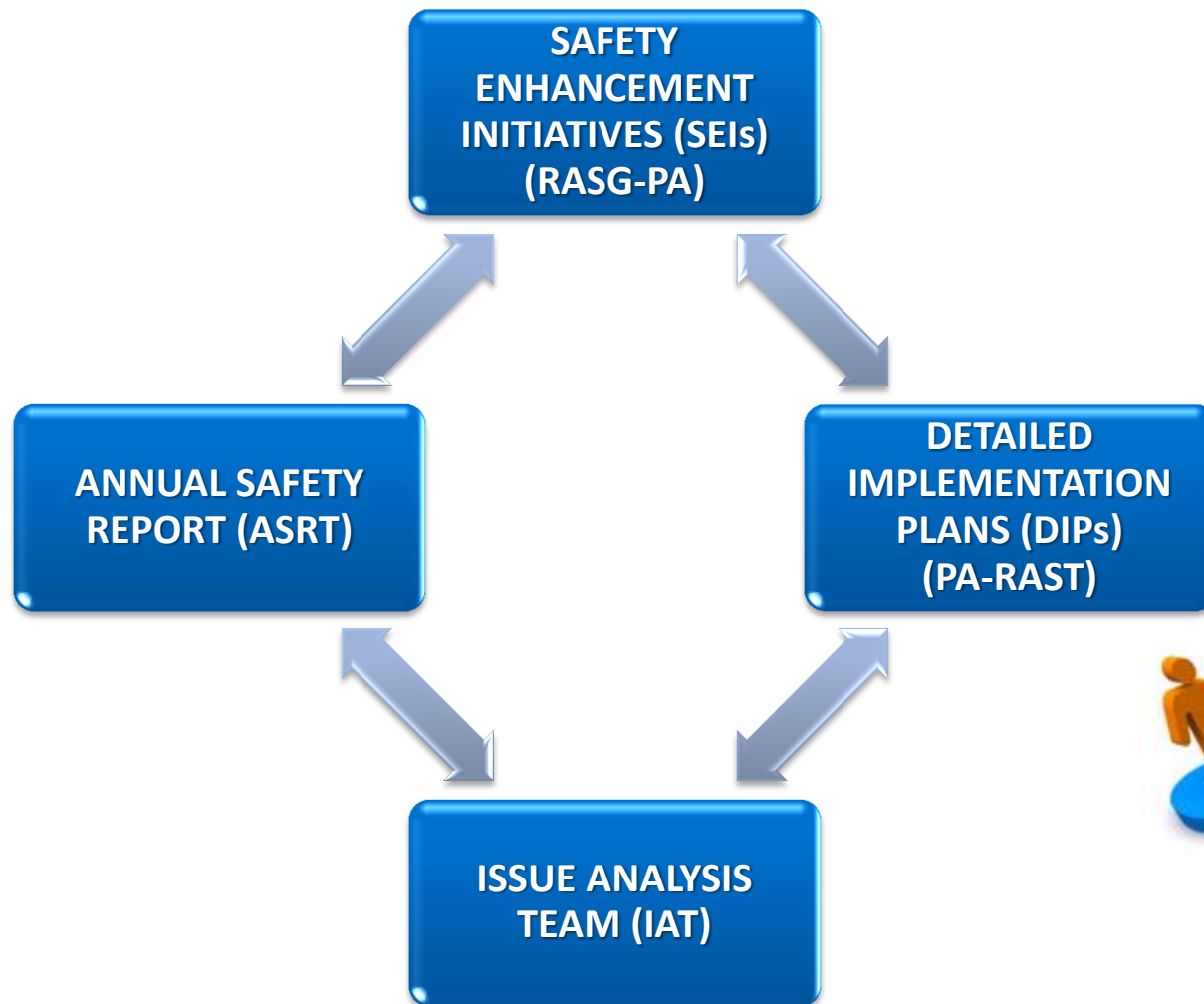


REACTIVE: safety analysis based upon past occurrences (accidents and incidents) in the Pan American Region

PROACTIVE: includes analysis of States' existing conditions (ICAO Standards and Recommended Practices implementation, traffic variations) and service providers (IATA Operational Safety Audits, ramp inspections)

PREDICTIVE: based upon analysis of Flight Operations Quality Assurance (FOQA) de-identified data, oriented towards identifying potential future hazards for initiating corresponding mitigation actions

RASG-PA PROCESS



RASG-PA Develops SEIs to Tackle the Main Risk Areas:

Runway
Excursions (RE)

Controlled Flight
Into Terrain (CFIT)

Loss of Control-
Inflight (LOC-I)

Mid-Air Collision
(MAC)

new

**Every SEI has an associated Detailed
Implementation Plan (DIP)**

SEI Summary



**New SEIs are under development by the
Safety Enhancement Teams (SETs)**

RASG-PA Deliverables



**Four Pan American Aviation
Safety Summits**

**Proposal for Amendment to
Aeronautical Legislation to
Protect Safety Information
Sources and First Aeronautical
Legislative Seminar for the
Protection of Safety Information**

**Runway Excursion Risk Reduction
(RERR) Toolkit (Version 2)**

**Advanced Maneuvers Manual
Distributed To All Operators In
The Region**

**Seven RASG-PA Aviation Safety
Workshops/Seminars**

RASG-PA Deliverables



Pilot Monitoring Toolkit

**Guidance for Maintaining
Runways in Accordance with
ICAO Annex 14**

**Aviation Safety Training Material
Available on the RASG-PA
Website: www.rasg-pa.org**

**Standardized CFIT Training
Across Operators in the Region**

**RASG-PA Safety Advisories
(RSAs)**

**Implemented Runway Safety
Teams (RSTs) at the Mexico City
International Airport (MMMX),
Mexico; Montego Bay, (MKJS),
Jamaica; Quito, (SEQU), Ecuador;
Lima (SPIM), Peru and San Jose,
Costa Rica (MROC)**

Accident Rates by Region of the World

2003 through 2012

2002
2007
2012

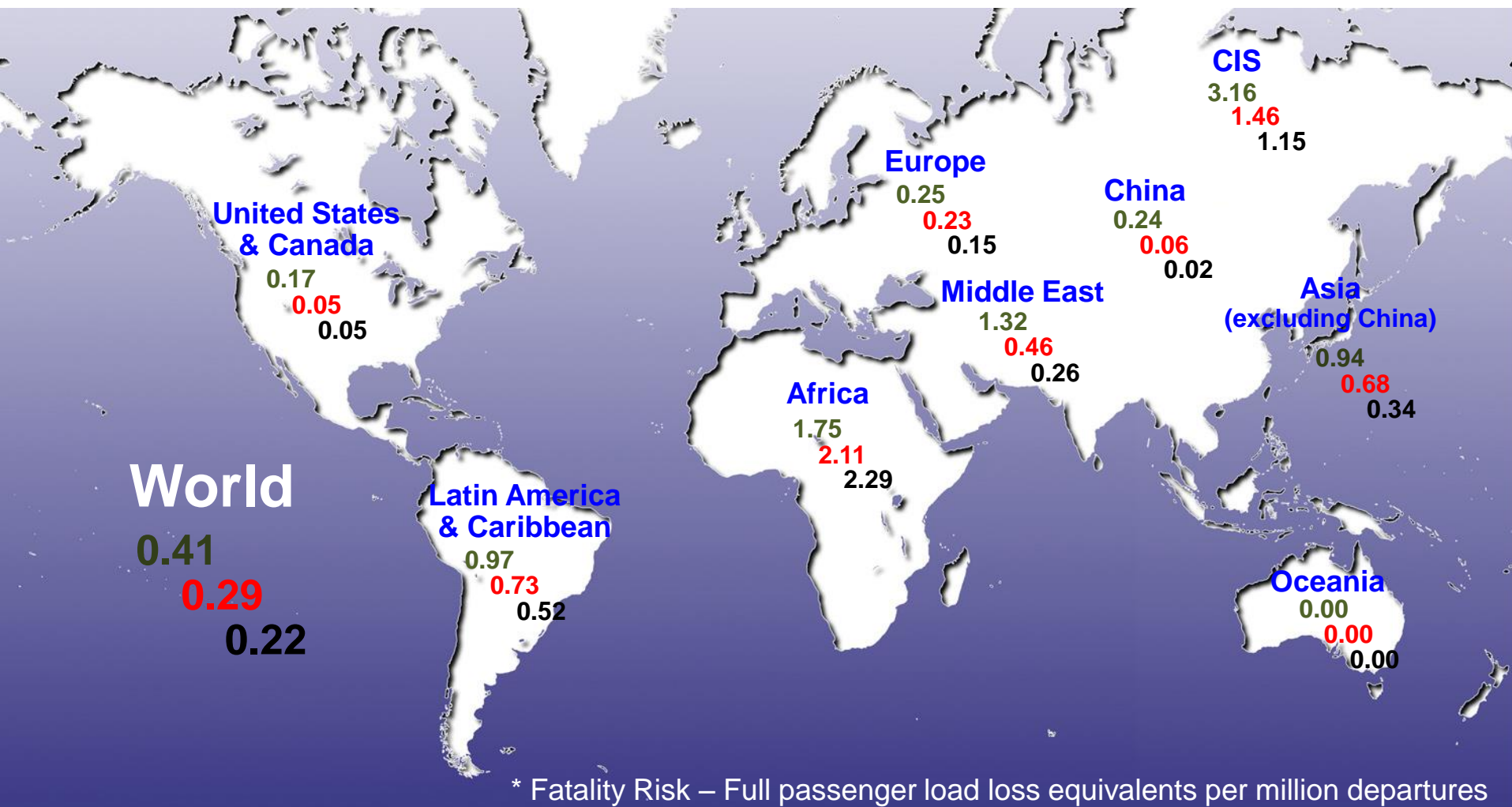
Western-built transports >60,000-pounds hull loss accidents, by airline domicile



Fatality Risk* of Commercial Jet Air Travel by Region of the World (10-year rolling average)

2002
2007
2012

Western-built jet transports >60,000-pounds *onboard fatal* accidents, by *airline domicile*



Thank you!



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