Aviation Safety 2008

The Year In Review



Jim Burin

Director of Technical Programs

The Fleet – 2008

<u>Type</u>	Western Built	Eastern Built	<u>Total</u>
Turbojets	19,277	1,656	20,933
Turboprop	s 4,830	1,588	6,418
Business J	ets		15,055

Major Accidents **Commercial Jets**

1	lanuary	2007	to 31	December	2007
	Januai V	2007		Decelline	2007

Pau, France

Kuching, Malaysia

Surabaya, Indonesia

Yoqyakarta, Indonesia

M'Banza Congo, Angola

Santa Marta, Colombia

Naha, Okinawa, Japan

Vnukovo, Russia

Samara, Russia

Douala, Cameroon

Toronto, Canada

Congonhas, Brazil

Phuket, Thailand

Quito, Equador

Ispara, Turkey

Controlled Flight Into Terrain (CFIT)

Butuan, Philippines

Fatal

102

0

0

0

0

22

6

114

0

5

187

0

0

90

0

0

57

Takeoff

Landing

Takeoff

Landing

Landing

Landing

Takeoff

Landing

Landing

Landing

Landing

Post-Taxi

Landing

Landing

Landing

Approach

Loss of Control (LOC)

Date	Operator	Aircraft	Location	Phase
1 January	Adam Air	B-737	Sulawsui, Indonesia	En route

F-100

B-737

B-737

B-737

TU-134

CRJ-100

B-737

B-737

A-320

B-737

MD-82

A-320

A-340

MD-83

EMB-190

CRJ-100

7 January

13 January

13 February

21 February

7 March

17 March

5 May

20 May

28 June

17 July

17 July

20 August

26 October

9 November

30 November

Source: Ascend and Aviation Safety Network

16 September

RCA Europe

RPX Airlines

Kenya Airways

Air Canada Jazz

TAAG Angola

AeroRepublica

China Airlines

One-Two-Go Airline

Philippine Airlines

Atlasjet Arilines

Fort Aero

Adam Air

Garuda

UT Air

TAM

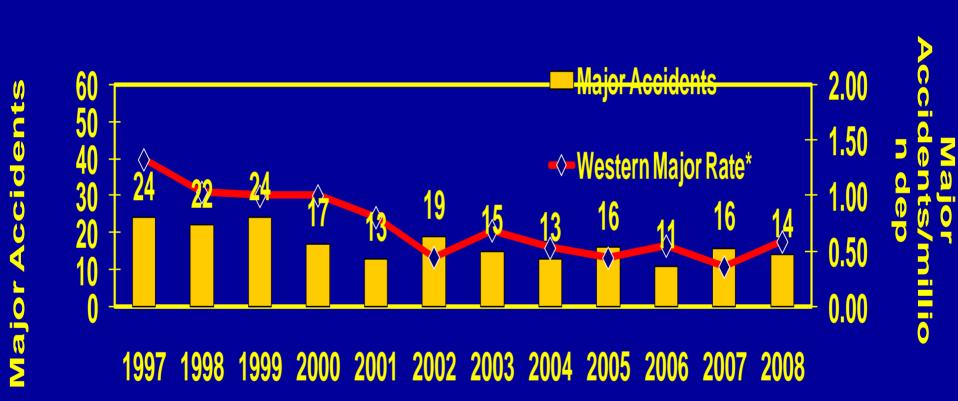
Iberia

Major Accidents Commercial Jets 1 January 2008 to 1 October 2008

Date	Operator	Aircraft	Location	Phase	Fatal
2 Januray	Iran Air	F-100	Shiraz, Iran	Takeoff	0
17 January	British Airways	B-777	London, England	Landing	0
1 February	LAB	B-727	Trinidad, Bolovia	Enroute	0
14 February	Belivia	CRJ-100	Yevervan, Armenia	Takeoff	0
15 April	Hewa Bora Airways	DC-9	Goma, DRC	Takeoff	3
25 May	Kalitta Air	B-747	Brussels, Belgium	Takeoff	0
30 May	TACA	A-320	Tegucigalpa, Honduras	Landing	3
10 June	Sudan Airways	A-310	Khartoum, Sudan	Landing	29
30 June	Ababeel Aviation	IL-76	Khartoum, Sudan	Takeoff	4
6 July	USA Jet Airlines	DC-9	Saltillo, Mexico	Approach	1
7 July	Kalitta Air	B-747	Bogota, Colombia	Takeoff	0
20 August	Spanair	MD-82	Madrid, Spain	Takeoff	154
24 August	Itak-Air	B-737	Bishkek, Kyrgyzstan	Approach	65
30 August	Conviasa	B-737	Toacaso, Ecuador	Enroute	3
14 September	Aeroflot Nord	B-737	Perm, Russia	Approach	81

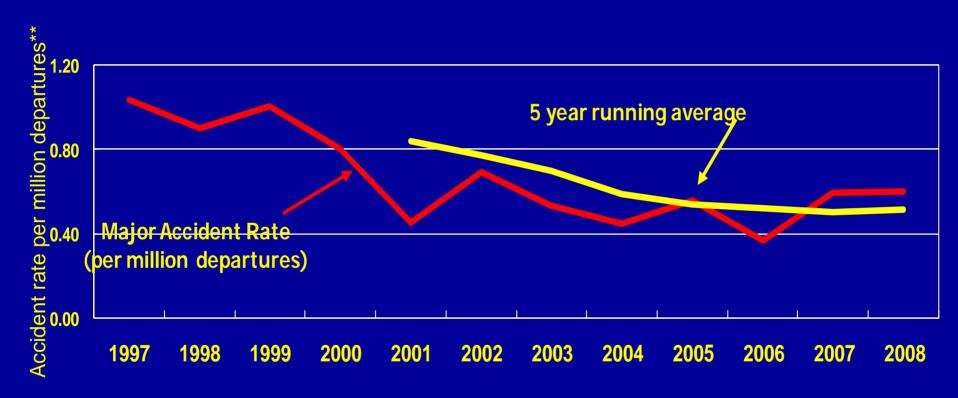
Source: Ascend

Major Accidents Worldwide Commercial Jets 1997 – 2008



Reliable worldwide departure/rate data not available for Eastern-Built Aircraft

Major Accident Rate Western-Built Commercial Jets 1997 – 2008



** Worldwide departure are estimated Reliable total departure data not available for Eastern-Built Aircraft

Major Accidents Business Jets 1 January 2008 to 1 October 2008

Date	Operator	Aircraft	Location	Phase	Fatal
1 February	Symons Living Trust	Citation I	Augusta, Maine, USA	Climb	2
18 February	Avion Sales	Citation III	Venezuela	En route	3
4 March	Southwest Sports Clinic	Citation I	Oklahoma City, USA	Takeoff	5
4 March	Confort Vuela	HS125-800	Monterrey, Mexico	Landing	0
30 March	Relton Muse Aviation	Citation I	London, UK	Climb	5
12 June	FAI Rent-A-Jet	Lear 35	Kisangani, DRC	Takeoff	0
30 July	My Aviation	Eclipse 500	West Chester, PA, USA	Takeoff	0
31 July	East Coast Jets	Hawker 800	Owatonna, MN, USA	Approach	7
19 September	Inter Travel and Svcs	Lear 60	Columbia, SC, USA	Takeoff	4

Source: Ascend

Major Accidents

		and the second s	ops (> 14 seats 1 October 200	
Date	Operator	Aircraft	Location	Pha
4 January	Transaven	LET-410	Caracas, Venezuela	Desc
	I	l	1	

6 March

15 March

19 March

3 April

9 April

11 April

21 April

2 May

23 May

26 May

26 May

Source: Ascend

Manunggal Air

Wings Aviation

Cirrus Airlines

Avtex Aviation

Alpine Aviation

Great Lakes

Moskovia Aviation

Flex Air

Blue Wing Airlines

Kata Air Transport

RICO Linhas Aereas

Date	Operator	Aircraft	Location	Phase	Fatal
4 January	Transaven	LET-410	Caracas, Venezuela	Descent	0
14 January	Alpine Aviation	B-1900	Lihue, Hawaii, USA	Landing	1
25 January	Aero Servis	AN-12	Point Noire, Congo	Landing	0
26 January	Dirgantara Air Svcs	CASA 212	Indonesia	Enroute	3
21 February	Santa Barbara Airlines	ATR-42	Venezuela	Climb	46

Wamena, Indonesia

Mannheim, Germany

Benzdrop, Suriname

Bundeena, Australia

Billings, Montana, USA

Chelyabinsk, Russia

Chisinau, Moldova

Coari, Brazil

Goma, DRC

Rumbek, Sudan

Nigeria

Landing

En route

Landing

Approach

Climb

Landing

En route

En route

Takeoff

Climb

Landing

0

3

0

19

8

0

21

1

9

0

Transal C-160

Beech 1900

DO-328

AN-28

Metroliner III

AN-32

Bandeirante

Beech 1900

Beech 1900

AN-12

AN-32

Major Accidents

Commercial Turboprops (> 14 seats) 1 January 2008 to 1 October 2008

Date	Operator	Aircraft	Location	Phase	Fatal
15 June	China Flying Dragon	Y-12	Chifeng, China	En route	3
18 June	Wiggins Airways	DHC-6	Hyannis, MA, USA	Takeoff	1
27 June	Juba Air Cargo	AN-12	Malakal, Sudan	En route	7
10 July	Aerocord	Beech 99	Puerto Montt, Chile	Takeoff	9
14 July	Maldivian Air Taxi	DHC-6	Maldives	Landing	0
16 July	North-Wright Airways	DHC-6	Hook Lake, Canada	Approach	0
13 August	Fly540	F-27	Mogadishu, Somalia	Approach	3
1 September	AirServ International	B-1900	Bukavu, DRC	Approach	17
1 September	Air Tahoma	CV-580	Columbus, Ohio, USA	Approach	3

Source: Ascend

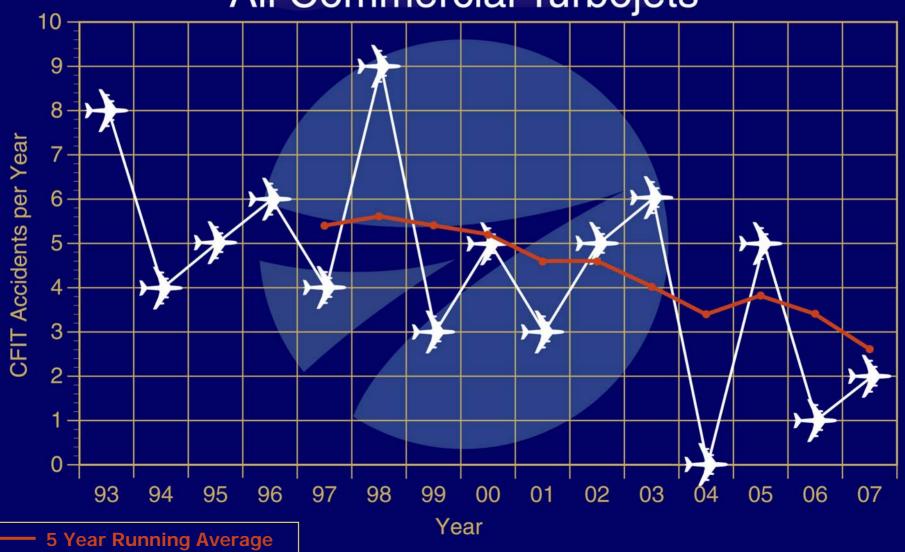


Controlled Flight into Terrain Major Accidents

Commercial Jets
1 January though 1 October 2008

Date	Operator	Aircraft	Location	Phase	Fatal
24 August	Itak-Air	B-737	Bishkek, Kyrgyzstan	Approach	65
30 August	Conviasa	B-737	Toacaso, Ecuador	En route	3

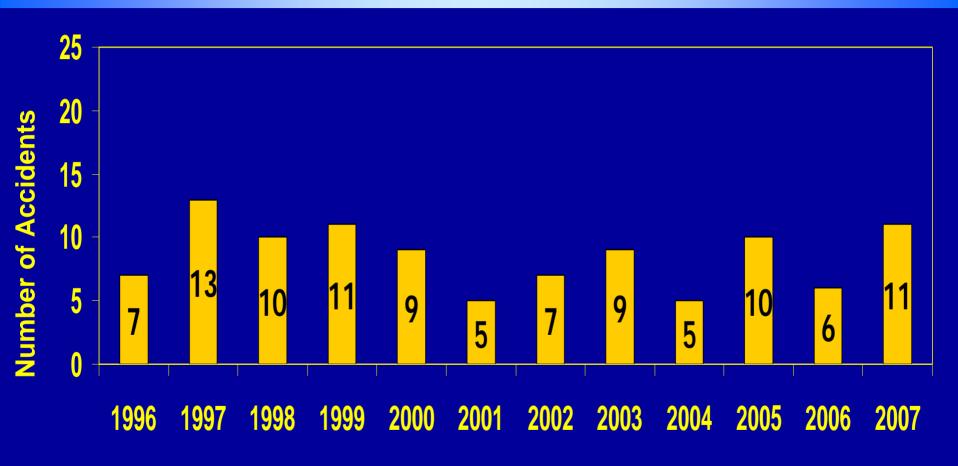




Approach and Landing Major Accidents Commercial Jets 1 January through 1 October 2008

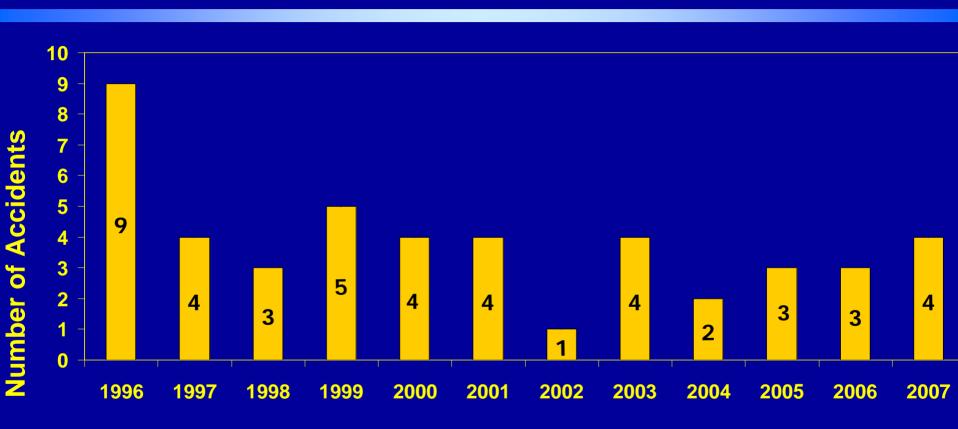
Date	Operator	Aircraft	Location	Phase	Fatal
30 May	TACA	A-320	Tegucigalpa, Honduras	Landing	3
10 June	Sudan Airways	A-310	Khartoum, Sudan	Landing	29
6 July	USA Jet Airlines	DC-9	Saltillo, Mexico	Approach	1
24 August	Itak-Air	B-737	Bishkek, Kyrgyzstan	Approach	65
30 August	Conviasa	B-737	Toacaso, Ecuador	En route	3
14 September	Aeroflot Nord	B-737	Perm, Russia	Approach	81

Approach and Landing Major Accidents Commercial Jet Airplanes 1996 Through 2007



Loss of Control Major Accidents

Commercial Jets 1996 through 2007



Loss of Control Major Accidents Commercial Jets 1 January through 1 October 2008

Date	Operator	Aircraft	Location	Phase	Fatal
2 January	Iran Air	F-100	Shiraz, Iran	Takeoff	0
14 February	Belivia	CRJ-100	Yeverevan, Armenia	Takeoff	0
6 July	USA Jet Airlines	DC-9	Saltillo, Mexico	Approach	1
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Safety Challenges

Safety Culture

Safety Culture

Safety Culture:

The shared values, beliefs, assumptions, and norms that govern decision making and that may affect individual and group attitudes about risk, safety, and the proper conduct of hazardous operations.

Safety Culture:

"The way we do things around here"
-or-

What you do when no one is watching











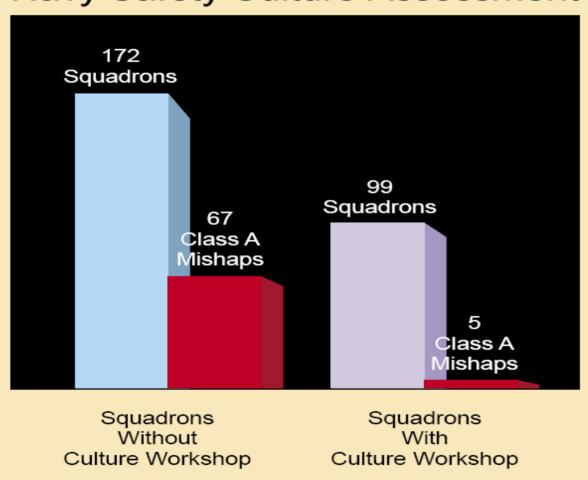








Navy Safety Culture Assessment



2002 - 2004

93% of Class A (serious) mishaps occurred in squadrons not participating in the Safety Culture Assessment Program.

The program is now <u>mandatory</u>



Aviation Safety 2008

An average to below average year for all segments of professional aviation

Commercial jet loss of control accidents dominate the fatality numbers

Where are the lessons learned being learned?

The challenge of creating a positive safety culture is a significant one

FSF Goal:

Make Aviation Safer by Reducing the Risk of an Accident