



World Business Jet and Turboprop Accident Involvement

Worldwide – Europe – N. America

By Robert E. Breiling Associates, INC

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Business Turbine Fleet Growth

World – Europe – N. America

2005 – 2009

Business Jets	2005	2006	2007	2008	2009
World	14,101	14,317	15,270	16,485	17,382
Europe	1,637	1,852	2,125	2,507	2,744
N. America	9,942	10,259	10,704	11,157	11,485

Business Turboprops	2005	2006	2007	2008	2009
World	11,533	11,345	11,710	12,127	12,449
Europe	914	932	989	1,102	1,215
N. America	7,106	7,470	7,593	7,726	7,754
Combined World Fleet Growth	25,634	25,662	26,980	28,612	29,831

Accident Involvement vs. Fleet Business Jet and Turboprop Combined Fleets 2005 – 2009 (5 yr average)

	N. America	Europe	World Remainder
% of World Fleet	66%	12%	21%
% of Accidents	61%	11%	28%
% Fatal Accidents	60%	9%	31%

Business Jets

No. Accidents / Fatal Accidents by World Area

World	2005	2006	2007	2008	2009
Accidents	30	40	38	44	22
Fatal Accidents	7	9	8	9	4

N. America	2005	2006	2007	2008	2009
Accidents	23	28	25	23	8
Fatal Accidents	4	4	4	5	1

Europe	2005	2006	2007	2008	2009
Accidents	6	7	9	7	6
Fatal Accidents	1	1	2	1	3

Business Turboprop

No. Accidents / Fatal Accidents by World Area

World	2005	2006	2007	2008	2009
Accidents	70	64	76	97	74
Fatal Accidents	18	19	27	32	19

N. America	2005	2006	2007	2008	2009
Accidents	44	34	46	52	42
Fatal Accidents	14	14	16	18	8

Europe	2005	2006	2007	2008	2009
Accidents	6	7	9	7	8
Fatal Accidents	1	1	2	1	4

Accidents & Incidents as a Percent of Accidents / Incidents Phase of Flight (2005-2009 5 yr average)

Business Jets	Parked Taxi	Takeoff	Climb	Cruise	Descent	Approach	Landing
World	10%	19%	6%	4%	5%	7%	50%
N. America	8%	16%	6%	5%	5%	7%	55%
Europe	8%	8%	8%		8%	8%	62%

Business Turbo Prop	Parked Taxi	Takeoff	Climb	Cruise	Descent	Approach	Landing
World	4%	12%	11%	11%	7%	16%	39%
N. America	4%	10%	10%	11%	7%	20%	38%
Europe	6%	15%	12%	9%	12%	10%	36%

Landing Accident/Incident Factors/Findings

VMC	65%
IMC	22%
Fatal Accidents	18%
Runways > 5,000 ft.	76%
Runways 4,000 – 4,999 ft.	10%
Runways 3,000 – 3,999 ft.	8%
Runways < 3,000 ft.	1%
Wet/puddle/snow/ice/slush covered runways	24%
Uncontrolled airports when crosswinds or runway conditions/contamination or weather was a factor	11%
Landed downwind	4%
“Duck under” or a “look see” approach	3%
Landing after receiving a poor runway condition report	2%
Pilot/crew related with contributing factors such as crosswind, runway contamination or runway condition	19%
Pilot/crew related with no contributing factors	46%
Mechanical/maintenance/air frame/powerplant malfunction/failure	29%

World Business Jet & Turboprop Accidents / Incidents by Probable Cause

	Pilot / Crew	Airport Condition / Personnel – ATC	Airframe/Power Plant Design/Maint.	Weather / Other / Unknown
Business Jets				
All Years	54.6%	5.5%	23.8%	16.8%
2009	51.4%	8.3%	22.2%	16.7%
Turboprops				
All Years	55.3%	11.5%	24.7%	8.5%
2009	47.3%	5.4%	27%	20.3%
World Air Carrier Jets				
1996 – 2008	55.0%	5.0%	20.0%	20.0%

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