International Business
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Business Aviation Safety Brief

Summary of Global Accident Statistics

2001-2005

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Contents

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1.0 Introduction

Business Aviation has established a record as one of the world's safest forms of transportation. Professionally flown aircraft of all sizes are operated on unscheduled routes to all corners of the globe, yet the safety record continues to be excellent in spite of the very challenging operating environment.

The exemplary safety record of business aviation can be attributed to professionalism and attention to safe operating practices. The business aviation community promotes safety through industry standards and good training, as well as through monitoring and analysing safety information to facilitate continuous improvement. The business aviation representative associations assist operators by providing safety data and programs in their respective countries. The Council representing the national and regional associations at the global level, the International Business Aviation Council (IBAC), has in turn developed a program to collect and analyse worldwide information. To that end, IBAC has contracted with Robert Breiling and Associates to develop global data on business aircraft accidents.

Summary information presented in this Brief is taken from the analysis conducted by Robert Breiling and Associates in 2006. Breiling's detailed Report contains information on accidents from all regions of the world.

This Business Aviation Safety Brief covers a five year period from 2001 to 2005. IBAC will update the Brief annually and the IBAC Planning and Operations Committee (POC) will review the information continuously to determine useful trend data. In addition, the IBAC Governing Board has determined that the Safety Brief will be scrutinized from time to time by independent organizations and feedback will be considered by IBAC's POC.

This summary data includes all accidents involving aircraft when used in conducting business operations. It does not include accidents of business aircraft when used in airshows and other non-business related flying.

Listings of Business Jet and Turboprop accidents that occurred in the preceding calendar year (i.e. 2005) are contained in Appendices A & B.

The compilation, analysis and publication of safety data is an essential foundation for the development of measures to prevent accidents and thus, is not a means unto itself. In this regard, and as a separate IBAC initiative, the International Standard for Business Aircraft Operations (IS-BAO) was introduced in 2002 and was designed to raise the safety bar by codifying safety best practices.

Recognizing that it will be many, many years before safety data will reflect the impact of the IS-BAO, IBAC commissioned an independent, retrospective analysis to subjectively assess the extent to which (i.e. in terms of probability) had the IS-BAO been implemented by the operator concerned the accident could have been prevented. A synopsis of the findings of this study are presented in Section 5.0.

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2.0 Business Aviation Community

2.1 Number of Turbine Aircraft

The Breiling Report contains data covering a five year period for the global population and the distribution of aircraft by region. A summary of the aircraft population in 2005, the last year covered by the report, is as follows:

2005 Global Business Aircraft Population	
Business Jets	14,101
Turbo Props	10,551
All Turbine Business A/C	24,652

Table 2.1a

Analysis

Business aircraft in North America represent 71.5% of the global fleet. South and Central America have approximately 10% and Europe 10.5% of the world's fleet. Other regions account for the remaining 8% of the fleet.

2.2 Number of Flight Hours

The 2005 summarized flight hour totals are as follows:

2005 Global BusAv Flight Hours	
Business Jets	5,347,389
Turbo Props	4,651,676
All Turbine Business A/C	9,996,065

Table 2.2a

Analysis

Flying hours in North America represents 69% of the total, Europe 11%, Central/South America 11%, and the rest of the world 9%.

2.3 Number of Departures

The number of business aviation departures in the 2005 year is as follows:

2005 Global BusAv Departures	
Business Jets	3,895,810
Turbo Props	3,136,666
All Turbine Business A/C	7,032,476

Table 2.3a
(*Note: These are derived figures based on flight hours and sector durations typical for each category of jet and turboprop aircraft.*)

2.4 Organization of the Community

Business Aircraft operations are classified into three (3) separate categories:

1. **Business Aviation Commercial**
Aircraft flown for business purposes by an operator having a commercial operating certificate (generally on-demand charters).

2. **Corporate**
Non-commercial operations with professional crews employed to fly the aircraft.

3. **Owner Operated**
Aircraft flown for business purposes by the owner of the business.

(Note : Consult IBAC for formal definitions of the three categories. Two additional classifications are included in the Breiling Report, namely Government (public operations) and Manufacturer aircraft. These are not, by their use, considered to be "business aircraft", but are included in the data for completeness.)

3.0 Business Aircraft Global Accident Data
(5 year period 2001 – 2005)

3.1 Accidents by Operator Type

A summary of the total accidents over five (5) years by type of operator is as follows:

Accidents by Operator Type - Jet Aircraft				
Business Jet Aircraft	Total Accidents (5 yrs)	Fatal Accidents (5 yrs)	Average Total Accidents per year	Average Fatal Accidents per year
Commercial	75	23	15	4.6
Corporate	23	6	4.6	1.2
Owner Operated	19	5	3.8	1.0
Government	5	3	1.0	0.6
Fractional	9	0	1.8	0

Table 3.1a
*(Note: No analysis provided for **Manufacturer** operations conducted with **Jet Aircraft**)*

Accidents by Operator Type - Turbo Prop Aircraft				
Turbo Prop Aircraft	Total Accidents	Fatal Accidents	Average Total Accidents per year	Average Fatal Accidents per year
Commercial	242	72	48.4	14.4
Corporate	18	4	3.6	0.8
Owner Operated	109	42	21.8	8.4
Government	9	5	1.8	1.0
Manufacturer	1	0	0.2	0

Table 3.1b
*(Note: No analysis provided for **Fractional** operations conducted with **Turbo Prop Aircraft**.)*

Analysis

The majority of business aircraft accidents occur in the commercial category, where operations are governed by commercial regulations (such as FAA Part 135 and JAR OPS 1). The next most frequent number of accidents occurs with aircraft flown by business persons. Accidents of corporate aircraft remain rare.

3.2 Accident Summary by Phase of Flight

Five (5) year totals by phase of flight are as follows:

Accident Summary by Phase of Flight									
	Taxi	T/O	Climb	Cruise	Desc't	Man'v	App	Land	Total
Business Jets	6 4.7%	23 18.2%	8 6.3%	4 3.1%	5 3.9%	1 0.8%	13 10.2%	67 52.8%	127 100%
Turbo Props	12 3.3%	54 14.6%	38 10.3%	39 10.6%	11 3.0%	15 4.1%	86 24.4%	114 23.3%	359 100%

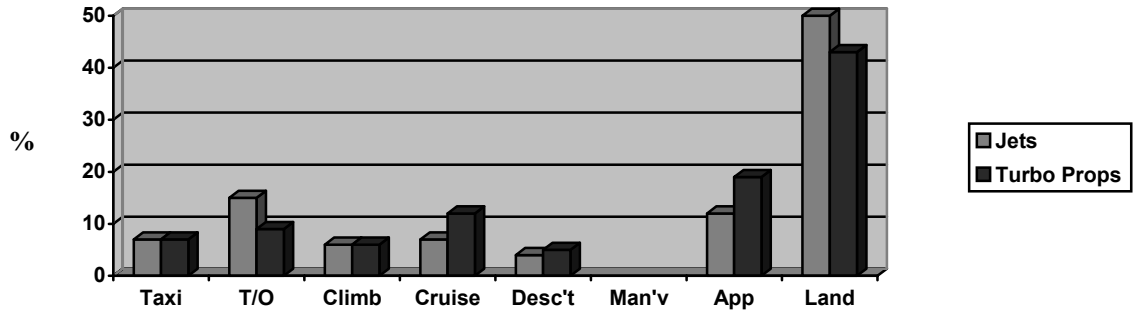
Table 3.2a

Analysis

The trend over a period of 35 years demonstrates a substantive decrease in the percentage of taxi accidents, and a notable decrease in accidents in the landing phase, although landing accidents remain as the most prevalent.

The trend indicates an increase in the number of accidents occurring in the approach phase. The percentage of accidents in the climb phase has also increased substantively for turbo prop aircraft. The distribution of accidents in the other phases has remained relatively unchanged.

(Note: Supplementary data collected by Robert Breiling over a 35 year period was used to develop this trend.)



4.0 Global Accident Rate Data

4.1 Accident Rate by Aircraft Type

The accident rate per 100,000 flight hours for each year over a five year period, as well as for the total, is as follows:

Accident Rate per 100,000 hours by Aircraft Type												
	2001		2002		2003		2004		2005		**5 Year Total**	
	Acc Rate	Fatal Rate	Acc Rate	Fatal Rate	Acc Rate	Fatal Rate	Acc Rate	Fatal Rate	Acc Rate	Fatal Rate	**Acc Rate**	**Fatal Rate**
Business Jets	0.60	0.21	0.50	0.11	0.51	0.21	0.73	0.19	0.56	0.13	**0.53**	**0.15**
Turbo props	1.90	0.76	1.69	0.61	2.24	0.75	1.35	0.54	1.50	0.39	**1.82**	**0.59**
All Bus A/C	1.22	0.47	1.06	0.34	1.30	0.46	1.28	0.36	1.00	0.25	**1.09**	**0.34**

Table 4.1a

4.2 Accident Rate by Operator Type

Global data for the numbers of aircraft in each of the business aviation operational categories (commercial, corporate and owner-operated) proved difficult to obtain as few States collect this information. Similarly, flight hours by type of operation are not available. Due to the lack of good exposure data, it was not possible to calculate, without some error, the rate of each category of operation. Additionally, the operational status of a single airframe may legally vary from flight to flight (i.e., an aircraft may be commercial on one flight and private on a flight made later on the same day or vice versa).

Nevertheless, by applying US data relevant to the division between categories of operator, and by making the assumption that the division is relatively similar for the rest of the world, an estimate of the rate by operator type can be made. Given that the North American data represents approximately 72% of the global total, it is unlikely that the distortion generated by the assumption will be very large.

The percentage of flight hours for each of the three categories in the USA is as follows:

Commercial (Air Taxi)	22.6%	
Corporate	38.3%	
Owner-operated	39.1%	
Total	100.0%	(Averaged over 4 years)

Assuming a similar division globally, the accident rates per 100,000 flight hours are as follows (based on data over 5 years):

Global Accident Rates by Operator Type *(Extrapolated)* *(per 100,000 flight hours)*					
Operator Type	Hours of Operation (5 yrs)	Total Accidents	Fatal Accidents	Total Accident Rate	Fatal Accident Rate
Commercial (Air Taxi)	10,568,479	317	95	3.00	0.90
Corporate	17,910,299	41	10	0.23	0.06
Owner-operated	18,284,405	128	47	0.70	0.26
*All Business Aircraft	46,763,185	510	160	1.09	0.34

Table 4.2a

*Note: *This line includes the three lines above it, plus **Government**, **Manufacturers** and **Fractional** aircraft operators. Also included are accidents involving operators for which insufficient information was available to assign the operator type.*

Analysis

The accident rates calculated in Table 4.2 include both turbo-prop and jet aircraft. The rate data indicates an excellent level of safety in corporate operations, whereas the accident rates in the commercial sector warrants increased attention by the business aviation community.

4.3 Accident Rate by Departures

There is a growing trend for organizations reporting safety data to do so using accident rates per number of departures given that safety exposure is greatest during departure and arrival. Accidents of aircraft en-route are rare except for flights in low level flight in marginal visual conditions. Accident rates per departure, or flight segment or cycle, therefore provide more realistic safety correlations.
The accident rate per 100,000 departures is as follows:

Business Jet Accident and Rate by Departures *(per 100,000 departures)*					
Accident Rate	Departures	Accidents (5 Years)		Accident Rate	
		Total	Fatal	Total	Fatal
Large Jet Aircraft	3,685,291	14	4	0.26	0.11
Medium Jet Aircraft	5,781,951	32	12	0.55	0.21
Light Business Jets	8,665,191	85	21	0.98	0.24
*All Business Jets	18,138,433	131	37	0.72	0.20

Table 4.3a

Business Turbo Prop Accidents and Rates by Departures *(per 100,000 departures)*					
	Departures	Accidents (5 Years)		Accident Rate	
		Total	Fatal	Total	Fatal
Large Turbo Prop	936,316	57	17	6.09	1.82
Medium Turbo Prop	12,283,419	293	95	2.39	0.77
Light Turbo Prop	821,138	29	11	3.53	1.34
All Turbo Prop	14,040,873	379	123	2.70	0.88

Table 4.3b

All Business Turbine Accidents and Rates by Departures *(per 100,000 departures)*					
	Departures	Accidents (5 Years)		Accident Rate	
		Total	Fatal	Total	Fatal
All Business Aircraft	32,179,306	510	180	1.58	0.50

Table 4.3c

If an assumption is made that the distribution of departures for operator types of commercial (22.6%), corporate (38.3%) and owner-operated (39.1%) is relatively the same as the distribution between flight hours, the accident rates by type of operation can be calculated as follows:

Business Aircraft Accident Rates by Operator Type *(Extrapolated)* *(per 100,000 departures)*					
Operator Type	Departures (5 yrs)	Total Accidents	Fatal Accidents	Total Accident Rate	Fatal Accident Rate
Commercial (Air Taxi)	7,272,523	317	95	4.36	1.31
Corporate	12,324,674	41	10	0.33	0.08
Owner-operated	12,582,108	128	47	1.02	0.37
*All Business Aircraft	32,179,306	510	160	1.58	0.50

Table 4.3d

If it is further assumed that the distribution between operator types is proportional for jets and turboprops, the accident rate for jet aircraft by operational category can be extrapolated as follows:

Jet A/C Accident Rate by Operator Type *(Extrapolated)* *(per 100,000 departures)*					
Operator Type	Departures (5 yrs)	Total Accidents	Fatal Accidents	Total Accident Rate	Fatal Accident Rate
Commercial (Air Taxi)	4,099,286	75	23	1.83	0.56
Corporate	6,947,020	23	6	0.33	0.09
*All Jet Aircraft	18,138,433	131	37	0.72	0.20

Table 4.3e

Note: Data for Owner-Operated jet aircraft accidents has not been provided in Table 4.3e pending a review of the validity of the assumptions regarding exposure data for these operations

Analysis

A number of assumptions have been made related to the distribution of exposure data, and as a result the data should be used with some caution. Nevertheless, no other rate data is known to exist for worldwide business aviation. The results of the extrapolation should be sufficiently accurate to provide a reasonable comparison with accident information from other aviation sectors.

The accident rate data demonstrates that corporate aviation has an excellent safety record over the years measured. The corporate jet fatal accident rate of 0.09 accidents per 100,000 departures compares favourably with the 10-year (1994-2005) scheduled passenger carrying airline rate of 0.089 for hull loss and/or fatal accidents per 100,000 departures of jet aircraft over 60,000 lbs and 0.310 for non-scheduled and all other operations of jet aircraft over 60,000 lbs (*Source: Boeing – Statistical Summary of Commercial Jet Airplane Accidents, Worldwide Operations 1959-2005*).

The data in this Brief demonstrates that there is room for improvement in the commercial business aviation sector.

4.4 Accident Rate Trend

The production of this, the Fifth Issue of the Business Aviation Safety Brief enables, for the first time, a meaningful compilation of trend information as presented in Table 4.4a.

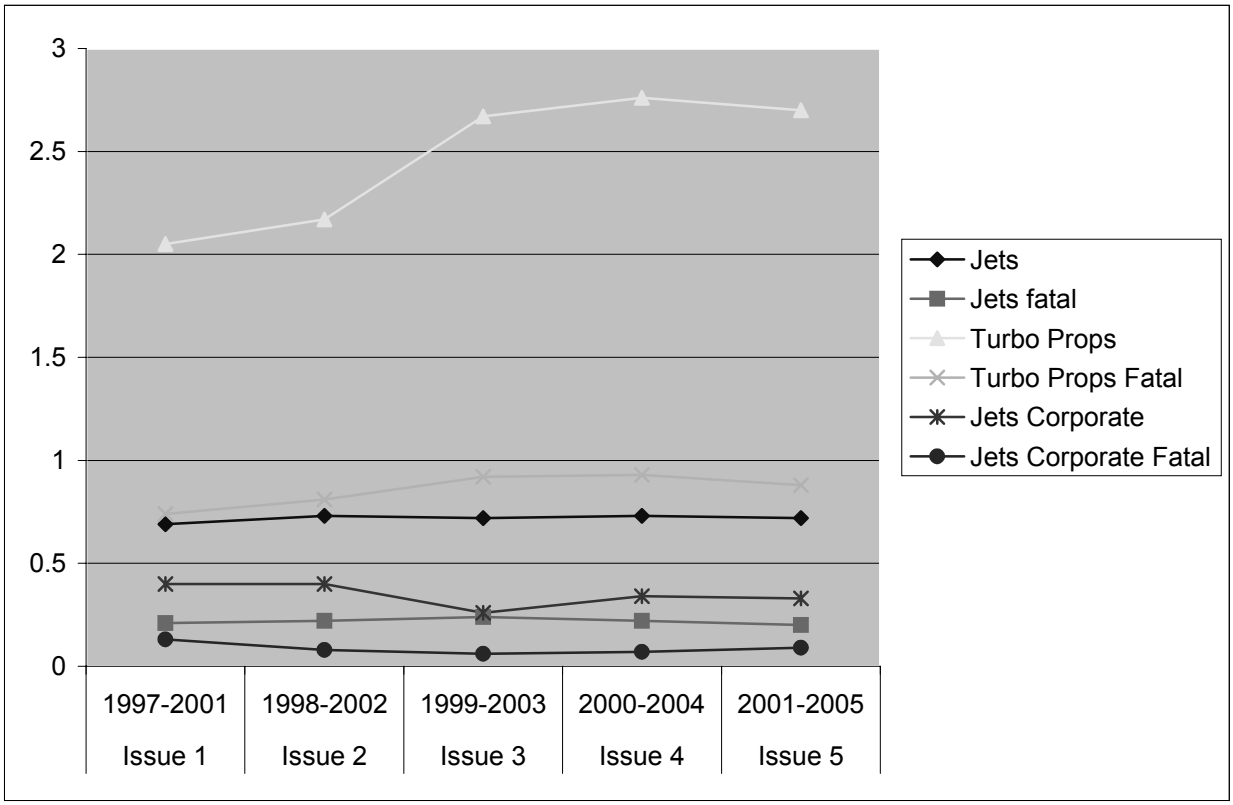


Table 4.4a

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5.0 IS-BAO Safety Value

A Code of Practice

The International Standard for Business Aircraft Operations (IS-BAO) is an industry safety standard introduced in 2002 as the industry's code of practice designed to raise the safety bar by codifying safety best practices. Given that there are very few accidents in the business aviation community, it will be many years before a determination can be made regarding whether or not the IS-BAO is making a safety impact. Therefore, to assess the safety value a study was initiated based on historical accident data.

An analysis of past accidents required a considerable amount of subjective assessment as the analysts had to review the details of accidents against a full understanding of the IS-BAO to make a value judgment regarding whether the accident may have been avoided if the IS-BAO had been implemented.

The study was conducted by an independent analyst who reviewed a total of 500 accidents covering the period between 1998 and 2003. A total of 297 accidents of the 500 were considered to contain sufficient information to be further assessed. The study against the provisions of the IS-BAO standard was performed to determine a level of probability that if the flight department had known about and implemented the IS-BAO the accident may have been avoided. The data was classified and analyzed to determine the potential impact of the IS-BAO and the accidents were rated on a five point scale ranging from certainty of prevention to no effect.

Two assessments were made. First, the analysts made the assumption based on indicators that the flight department may have implemented the IS-BAO, and if implemented, the potential for accident avoidance. The accidents were then further analyzed to determine the potential outcome given that the IS-BAO was implemented in full before the accident. An audit by an accredited auditor leading to an IBAC Certificate of Registration is the recommended means of demonstrating full implementation.

As part of the analysts' work, the accidents were classified in a number of different ways to see if there were any meaningful trends in the prevention probability between the different factors. Classification methodologies applied include:

1. Simple Four Factors – Human, Technical, Environmental and Management.
2. Events – or significant type of accident (such as loss of control).
3. Breakdown on Human Factors.
4. Boeing Accident Prevention Strategies.

Probabilities were calculated for all accidents, phase of fight, type of accident, four factors (per above), type of operation, Commercial or non-commercial, fatalities and single versus two pilot operations.

A further step in the methodology included a quality assurance analysis by a group of current pilots through an assessment of a random selection of twelve accidents as a means of verifying the results of the analysts.

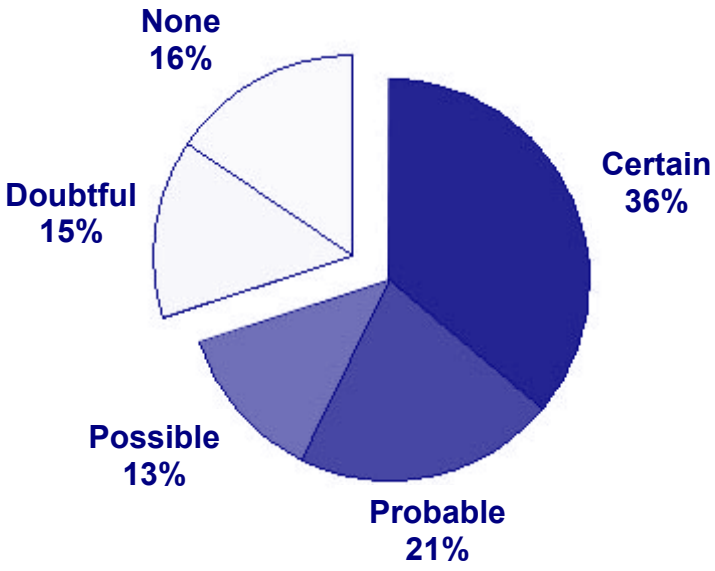
Results of Analysis

Criteria A

Assumes Operators Had Completely Implemented IS-BAO Prior to the Occurrence.

This part of the analysis made the assumption that the operator had implemented the IS-BAO standard in full. An assessment was then made regarding the potential that the accident could have been prevented. The following were the results of the assessment.

Certain of prevention	36.0% (107 of 297 accidents)
Probable prevention	21.2% (63 of 297)
Possible prevention	12.8% (38 of 297)
Doubtful of prevention	14.5% (43 of 297)
No prevention possibility	15.5% (46 of 297)



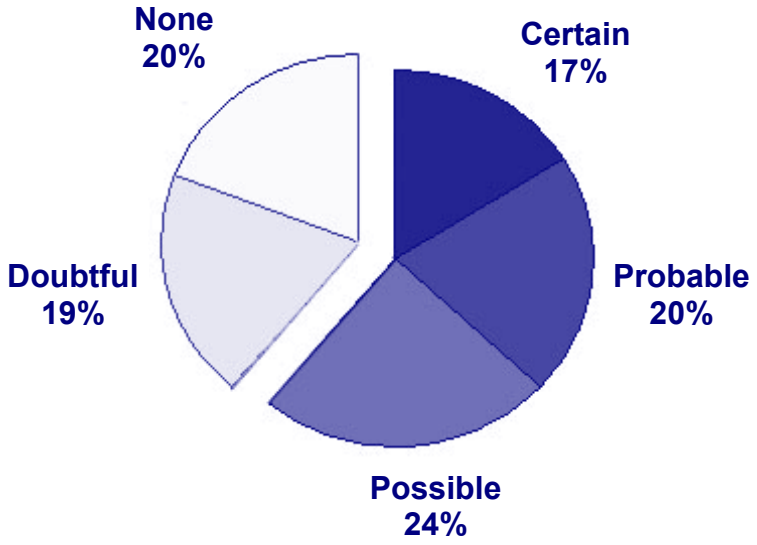
Conclusion - The probability of prevention is 57.2%, with a further 12.8% possible for a total of 70% potential that the aircraft accident could have been avoided.

Criteria B

Takes into Account Operators Background and Probability of Introduction of IS-BAO.

The assessment of whether the accident may have been prevented if the flight department had known about the IS-BAO, and if the operator was sufficiently responsible to implement the standard and had done so thoroughly, produced the following results:

Certain of prevention	17.2% (51 of 297 accidents)
Probable prevention	20.2% (60 of 297)
Possible prevention	23.9% (71 of 297)
Doubtful of prevention	19.2% (57 of 297)
No prevention possibility	19.5% (58 of 297)



Conclusion - The probability of prevention is 37.4%, with a further 23.9% possible for a total of 61.3% potential that the aircraft accident could have been avoided.

Criteria C
Probability of Prevention by Types of Operation and Aircraft.

The analysis showed that there is a greater probability that the accident could have been prevented for jet aircraft type accidents versus turboprop. This was a trend consistent through most methods of analysis and type of accident, although in some cases there was little to distinguish between jet and turboprop probabilities. For example, for the landing accidents (the most common type of accident) the probability of prevention was much greater for jets than turboprop aircraft. Yet, for loss of control accidents there was substantially no difference. The reason for the difference considered by the analysts was that there would be a greater potential for prevention in two pilot operations more typical in jet aircraft.

As would be expected there was a significantly greater probability of prevention related to Management Factors compared to Environmental factors, whereas Technical Factors and Human Factors ranked in the middle of these two.

There was no significant difference between the probability of prevention of commercial operations (air taxi) versus non-commercial. Evidence indicates that there is a higher probability that IS-BAO implementation would prevent accidents with two pilot operations versus one pilot.

Accidents with causal factors related to human performance totaled 232, and were broken down into the following;

1.	Knowledge Based (no standard solution)	37
2.	Rule Based (need to modify behaviour)	46
3.	Skill Based (routine practiced tasks)	149

There was no significant difference between the probability of prevention between these three categories.

Conclusion

The study by an independent analyst indicates that the IS-BAO standard has considerable potential to improve safety. The extent of potential benefit depends significantly on the commitment of the operator to implement and adhere to the standard.

Appendix A

Business Jet Accidents 2005

Date	Model	Description	Region	Phase	Operator	Fatalities
05-01-01	CE-551 II	Aircraft landed short following approach in icing conditions	NAM	Landing	Business	No
01-04	CL-600	Landing overrun, reversers not armed, Kiev, Russia	NAM	Landing	Corporate	No
01-19	G-IISP	On landing , aircraft slid off runway side, gear collapsed	NAM	Landing	Corporate	No
01-21	NA 265-40	Hydraulic pressure lost during taxi, aircraft hit other aircraft	CAR	Taxi	Corporate	No
01-28	L-35A	Ran off runway end, through fence and hit localizer	NAM	Landing	Comm	No
02-02	CL-600	Late abort, overshot runway, improper c.g. loading, TEB, NJ	NAM	Takeoff	Comm	No
02-13	DA-20C	Crew failed to extend landing gear, aircraft landed gear up	SAM	Landing	Comm	No
02-16	CE-560	Crashed during approach to 26R, Pueblo, CO. possible ice	NAM	Approach	Corporate	Yes
02-21	HS-125-600	Aircraft landed to side of runway at night and in IMC	NAM	Landing	Comm	No
02-24	IAI 1124	Control lost after reaching FL 260	CAR	Cruise	Public	Yes
03-08	CE-500	Aircraft collided with terrain during missed approach in IMC	SAM	Approach	Corporate	Yes
03-09	CL-600	Control column jammed by mike holder, gear coll. after abort	NAM	Takeoff	Corporate	No
05-09	NA-265-80	Bird ingestion on takeoff, abort above V1, runway overshoot	NAM	Takeoff	Corporate	No
05-15	CE-525	Overshot rwy. second try to land, acft. went into water, VMC	EUR	Landing	Corporate	No
05-20	DA-20	Lost both engines due contaminated fuel. Aircraft landed long	EUR	Descent	Comm	No
06-20	CE-525A	Landed long and overshot wet runway	SAM	Landing	Corporate	No
07-01	L-25	Ran off runway side during landing roll	NAM	Landing	Comm	No
07-15	CE-525	Hydroplaned landing, late abort, hit localizer antennas	NAM	Landing	Business	No
07-15	L-35A	Skidded of runway into a field, fire followed	NAM	Landing	Comm	No
07-17	CE-525	Hydroplaned on landing, attempted abort, overshot into a fence	NAM	Landing	Business	No
05-09-01,	DA-20DC	Bird ingestion both engines after liftoff, late abort, overshoot	NAM	Takeoff	Comm	No
09-03*	Eclipse	Inadvertent gear up landing during test flight	NAM	Landing	Mfgr.	No
09-14	Premier I	Tire blew landing, aircraft veered/swerved and relanded hard	NAM	Landing	Corporate	No
09-16	CE-525	Impacted terrain during initial climb out in IMC, control lost	SAM	Climb	Corporate	Yes
09-26	CE-560XL	Nose landing gear collapsed during taxi	NAM	Taxi	Fractional	No
09-30*	CE-550	Acft.made emergency ldg. after loss of both engines in cloud	NAM	Cruise	Corporate	No
10-17*	T-39A	Nose and rt. main collapsed during swerve/veer on wet rwy.	NAM	Landing	Corporate	No
10-24*	CL-600	Aircraft destroyed by hurricane Wilma, hangar collapsed	NAM	Parked	Corporate	No
10-24*	BJ-400	Aircraft destroyed by hurricane Wilma, hangar collapsed	NAM	Parked	Comm	No
10-24*	L-35	Aircraft destroyed by hurricane Wilma, hangar collapsed	NAM	Parked	Comm	No
10-24*	L-55	Aircraft destroyed by hurricane Wilma, hangar collapsed	NAM	Parked	Comm	No
10-26	L-25D	Landing gear collapsed during landing	NAM	Landing	Comm	No
11-05	CE-500	Acft. had problem after TO and crashed returning to land	NAM	Takeoff	Pvt/Bus	Yes
12-10	CE-525111	Overshot runway while executing an intersection takeoff	NAM	Takeoff	Comm	No
12-28	L-35A	Crashed during approach in rain, snow, strong winds	NAM	Approach	Comm	Yes
		*Not counted as an operational accident				

Appendix B

Turbo Prop Accidents 2005

Date	Model	Description	Region	Phase	Operator	Fatalities
05-01-03'	CE-441	Gear collapsed after hydroplaning off the runway	NAM	Landing	Pvt/Bus	No
01-04	AC-690A	After landing aircraft veered off runway side in gusts, night, IMC	NAM	Landing	Pvt/Bus	No
01-11*	BE-90L	Crash during VOR/GPS approach at night in IMC, Rawlins,WY	NAM	Approach	Comm	Yes
01-12	BE-300	Landed long, overshot runway, impacted localizer antenna	NAM	Landing	Corp	No
01-13	EMB-110	Aircraft crashed during engine out approach, Keene, NH	NAM	Approach	Comm	Yes
01-14	BE-90L	-Nose wheel collapsed during landing	NAM	Landing	Pvt/Bus	No
01-21	CE-208B	Acft. crashed executing emerg. landing after heavy ice build up	SAM	Landing	Comm	No
01-21	CE-421TP	Aircraft crashed after takeoff in IMC, Riley 421TP conversion	NAM	Takeoff	Private	Yes
01-23	BE-90C	Wheel departed on takeoff, pilot relanded with gear retracted	AFR	Takeoff	Private	No
01-31	CE-208B	In climb, when flaps retracted, control lost due snow on wings	EUR	Climb	Comm	No
01-31	AC-690A	Aircraft stalled and landed hard shooting a short field landing	NAM	Landing	Pvt/Bus	No
02-10	AC-690	Veered off runway side landing in crosswind	NAM	Landing	Pvt/Bus	No
02-11	AC-680V	Gear collapsed landing, aircraft veered off runway side	NAM	Landing	Pvt/Bus	No
02-27*	BE-200	Stolen aircraft forced down by Colombian Air Force	SAM	Maneuver	Stolen	No
03-09	CE-208B	Control lost during takeoff following microburst encounter	CAR	Takeoff	Comm	No
03-11	MU-2B	Aircraft landed with landing gear retracted	NAM	Landing	Comm	No
03-15	PA-46-500TP	On touchdown, aircraft veered off rwy. and nose gear collapsed	NAM	Landing	Private	No
03-18	C-45TP	Gear collapsed landing due hyd.cylinder hose failure	NAM	Landing	Comm	No
03-18	CE-406	Right main landing gear collapsed during takeoff	AFR	Takeoff	Comm	No
03-26	PC-12	Aircraft crashed during approach, possible icing in area	NAM	Approach	Pvt/Bus	Yes
03-29	CE-208	Control lost landing at farm strip. Aircraft hit ditch, fire followed	SAM	Landing	Comm	No
03-30	SA-226TC	Aircraft struck deer landing, propeller blade entered cabin	NAM	Landing	Comm	No
05-04'	CE-208B	Aircraft landed hard at an airstrip and the nose gear collapsed	AFR	Landing	Comm	No
04-10'	AC-690	Aircraft landed with left main gear retracted	NAM	Landing	Public	No
04-14'	MU-2B	Aircraft impacted mountain during a training flight, Japan, military	ASI	Maneuver	Military	Yes
04-18'	BE-200	Emergency landing after dual power loss	SAM	Cruise	Comm	No
04-23*	DHC-6	During parachute drop, aircraft hit sky diver in air	NAM	Maneuver	Private	Yes
04-26'	SA-26AT	Aircraft crashed during ILS approach	NAM	Landing	Pvt/Bus	No
05-03'	PA-31T	Main landing gear failed to extend, aircraft landed gear up	NAM	Landing	Pvt/Bus	No
05-05'	AC-695A	Owner/pilot incapacitation, passenger crash landed aircraft	NAM	Cruise	Pvt/Bus	Yes
05-24'	MU-2K	Crash during initial climb, possible engine malf/failure	NAM	Climb	Pvt/Bus	Yes
05-24'	BE-300	Crashed while executing an instrument approach in IMC	SAM	Cruise	Corp	Yes
05-31'	SA-226T	Experienced engine problem, crashed short of rwy. VMC	NAM	Approach	Pvt/Bus	No
		* Not counted as routine operation				

Appendix B

Turbo Prop Accidents 2005 cont'd

Date	Model	Description	Region	Phase	Operator	Fatalities
06-04'	DHC-6	Departed sky diving area and crashed, no other information	NAM	Landing	Private	No
06-13'	BE-90C	Crashed during attempted go-around trying to land on a small strip	NAM	Approach	Pvt/Bus	No
06-13'	BE-200	Left engine malf. on takeoff, pilot re-landed with gear retracted	SAM	Takeoff	Comm	No
06-23'	BE-90E	Rolled inverted and crashed during approach in VMC	NAM	Landing	Pvt/Bus	Yes
06-28'	CE-208	Landed short,gear sheared, aircraft cartwheeled and flipped over	NAM	Landing	Comm	No
07-01'	PA-46TP-500	Pilot lost control attempting to land in gusting conditions	NAM	Landing	Pvt/Bus	No
07-09*	CE-208B	Parachutist missing after jumping from aircraft	NAM	Maneuver	Private	Yes
07-22'	CE-208B	Power lost after takeoff, aircraft damaged during off airport landing	NAM	Climb	Comm	No
07-26'	CE-208B	Aircraft impacted rising terrain during aerial application flight	CAR	Maneuver	Comm	Yes
07-28'	BE-200	Aircraft impacted mountains during flight	NAM	Cruise	Comm	Yes
07-28'	BE-100A	Severe weather encounter during storm diversion	EUR	Maneuver	Comm	No
08-04'	MU-2B-60	Descended below glidepath and crashed short of runway	NAM	Approach	Comm	Yes
08-13'	CE-425	Crashed during ILS app. In marginal wx., night, below glidepath	NAM	Approach	Pvt/Bus	Yes
08-19'	CE-208	Seaplane water landed with wheels down and flipped over	NAM	Landing	Comm	No
08-28'	CE-441	Inadvertent landing gear retracted landing	NAM	Landing	Pvt/Bus	No
09-12'	PA-46-500TP	Control lost during climb, possible runaway autopilot	NAM	Climb	Pvt/Bus	No
09-18'	BE-90C	Aircraft landed with landing gear retracted, Kingston, Jamaica	CAR	Landing	Comm	No
09-22'	MU-2B	Crashed 2 mi. west of airport returning to land, night,VMC	NAM	Approach	Comm	Yes
10-06'	CE-208B	Crashed after takeoff, possible icing	NAM	Climb	Comm	Yes
10-16*	CE-208B	Skydiver fatally injured during parachute jump	NAM	Cruise	Pvt/Bus	Yes
10-18'	CE-208	Forced landing after inflight power loss	NAM	Cruise	Comm	No
10-24'	CE-208B	Aircraft collided with terrain during low level flight	NAM	Cruise	Comm	No
11-08'	EMB-110P	Aircraft crashed following engine loss during initial climb	NAM	Climb	Comm	No
11-15'	CE-208	Float equipped 208 crashed into Peconic Bay, NY. Training	NAM	Landing	Comm	No
11-29'	CE-425	Aircraft crashed 3 mi. short after being cleared for an ILS	NAM	Approach	Pvt/Bus	Yes
12-09'	EMB-110P	Diverted due low fuel state, crashed 1/4 mi. short of runway	NAM	Approach	Comm	No
12-13'	CE-208B	Aircraft rolled off runway end during takeoff	NAM	Takeoff	Comm	No
12-20'	MU-2B	Aircraft impacted terrain shortly after takeoff	NAM	Climb	Comm	Yes
12-24'	CE-208B	Unable to climb after takeoff, aircraft hit glideslope	NAM	Climb	Comm	No
12-27'	TBM-700	Crashed off airport practicing an engine out	NAM	Approach	Pvt/Bus	No
12-30'	BE-100A	Aircraft landed hard due ice induced stall	NAM	Landing	Comm	No
		*Not counted/included as normal operation				