



IS-BAO STANDARDS BOARD/7
CONVENTION CENTER ROOM S 321
ORLANDO, FL – 0900 HRS OCTOBER 16, 2006



Attendees

Members

Paul Stinebring – NBAA	Chair
Steve Fisher – EBAA	Vice-Chair
Len Beauchemin – NBAA	Member
William Boucher – CBAA	Member
Pat Dunn – NBAA	Member
Bill Stine – NBAA	Member
Ron Swanda – GAMA	Member
Don Spruston – IBAC	Member

Support Staff

Ray Rohr	Standards Manager
Peter Ingleton	Director, ICAO Liaison

Others

Doug Carr	NBAA
-----------	------

Regrets

Gary Ridley – EBAA & BBGA	Member
Rudy Toering – BBGA	Member

1. Call to Order

Paul Stinebring called the meeting to order at 0900 hrs.

2. Adoption of Agenda

The proposed agenda was reviewed and it was moved by Ron Swanda and seconded by Bill Boucher that it be adopted with the addition of Item 6 f) Maintenance Personnel Survey and 11.1 Long-Range Operations proposed respectively by Mr. L. Beauchemin and Mr. R. Swanda

Carried

Action - Info

3. Review of Decision Record of November 8, 2005

The Decision Record of November 8, 2004 was reviewed and it was moved by Steve Fisher and seconded by Pat Dunn that the Decision Record of the November 8, 2005 Standards Board/6 meeting be adopted as presented.

Carried

Action - Info



IS-BAO STANDARDS BOARD/7
CONVENTION CENTER ROOM S 321
ORLANDO, FL – 0900 HRS OCTOBER 16, 2006



4. Action Items from Last Meeting

4.1 The following Action Items from the, Nov. 8, 2005 meeting were reviewed and the actions taken were accepted.

Action - Info

Action Item	Report
a.	The updated IS-BAO brochure as completed and published.
b. Find a replacement for John Batty	Rudy Toering was appointed to replace John Batty on the Standards Board.
c. IS-BAO presentation at BBGA conference	An IS-BAO presentation was made at the March 2006 BBGA conference in St. Albans.
d. Post IS-BAO brochure on IBAC web site	The updated IS-BAO brochure was posted on the IBAC web site at http://www.ibac.org/is-bao/support/9X7%20F%20booklet%20e-version%201.pdf
e. Publish amendments to IS-BAO and related documents	The January 1, 2006 amendment to the IS-BAO was published and mailed in December 2005.
f. Publish two new policies	The policies on IS-BAO registration involving common services provided by aviation support service companies and IS-BAO registration when a flight department is split into two or more separate entities were finalized and posted on the IBAC web site at http://www.ibac.org/is-bao/isbao_policies.htm
g. Hold Workshops as per the approved schedule	The scheduled Workshops were held and in response to demand three more were added.

5. Standards Board Membership and Executive

Gary Ridley has advised that due to a change in employment he must resign from the Board. His resignation was reluctantly accepted and his contribution to the work of the Board was noted with appreciation.

It was moved by Bill Stine and seconded by Don Spruston that the terms of Steve Fisher and Pat Dunn be renewed for a three year period.

Carried

It was also agreed that Don Spruston would request that the Governing Board appoint a replacement for Gary Ridley. It was also noted that it is important to ensure that the Board reflects the regional composition of IBAC and include individuals that can contribute strategic input to the IS-BAO program from perspectives that are not presently represented.

The SB agreed to recommend a revision to its Terms of Reference such that the GAMA representation be made permanent and to recognize the need for a regional geographic balance.

Action - Spruston



IS-BAO STANDARDS BOARD/7
CONVENTION CENTER ROOM S 321
ORLANDO, FL – 0900 HRS OCTOBER 16, 2006



The current members and terms of office are as follows:

Member	Position	Term Expires
Paul Stinebring – NBAA	Chair	2008
Steve Fisher – EBAA	Vice-Chair	2009
Len Beauchemin – NBAA	Member	2007
William Boucher – CBAA	Member	2007
Pat Dunn – NBAA	Member	2009
Bill Stine - NBAA	Member	2007
Ron Swanda – GAMA	Member	2007
Rudy Toering - BBGA	Member	2008
Don Spruston - IBAC	Member	IBAC DG

6. IS-BAO Activity Update

The IS-BAO Activity Report that is attached as Appendix A was reviewed and accepted. Ray Rohr noted that there were a number of IS-BAO audits in process and he anticipated that there would be more than 80 registered operators by the end of the year.

There was extensive discussion regarding the need to develop and implement an integrated marketing plan. Ideas presented included:

- Ensure that Member Associations (MAs) have a link to the IS-BAO homepage on the homepages of their website.
- Have MAs send a copy of the IS-BAO brochure to all of their operator members.
- Work with MAs, audit companies and charter operators and charter users to promote the safety benefits of IS-BAO and SMS.
- Work with OEMs and training service providers to create awareness of the IS-BAO and the safety benefits that can be achieved.
- Have a neutral party survey operators who have purchased the IS-BAO but have not completed registration and determine the reasons why.
- Work with registered operators and auditors in target geographical areas to develop mentoring programs to support operators with the implementation process.
- Try to facilitate the establishment of operator networking groups.
- Investigate strategies to hold more workshops that target operator in the various geographic areas.
- In our promotional materials stress the “scalability” of the IS-BAO as it applies to small operators.
- Work with the NBAA to develop a scheme to assist selected small operators with IS-BAO implementation as a demo project. This could include NBAA regional groups.
- Use the experience from this demo project to develop a brochure or other marketing materials aimed at small operators.
- Use the experience form the demo project to review the guidance material available for small operators and if necessary develop additional materials.
- Examine schemes to give some credit or recognition, to operators at various points in the implementation process.
- Consider developing a program that would be parallel to the IS-BAO but would only include an operator SMS.



IS-BAO STANDARDS BOARD/7
CONVENTION CENTER ROOM S 321
ORLANDO, FL – 0900 HRS OCTOBER 16, 2006



- Consider obtaining the services of a marketing person to assist with developing a comprehensive IS-BAO marketing program.
- Review the IS-BAO business plan in an effort to reduce the price and increase the sales. It was suggested that we may wish to look at additional sources of funding for the program so that the selling price of the IS-BAO could be reduced.

It was agreed that Don Spruston, Ray Rohr and Peter Ingleton would review the suggestions and develop an action plan.

Action – Spruston/Rohr/Ingleton

Len Beauchemin reported on the results of his survey of Maintenance Managers. He recommended that the following initiatives be included in the marketing program that is being developed.

- Target the Professional Aviation Maintenance Association (PAMA) chapters and their meetings. Their web site is <http://www.pama.org>.
- Try to get more IS-BAO info in aviation technology journals.
- SMS is not well understood by the aviation maintenance community. It was suggested that we consider development of an SMS video.
- In our informational materials we should address the question of “What is in it for the maintenance personnel?”

It was agreed that these items be considered in developing the above noted action plan.

Action – Spruston/Rohr/Ingleton

7. Amendments to ICAO Annex 6 and Other Related Annexes

The summary of the amendments to the ICAO Annexes was reviewed and the recommended actions were accepted. A copy of the summary is attached as Appendix B.

Action – Rohr

8. Amendments to IS-BAO, APM and GCOMs

The proposed amendments to the IS-BAO, Audit Procedures Manuals and generic company operations manuals were reviewed in detail and accepted. A copy of the summary is attached as Appendix C.

Action – Rohr

9. Standards Manager Transition

Don Spruston briefed on the status of the Selection Committee's efforts to recruit a replacement for the Standards Manager. He anticipates that the candidate will be selected early in 2007.

Action – Info



10. IS-BAO Workshop Schedule

The IS-BAO Workshop schedule was discussed and the following schedule was agreed:

City/Area	Date
San Antonio, TX	January, 2007
Bedford, MA	February, 2007
West Chicago, IL	April, 2007
Geneva	May 21, 2007
Atlanta, GA	June, 2007
Washington, DC	August, 2007
TBA	Sept. – Oct.
Oakland, CA	November, 2007

Additional Workshops may be held as required.

Action – Rohr

11. Other Business

Long Range Operations

Ron Swanda suggested that guidance material on long range flight should be included in the IS-BAO. He noted that a rule for Part 135 operations is in process and that it may be possible to use it and the related material as the basis of IS-BAO guidance material.

Len Beauchemin noted that is was very important to use engine reliability data in the long range flight assessment process.

It was agreed that Ron Swanda would forward the Part 135 material to Len and Ray and the three of them would jointly work on the issue.

Action – Swanda

12. Next Meeting

The next meeting will be held in Atlanta, GA on September 24, 2007 or, if required, at the call of the Chair.

Action – Info

There being no further business it was moved by Steve Fisher that the meeting be adjourned.

Carried

APPENDIX A – IS-BAO ACTIVITY REPORT

6.a IS-BAO Sales

The following are the IS-BAO sales reported to October 1, 2006 with comparative data sales for 2005

MEMBER ASSOCIATION	REPORTED IS-BAO SALES		
	OCT. 1, 2006	OCT. 1, 2005	LAST YEAR
ABAG (Brazil)	3	3	0
BBGA (United Kingdom)	13	13	0
BAASA (S. Africa)	2	2	0
CBAA (Canada)	9	7	2
EBAA (Europe)	17	17	0
EBAA-F (France)	5	3	2
GBAA Germany	3	3	0
JBAA (Japan)	5	5	0
NBAA (United States)	430	370	60
Total	487	423	64

6.b IS-BAO Auditors

The list of accredited IS-BAO Auditors is as follows:

Brazil	1	Luxembourg	1	South Africa	1
Canada	3	Netherlands	1	UK	4
Japan	1	Russia	1	USA	67
				Total	80

Last year five auditors did not renew their accreditation. Two of the auditors whose accreditation expire the end of 2006 have confirmed that they will not be renewing and four have not advised of their intentions.

There were not any auditor monitors conducted this year but one is scheduled for December.

APPENDIX A – IS-BAO ACTIVITY REPORT

6.c IS-BAO Workshops

Nine IS-BAO Workshops are scheduled for 2006. The following are the results for the seven that have been held and numbers currently booked for the two remaining.

Date	Location	Attendance				Revenue	Expense	Profit (Loss)
		Operators & Others	Auditors Initial	Auditors Renewal	Total			
Jan. 21	Boca Raton	10	1	0	11	\$5,100	\$2,868	\$2,232
Mar. 30	St. Louis	10	5	1	16	\$12,800	\$2,599	\$10,201
May 2	Geneva	1	0	4	5	\$2,000	\$1,000	\$1,000
June 9	Dulles	12	1	0	13	\$4,000	\$3,200	\$800
Aug. 22	Washington	2	0	13	15	\$6,000	\$2,550	\$3,450
Aug. 24	White Plains	15	1	1	17	\$7,200	\$2,550	\$4,650
Oct. 11	Philadelphia	4	4	1	9	\$6,800	\$2,400	\$4,400
Nov. 7	Hong Kong	8	2	0	10	\$5,100	\$3,239	\$1,861
Nov. 17	Long Beach	3	0	0	3	\$1,200	\$2,400	(\$1,200)
	Total	65	14	20	99	\$50,200	\$22,805	\$27,395

Note: The above chart has been updated to include Workshops held subsequent to the Standards Board meeting.

APPENDIX A – IS-BAO ACTIVITY REPORT

6.d Registered Operators

As of October 1, 2006 there have been 71 initial registration audits completed. Of that group four flight departments have either ceased operation or have been amalgamated with another flight department. In addition one operator has not renewed their registration. Hence, there are now 66 registered operators. Of that total 25 were initial registrations in the past year. Also, there were 15 renewals in the same period.

The list of operators currently registered is as follows:

1	Entergy Services, Inc.	New Orleans, LA
2	The Coca Cola Company	Atlanta, GA
3	Altria Corporate Services Inc.	White Plains
4	Toyota AirFlite	Hebron, KY
5	MI Home Products	Harrisburg, PA
6	Magna International, Inc.	Toronto, ON, Canada
7	Yum! Brands Aviation	Louisville, KY
8	IBM	White Plains, NY
9	Countrywide Home Loans	Van Nuys, CA
10	Boeing Executive Flight Operations	Chicago, IL
11	The Home Depot	Atlanta, GA
12	Shell US	Houston, TX
13	Sky River Management	Henderson, NV
14	Gannett Co. Inc.	Dulles, VA
15	Shell Aircraft International	Rotterdam, Netherlands
16	Darden Restaurants	Orlando, FL
17	Aon Aviation, Incorporated	Chicago, IL
18	BellSouth Corp. Aviation and Travel Services, Inc.	Atlanta, GA
19	Executive Fliteways, Inc.	Ronkonkoma, NY
20	AFLAC Incorporated	Columbus, GA
21	T-Bird Aviation	DuPage West Chicago, IL
22	Cargill Corporate Aircraft	Minneapolis, MN
23	Koch Business Holdings, LLC	Wichita, KS
24	Textron, Inc.	Warwick, RI
25	Caterpillar, Inc.	Peoria, IL
26	Anglo Operations Limited	Bonaero Park, South Africa
27	Mente, LLC	Seattle, WA
28	Merck & Company Inc.	West Trenton, NJ
29	General Mills Inc.	Minneapolis, MN
30	Harley-Davidson Motor Co.	Milwaukee, WI
31	CVS Corp	Warwick, RI
32	BD Aviation	Teterboro, NJ
33	Marathon Oil	Houston, TX
34	BMW	Munich, Germany
35	CIGNA Corp.	Windsor Locks, CT
36	Husky Injection Moldings	Toronto, ON, Canada
37	Kellogg Company Aviation Dep't.	Battle Creek, MI
38	Bunn-O-Matic Corp	Springfield, IL
39	Amerada Hess Aviation	West Trenton, NJ
40	GE Corporate Air Transport	Newburgh, NY

APPENDIX A – IS-BAO ACTIVITY REPORT

Since last Standards Board meeting		
41	Amgen Aviation	Camarillo, CA
42	DB Aviation	Waukegan, IL
43	Group Holdings Inc	Fort Worth, TX
44	AGRO Industrial Management	West Palm Beach, FL
45	Northrop-Grumman Aviation Division	Hawthorne, CA
46	PepsiCo Flight Operations	White Plains, NY
47	United Services Automobile Assn	San Antonio, TX
48	Aviation Consultants of Aspen, Inc	Hollis, NH
49	Johnson & Johnson	West Trenton, NJ
50	Gulfstream Aerospace Demo and Corp Flight Operations	Savannah, GA
51	Dassault Falcon Jet	Teterboro, NJ
52	Lockheed Martin Corporate Aircraft	Baltimore, MD
53	Consolidated Contractors International Company. S.A.L	Athens, Greece
54	Emerson Aviation	Chesterfield, MO
55	Specsavers Aircraft Ltd.	Guernsey, CI, UK
56	Líder Táxi Aéreo	Belo Horizonte, MG, Brazil
57	Schering-Plough Corporation	Morristown, NJ
58	Nike Flight Operations	Hillsboro, OR
59	DuPont Aviation	New Castle, DE
60	Valero Energy	San Antonio, TX
61	Hendrick Motor Sport Aviation	Charlotte, NC
62	Occidental Petroleum	Burbank, CA
63	Eastman Kodak	Rochester, NY
64	M & N Aviation	Casper, WY
65	Owens Corning	Swanton, OH
66	Texas Instruments	McKinney, TX
67	Costco	Issaquah, WA
68	FedEx	Memphis, TN

The location of the main base of the registered operators is as follows:

Brazil	1
Canada	2
Germany	1
Greece	1
Netherlands	1
South Africa	1
United Kingdom	1
United States	61

APPENDIX A – IS-BAO ACTIVITY REPORT

6.e IS-BAO Marketing

The IS-BAO sales and registration results were reported earlier in this Agenda Item.

The sales results of the NBAA have been most notable. Activities which it is believed have contributed to this success are:

- The NBAA have IS-BAO information on their web site including the list of IS-BAO Workshops etc.
- IS-BAO articles have been included in their weekly NBAA Update.
- The IS-BAO is mentioned in the *NBAA Membership Benefits Guide*.

Other marketing and awareness activities undertaken include:

- The new IS-BAO brochure has been widely distributed,
- Nine IS-BAO Workshops are being were held in 2006. The one in Hong Kong is in response to local interest in the area.
- The Standards Manager attended two NBAA Regional Forums,
- IS-BAO presentations were made at:
 - BBGA Conference, and
 - EBACE,
- The NBAA representative included the IS-BAO in his presentation at the August 23 Georgia Business Aviation Association Safety Day,
- A representative from an European accredited audit company made an IS-BAO presentation at the August 25 Quality Control Management Event in Berne, Switzerland and
- An auditor is making an IS-BAO presentation at Oct. 20, 2006 NASCAR SMS Awareness Training that is being co-sponsored by the FAA.

The Introduction to IS-BAO DVD has been distributed IS-BAO Workshops and at Association events and to those indicating an interest.

The IS-BAO Workshop received NBAA PDP accreditation this year. Attendees will receive will receive a PDP certificate indicating that they have met the requirements of PDP Objective O4.

The June 2006 FAA Advisory Circular 120-92 Introduction to Safety Management Systems for Air Operators provides a significant IS-BAO marketing opportunity in the USA.

It is obvious from the IS-BAO sales results that we need a more integrated marketing program to which all of the member associations are committed and involved if we are to have any chance of taking the IS-BAO from the “Early Adopters” to mainstream.

APPENDIX B SUMMARY OF AMENDMENTS TO ICAO ANNEXES & MANUALS

ICAO Document	Amdt #	Applicable	Nature	Attachment Reference	IS-BAO Impact	IS-BAO Ref
Annex 1	166	24 Nov 2005	<ol style="list-style-type: none"> 1. Amendment of medical provisions, 2. New provisions on approved training organizations. 	12402	<ol style="list-style-type: none"> 1. None 2. None 	Current 4.3.1 is generic. No action required.
Annex 2	38	24 Nov 2005	<ol style="list-style-type: none"> 1. Definitions; marshalling signals (3.4.4);, 2. (“3.4.4 No person shall guide an aircraft unless trained, qualified and approved by the appropriate Authority to carry out the functions of a signalman.”) 3. Communications failure procedures; interception manoeuvres. 	12404	<ol style="list-style-type: none"> 1 & 2. New 3.4.4 is apparently applicable to an Operator’s employees! 3. None. 	5.1.3 was augmented.
Annex 6 / I	29	24 Nov 2005	<ol style="list-style-type: none"> 1. New definitions related to RVSM Operations and cruise relief pilots, 2. New Standards 4.9.1 and 4.9.2, concerning single pilot operations under IFR or at night, 3. An exception to the operating limitations in 5.1.2 for approved single-engine turbine-powered aeroplanes, 4. New Standards 5.4.1 and 5.4.2 , specifying requirements for approval of commercial operations by single-engine turbine –powered aeroplanes in IMC or at night, 5. New Standard 6.22 ,specifying aeroplane equipment requirements for single pilot operations under IMC or at night 6. Amendments to 7.2.4 regarding flight levels for RVSM operations, and new standards 7.2.5 , 7.2.6 and 7.2.7, specifying the responsibilities of the relevant State authority to take prompt and appropriate action if the monitoring results indicate that the height – keeping performance of a particular aircraft or 	12409	<ol style="list-style-type: none"> 1. None 2. See BN below 3. See BN below 4. See BN below 5. See BN below 6. None 	No action required re single pilot ops. Commercial ops requirements addressed by State rules and are caught by SMS requirement 3.2.1.d.

APPENDIX B SUMMARY OF AMENDMENTS TO ICAO ANNEXES & MANUALS

ICAO Document	Amdt #	Applicable	Nature	Attachment Reference	IS-BAO Impact	IS-BAO Ref
			<p>an aircraft type group exceeds the prescribed limits,</p> <p>7. New Standards 7.41. and 7.4.2 concerning operator management of electronic navigation data products,</p> <p>8. Amendments to Standards 9.4.1 and 9.4.2 concerning recent experience of the pilot – in –command, co-pilot and cruise relief pilot,</p> <p>9. Amendments to Standards 9.4.3.5 and 9.4.3.6, concerning area, route and aerodrome qualifications of the pilot in command,</p> <p>10. New Standard 9.4.5.1 requiring States to specify requirements applicable to single pilot operations under IFR or at night,</p> <p>11. A new RP 9.4.5.2, specifying pilot-in-command experience and training requirements for single pilot operations under IFR or at night,</p> <p>12. Amendments to Appendix 2 , regarding the contents of operations manuals in relation to area, route and aerodrome qualifications of the pilot-in-command and maximum cross wind and tailwind operating limits,</p> <p>13. A new Appendix 3 specifying additional requirements for approved operations by single-engine turbine-powered aeroplanes at night and/or in IMC, and a new Appendix 4 regarding the height –keeping performance criteria for operations in RVSM airspace.</p>		<p>7. See BN below</p> <p>8. None</p> <p>9. Possible</p> <p>10. None</p> <p>11. See BN below</p> <p>12. See BN below</p>	
Annex 6 / II	24	24 Nov 2005	1. New definitions and provisions regarding height -keeping performance and height-keeping monitoring requirements associated	12406	None	

APPENDIX B SUMMARY OF AMENDMENTS TO ICAO ANNEXES & MANUALS

ICAO Document	Amdt #	Applicable	Nature	Attachment Reference	IS-BAO Impact	IS-BAO Ref
			with RVSM operations, 2. New requirements for the carriage of ACAS II in general aviation aeroplanes, and associated training requirements for pilots.		Re ACAS II carriage-possible? Re training -None	2. ACAS requirements modified as per new requirements
Annex 6 / III	10	24 Nov 2005	1. New provisions concerning references to noise certification.	12410	None	
Annex 8	100	13 Dec 2007	1. new definitions of Category A, Category B, critical engine, discrete source damage, engine, fire proof, fire resistant, and satisfactory evidence; 2. Amendment to the definition of repair; 3. Revision of the provisions of Part II to allow the introduction of new parts in the Annex, amend Chapter 3 to clarify provisions relating to the limiting conditions under which a damaged aircraft is permitted to fly non-commercially to an aerodrome where it can be restored to airworthy condition and reorganize Chapter 4 to clarify State's responsibilities; 4. Revisions of provisions of Part III A pertaining to applicability and operating limitations, proof of compliance; 5. Revision of provisions pertaining to applicability, operating limitations, performance, stability, structure, design and construction, power-plant, operating limitations, crash worthiness and cabin safety, operating environment and human factors; 6. Restructuring of Part IV into Part IVA (same provisions as those contained in the current	12369	None None, but note revised definition. None None None None None	No action required.

APPENDIX B SUMMARY OF AMENDMENTS TO ICAO ANNEXES & MANUALS

ICAO Document	Amdt #	Applicable	Nature	Attachment Reference	IS-BAO Impact	IS-BAO Ref
			Part IV of Annex 8, Ninth Edition including Amendment 99, except for applicability clauses and cross-references) and Part IV B (new); 7. Introduction of new Part V – <i>Small Aeroplanes</i> , Part VI – <i>Engines</i> and Part VII – <i>Propellers</i> .			
Annex 10 / I, II & III	80	24 Nov 2005	1. Updates to strategy for introduction and application of non-visual aids for approach and landing. 2. Changes to procedures for the indication of the transmitting channels in VHR RTF communications. 3. Provisions for the use of location protocols for use in ELTs operating on 406 MHz.	12405	None None None	No action required.
Annex 11	43	24 Nov 2005	1. Definitions; use of surface movement radar; ATS requirements for communications; meteorology information; height keeping performance by aircraft; ATS safety management ; electronic terrain and obstacle data; editorial amendments.	12408	None	
Annex 13	nil					
Annex 16 / I	8	24 Nov 2005	1. Ambient noise correction procedure including definitions for “background noise”, ambient noise” and “broadband noise”; 2. Allowable wind speed limits during testing; applicability language clarification including temporary changes in type design and provisions to allow re-certification of Chapter 5 aeroplanes to Chapter 4; 3. Rotorcraft –related technical issues;	12403	None None None	No action required.

APPENDIX B SUMMARY OF AMENDMENTS TO ICAO ANNEXES & MANUALS

ICAO Document	Amdt #	Applicable	Nature	Attachment Reference	IS-BAO Impact	IS-BAO Ref
			4. New Attachments G and H containing guidelines for the administration of noise certification documentation and guidelines for obtaining helicopter noise data for land use planning purposes respectively.		None	
Annex 16 / II	5	24 Nov 2005	1. Increase in stringency of NOx emissions Standards.	12403	None	No action required.
Annex 17	N/A					
Annex 18	8	24 Nov 2005	1. Refinement of 9.6.1 to make it clear that the presence of dangerous goods needs to be reported only in the case of a serious incident in which dangerous goods were likely to have been involved.	12401	Possible	Current 14.8 already covers.
PANS ATM	4	24 Nov 2005	1. Definitions; meteorological information; special procedures for in-flight contingencies in oceanic airspace; reduced runway separation minima; air-ground communications failure procedures; phraseologies for use on and in the vicinity of the aerodrome.	SL AN 13/2.1-05/51	None But ascertain whether reminder is apropos re use of True Mach when MNT separation applied.	Revised AMC 7.0 section 2.10.
PANS OPS / I	14*	23 Nov 2006	Editorial only	SL AN 11/19-05/69	None	No action required.
PANS OPS / II	13*	23 Nov 2006	Editorial only	ditto	None	No action required.

* Not formally approved – approval expected mid 2006.

Advance copy distributed in English only and for info only.

Appendix B – Summary of Amendments to ICAO Annexes and Manuals

Briefing Note Re Annex 6 Part I Amendment 29

BRIEFING NOTE RE ANNEX 6 PART I AMENDMENT 29

Subject amendment (applicable to international commercial operations) includes, inter alia, provisions and guidance on three significant issues:

1. Single pilot operations under IFR or at night (4.9, 6.22 and 9.4.5)
2. Operations of single-engine turbine-powered aeroplanes at night and/or in IMC (5.4, Appendix 3 and Attachment 1)
3. Electronic navigation data management (7.4).

Purpose

To assess these amendments to ascertain whether they warrant revision of the IS-BAO from the standpoint of:

- relevance to corporate operations best practices, or
- to ensure that the IS-BAO does not contain provisions that may conflict with requirements for commercial operations.

Discussion

Single Pilot Operations Under IFR or at Night

A recently released Supplement to the IS-BAO (Single pilot VLJ and TAA Operations) and associated Generic Single Pilot Operations Manual (GSPOM) addresses the totality of such operations. Annex 6 Part I Amendment 29 is confined to single pilot commercial operations under IFR or at night.

The IS-BAO Supplement was not intended to address commercial operations. However, Safety Management Systems section 3.2.1.d requires operators to have “*systems for identifying applicable regulations, standards, exemptions and guidelines and demonstrating compliance with them*”. As such, this provision provides the required linkage to the rules that a State must develop to address this issue.

Neither the IS-BAO nor the Supplement prescribe the minimum crew complement for commercial operations other than to require in 4.2.1 that “*the minimum aircraft crew shall consist of the number of qualified flight crew as specified in the aircraft flight authority*”.

Amendment 29 includes ‘additional’ aeroplane equipment requirements as follows;

“6.22

.....

- a) a serviceable autopilot that has at least altitude hold and heading select modes;
- b) a headset with a boom microphone or equivalent;
- c) means of displaying charts that enables them to be readable in all ambient light conditions.”

Such additional requirements are considered to have merit in general for single pilot operations. The IS-BAO Supplement Chapter 8 records that ‘No special considerations have been noted in this Chapter’.

This is worthy of review.

Amendment 29 also includes (RP 9.4.5 new) experience, recency and training recommendations for the pilot-in-command.

Whilst there may be merit in including these provisions in the GSPOM, the IS-BAO has addressed such matters at a macro level only and has not been prescriptive in this regard.

When applicable (24 Nov 2005) Amendment 29 will require that the State of the Operator approve the operation by a single pilot of an aeroplane under the IFR or at night.

For consideration whether or not this approval requirement for international commercial operations should be noted in the IS-BAO under Chapter 6.

Appendix B – Summary of Amendments to ICAO Annexes and Manuals

Operations of Single-Engine Turbine-Powered Aeroplanes at Night and/or in IMC

This subject is currently addressed in the IS-BAO.

Experience to date with the IS-BAO would indicate that the existing standard is adequate in this respect and appropriate for corporate as well as owner-operated operations. A case may exist for providing additional guidance to operators conducting those categories of operations based on Annex Part 1 Appendix 3 (new), which could (in extenso or abridged) be included as a new AMC. Such an AMC, if comprising Appendix 3 in extensor, would also serve to ensure that commercial operations aeroplanes are encompassed by the IS-BAO.

Electronic Navigation Data Management

This subject is currently addressed in 8.11.3 of the IS-BAO with regard to the data bases of ground proximity warning systems with predictive terrain hazard warning.

In recognition of the fact that the use by business aircraft of electronic navigation data bases is ubiquitous, irrespective of the nature of the operation, and that ensuring the integrity of such data bases is fundamental to flight safety, it is considered advisable that an operator establish and maintain “procedures for ensuring that the process applied and the products delivered have net acceptable standards of integrity and that the products are compatible with the intended function of the equipment that will use them” and that the operator ‘s procedures ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it”.

It is proposed that an additional sub-paragraph (8.2.3) be added under 8.2 as follows;

“8.2.3 The operator establish and maintain procedures for ensuring that the process applied and the products delivered have net acceptable standards of integrity and that the products are compatible with the intended function of the equipment that will use them. The procedures shall additionally ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it”.

APPENDIX C - IS-BAO, GCOM & APM AMENDMENTS JAN. 1, 2007

IS-BAO Manual		
Section	Issue	Amendment Action
3.2.1h SMS Requirements	It has been observed that operators stop the risk assessment process after developing the required profiles and it is suggested that the requirement to incorporate risk assessment into daily operations be emphasized including building it into management, operations and maintenance functions and SOPs.	A note is currently included in 3.2.1.h stating “ <i>Risk assessment, management, and mitigation techniques should be fully integrated into all activities undertaken by the flight department and every employee’s daily tasks.</i> ” The note has been changed into a recommendation.
3.2.2 SMS Requirements	New SMS material has been published including FAA Circular 120-92.	Added additional references.
4.3.1.vi Radio Communications Capability	It has been suggested that English language proficiency be specified as English is the language used in international aviation.	It is recognized that English is the language used in international aviation but the IS-BAO is also applicable to domestic operations and some operators may not be involved in international operations and therefore proficiency in the national language may be all that is required.
4.2.2 Aircraft Crew Member Duties and Responsibilities	It has been suggested that this section should be divided into two provisions.	Reformatted the section and re-number subsequent provisions.
5.1.3.e Other Training	This provision is not a standard and as such, it would be more appropriate to make it a note.	Changed the provision to a note.
6.2.2 VFR Flight	It has been suggested that in this section we add considerations for VFR flight in high-performance aircraft including higher weather minimums, VFR charts, training, etc.	Added a note on the issue.
6.2.5 Fuel and Oil Requirements	It has been suggested that the oil supply requirement for all aircraft except piston engined aircraft be deleted and that minimum <i>touchdown</i> fuel be specified.	The provisions specified in 6.2.5 reflect the current Annex 6 part II requirements, therefore no change was made.
6.13 Fatigue Countermeasures	Wording of section 6.13.2 is awkward.	Revised wording of provision.
	Section 6.13.4 contains information only and as such should be a note.	Changed the section to a note.
	The current 6.13.5 is a recommendation but is not worded exactly as such.	Revised wording and re-number because of revision to existing 6.13.4.
6.14 Travel Health Issues	It has been suggested that a provision be added to address appraisal of health issues at destinations and for dealing with health issue.	Added new recommendation 6.14.

APPENDIX C - IS-BAO, GCOM & APM AMENDMENTS JAN. 1, 2007

IS-BAO Manual		
Section	Issue	Amendment Action
8.14 FDR & CVR	It has been suggested that a recommendation be added suggesting that the operator include in their ops manual procedures on the use of FDR & CVR and the protection and use of data.	Added a recommendation.
8.7 Survival Equipment	It has been commented that there are no ICAO standards for determining which areas may be designated as difficult SAR areas. Further, providing "life-saving" equipment for the variety of geographic and climatologically areas over which an intercontinental turbojet may fly is a <i>single leg</i> is not simple. Also, given that the incidence of forced landing or ditching of turbojet business aircraft is slight, it has been suggested that the requirement be deleted.	This provision is a current requirement of Annex 6 Part II, therefore it was agreed that deletion is not appropriate.
9.1.3 Maintenance Control System sections 3.b, 3.c & 3.d	A comment was received that the terminology used (elementary work/preventative maintenance or servicing) is not readily understood by Part 91 operators and elementary work is not defined. It was suggested that the three sections be replaced with a provision stating that all personnel performing elementary work (and define it) shall be trained and qualified to perform the work, and standards used shall be acceptable to the State of Registry, if desired.	<p>The terms used to describe minor maintenance work that must be recorded but does not require the approval of a licensed maintenance person to return the aircraft to service, is usually either "elementary work" or "preventative maintenance". For that reason the two terms (hyphenated) are used in the text.</p> <p>It also must be noted that there are three separate issues addressed in the three sub-sections:</p> <ul style="list-style-type: none"> • Identification of the standards used to perform the work, • Identification of the regulatory information and technical data used to perform the work, and • Recording of the work. <p>Consequently it was concluded that the proposed solution does not adequately address the issues. However, in an effort to address the identified problem sections were restructured and a definition added.</p>
9.1.6 Maintenance Control System	This section erroneously refers to maintenance in accordance with the operations manual instead of approved maintenance program.	Revised the wording to refer to the approved maintenance program.
10.3 Operations Manual	It has been suggested that any deviation from an IS-BAO Standard or an ops manual provision require a formal risk assessment process.	Added provision specifying the requirement for a formal risk assessment process.

APPENDIX C - IS-BAO, GCOM & APM AMENDMENTS JAN. 1, 2007

IS-BAO Manual		
Section	Issue	Amendment Action
15.2 Security	The requirement reads that the security programme shall include appropriate training and testing of personnel involved. It has been suggested that the training requirement should be amended to specify initial training and recurrent training.	Given the broad range of operations that the IS-BAO is designed to address it was concluded that the current wording is a good performance standard, therefore, no change was made.
AMC 5.1 Training Sec. 18 Aircraft Surface Contamination Training	In the January 1, 2006 revision to the IS-BAO the requirement for surface contamination recurrent training for flight crew and cabin crew was changed to every two years. Unfortunately, the recommended surface contamination training contained in Section 18 of AMC 5.1 was not revised.	Revised section 18 accordingly.
Sec 21 Cabin Crew Member Training	This section refers to safety procedures training as should be revised to reflect such.	Revised title to read Cabin Crew Member Safety Procedures Training
AMC 3.2 Safety Management System	The term ANS (air navigation service) has not always been understood. The term ATS (air traffic service) is more universally used.	Replaced AND with ATS. http://www.who.int/en/
AMC 5.1 Training Programs	A member of the IS-BAO Standards noted that while ground instructor qualifications are addressed in the AMC flight instructor qualifications are not. The Standards Board agreed that flight instructor qualifications be addressed.	AMC 5.1 section 2 was revised to include flight instructor qualifications.
AMC 6.15 Fatigue Countermeasures	There was a numbering change in chapter 6 and the AMC should now be 6.13	Renumber the AMC.
Appendix B – IS-BAO Registration Application	Editorial revision required	Made editorial changes
Appendix C – IS-BAO Registration Renewal Form	Editorial revision required	Made editorial changes
Appendix D - Terminology	It was observed that the abbreviations C of A and C of R are used but not defined.	Added definitions.

APPENDIX C - IS-BAO, GCOM & APM AMENDMENTS JAN. 1, 2007

GCOMs		
Section	Issue	Amendment Action
All	The revisions to the IS-BAO will require similar amendments to all of the versions of the generic company operations manuals.	All versions of the GCOM were amended to reflect the revisions made to the IS-BAO.

APPENDIX C - IS-BAO, GCOM & APM AMENDMENTS JAN. 1, 2007

Audit Procedures Manual		
Section	Issue	Amendment Action
Table of Contents	The page numbers for sections 8.5 & 8.6 are incorrect	Updated the table of contents.
1.3 Definitions and Audit Terminology	It has been observed that the definition of audit finding is incongruent with the definitions of Major and Minor Non-conformity	Revised the definition of audit finding and made reference to section 6.2.1
6.1 Making Findings	It has been observed that section 6.2.1 does not specify that findings must be based on IS-BAO requirements.	Section 6.2.1 was revised to emphasize that findings must relate to a standards specified in the IS-BAO and section 6.2.6 was added.
7.1 Report Standards	The audit report requirements do not specify that minor non-conformities require an accepted corrective action plan and that major non-conformities must be rectified.	The requirements were added to section 7.1.3.
7.3 Audit Report Contents	This section contains the provisions that relate to extended validity and audit report contents for experienced IS-BAO auditors. It is believed that the measure to determine "an established performance record" would be enhanced by inclusion of a "demonstrated comprehensive understanding of the IS-BAO and related audit procedures".	Added a provision to 7.3.2 to indicate that the establishment of a satisfactory performance record includes demonstration of a comprehensive understanding of the IS-BAO and related audit procedures
Audit Protocol 4.2	Section 4.2.2 has been modified in the IS-BAO.	Revised the numbering to reflect the change in the IS-BAO.
Audit Protocol 5.1	Section 5.1.3 has been modified in the IS-BAO.	Revised the numbering to reflect the change in the IS-BAO.
	It has been observed that section 5.6, does not contain the full requirements specified in the IS-BAO standard.	The Audit Protocols are intended to be used in conjunction with the standards not to replicate them. No change was made.
Audit Protocol 6.10	There is a reference error.	Corrected the reference.
Audit Protocol 6.12	The requirement to specify the date of the checklist is inconsistent with the requirement specified in the IS-BAO standard.	Modified to require that the checklist date reflect consistency with the flight manual and SOP.
Audit Protocol 6.13	The requirement to record the deviations, the risk assessment and related mitigation has been strengthened in this-BAO.	Revised Audit protocol to reflect amendment to IS-BAO.
Audit Protocol 6.14	New Travel Health Issues section added to IS-BAO	Added to audit protocol.
Audit Protocol 7.6	7.6 International Publications Library is a recommended practice but it is not reflected as such in the APM.	Revised to indicate that this is a recommended practice.
Audit Protocol 8.14	New recommended practice added to IS-BAO on procedures for the use of flight data recorders and cockpit voice recorders and protection and use of data.	Added to audit protocol.
Audit Protocol 9.1.3	Provisions related to elementary work or preventative maintenance and aircraft servicing were modified in the IS-BAO.	Audit protocol revised to reflect amendment to IS-BAO.

APPENDIX C - IS-BAO, GCOM & APM AMENDMENTS JAN. 1, 2007

Audit Procedures Manual		
Section	Issue	Amendment Action
Audit protocol 9.1.6	Document reference revised in IS-BAO.	Audit protocol revised to reflect amendment to IS-BAO.
Audit Protocol 9.5	9.5.5 is a recommended practice and is not reflected as such in the Protocol.	Removed the reference to 9.5.5. as 9.5.3 covers the requirement.
Audit Protocol 10.2	It has been suggested that the requirements to identify the date of last revision is not consistent with the requirements specified in the standard.	Deleted the requirement to specify the date of last revision.
Audit Protocol 10.3	IS-BAO revised to require that deviations to operations manual be based on a risk assessment.	Audit protocol revised to reflect amendment to IS-BAO.
Audit Protocol 14.2	2006 IS-BO revision was not reflected in the audit protocol.	Audit protocol revised to reflect 2006 amendment to IS-BAO.
Audit Report Form	Editorial revision required.	Editorial revisions to enhance form.
IS-BAO Registration Application	Editorial revision required.	Editorial revisions to enhance form.
IS-BAO Registration Renewal Form	Editorial revision required.	Editorial revisions to enhance form.