

International Standards – Business Aircraft Operations Business Model Task Force Report



strategic
transportation
& tourism
solutions



Prepared for
International Business Aviation Council

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1. Summary

Since its inception in 2002, the business aviation industry has welcomed the International Standard for Business Aircraft Operations (*IS-BAO*). The management of the International Business Aviation Council's (*IBAC*) division with the responsibility to manage the creation, maintenance, promotion, and growth of the *IS-BAO* and its supporting activities (the *IS-BAO Program*, *IS-BAOP*, or "the Program") expects the industry to continue adopting the *IS-BAO*. However, it faces three significant challenges as it prepares for future growth:

1. Meeting an expected increase in the volume of demand and in the diversity of subject areas covered by *IS-BAO*;
2. Providing for an orderly succession of leadership from its founders to their successors and to facilitate the increasing "professionalization" of the organization as it engages more full-time staff to manage and grow the program; and,
3. Protecting the integrity and effectiveness of the *IS-BAO Standards* as a means by which business aircraft operators can maximize the safety of their operations.

To achieve these overarching goals, the Task Force recommends that the *IBAC Governing Board* adopts the following principles to govern the Program's future growth:

- *IS-BAO* is a leading, trusted, respected and global standard of aircraft operation safety that is valued by its community for the quality of its program.
- *IS-BAO* operates as a not-for-profit entity.
- *IS-BAO* is a voluntary standard.
- *IS-BAO* is a means by which business aircraft operators can enhance the safety of their operations, demonstrate their commitment to operating safely, and promote a positive safety culture in the industry.
- *IS-BAO* relies on the support and input of industry participants, particularly its registered operators, auditors and supporters to develop policy, standards and operation improvement.
- The *IS-BAO Program* promotes the harmonization of aviation safety best practices and standards around the world.
- The *IS-BAO* organization is an operation that effectively manages growth and actively promotes safety to the industry.
- *IS-BAO* and its products and services will be readily available for the community.
- *IBAC* governs the management of the program and the content of the Standards/Best Practices through the office of the *IBAC Director General*.

In complying with these principles, the Task Force recommends that no material changes be made to the governance or the organization of the Program. Specifically:

- the Program will remain a program owned and governed by *IBAC*, through the Governing Board, to the Director General and the Standards Board, and then through the Director, *IS-BAO Program*;
- the Standards Board, with support from the *IS-BAO* secretariat and management, will continue to oversee the development and maintenance of the Standards exclusively;
- it will rely on *IBAC Member Associations* to promote the adoption of *IS-BAO* and its implementation by their Members;
- it will directly provide training on *IS-BAO Standards* and their implementation to operators;

- it will continue the operator registration process; and
- it will oversee an audit program, but continue to rely on accredited third-party auditors to perform audits on operators and not undertake such audit activities itself.

The Task Force re-affirms the role of IS-BAO as promoting a positive safety culture. However, the Task Force recommends a re-framing of the Program's operational mandate such that all of the Program's current activities, registration, training, and audit serve to promote this cultural goal. All of these functions are critical and mutually dependent to achieve the successful adoption of the IS-BAO Standards throughout the industry.

To that end, the Task Force recommends that future management of the IS-BAO Program:

- implement more formal management systems and build capability to capture, store, and analyze operational, financial, safety and regulatory information;
- recognize revenue to support expected increased demands on the Program's audit quality assurance operation by increasing, or broadening the sources of, revenue in the audit offering; and
- develop sources of predictable and scalable revenue by identifying potential areas of recurring revenue, such as publication renewal fees, different publication delivery models appropriately priced, increased registration fees, and increased training offerings.

2. Introduction

2.1 Brief Description of IS-BAO and the Program

IS-BAO is an industry code of practice designed to help flight departments worldwide achieve a high level of safety and professionalism. IS-BAO was developed by the industry for the benefit of the industry. The core of IS-BAO is the set of written norms developed by representatives of the global business aviation industry. To support the adoption, implementation and maintenance of IS-BAO by the industry, IBAC established an organization within itself to manage the development of IS-BAO and activities to advance its adoption, such as the registration, auditing and education of operators.

2.2 IBAC Decision to Review Business Model

Since its inception in 2002, the Program has grown significantly as the industry has embraced IS-BAO as a *de facto* means by which to achieve a standard of best practices in business aviation operation safety. Since inception, the Program has issued more than 1,400 copies of the written materials and 450 Certificates of Registration. It has developed supplementary programs such as the SMS Toolkit and SMS e-Learning training program. The demand for workshops has constantly grown - 22 workshops were delivered in 2009 and 43 in 2010. Some regulators have determined that the safety standard can be used for demonstrating regulatory safety compliance. As a result of all of these activities, the number of routine queries and demand for information, resolution and interpretation has grown at a significant rate.

The workload to keep pace with growth reached a critical point in 2009. It became obvious to all involved in the program that assistance to the existing Standards Manager was needed due to high workload demands. The short-term fix was to form an IS-BAO Management Committee chaired by the Director General, with many of the elements of the program delegated to others in a matrix management approach. However, this was viewed as a temporary measure, and a more permanent management concept was considered necessary. As a result, the IBAC Governing Board decided at its May 2010 meeting to implement a review of the IS-BAOP to ensure that it could manage the continued adoption of IS-BAO throughout the industry.

2.3 Engagement of InterVISTAS

At the May 2010 meeting, the Board advised that the review should be completed by an internal Committee consisting of Members of the IS-BAO Management Committee and volunteers from the Board and Member Associations, as well as volunteers from within the community, and facilitation and program coordination should be contracted to a specialist firm with expertise in organizational management. The objective of the project was defined as assessing options for business models for IS-BAO and making an appropriate recommendation to the Governing Board.

To conduct this study, the IBAC Director General engaged InterVISTAS to manage the project of reviewing the Program, including various consultations with stakeholders, the conduct of planning sessions, providing high-level commentary and recommendations, and the drafting of this report.

3. Description of Program

3.1 Brief History

Early in 2000, a Discussion Paper was prepared by IBAC that proposed the concept of “best practices” in the form of International Standards for Business Aircraft Operations. The IBAC Governing Board reviewed the Paper and approved funding from the IBAC Reserve Fund to complete a proof of concept phase. Over several phases starting in October 2000, the Governing Board oversaw the development of the IS-BAO Program, including the Standards and the Generic Company Operations Manual (GCOM). During this time, the business aviation community provided significant contributions during this phase. A number of experienced flight departments provided direct input and participated in five separate focus group sessions. The Governing Board approved the final draft of the code of best practice, after testing in a number of companies, in September 2001.

Shortly thereafter, the Governing Board approved the Business Plan, including the development of management, sales, marketing and registration operations. The Business Plan was updated in 2004 and 2010. In the most recent 2010 update, the Plan included:

- Eight years of financial and operational data;
- Recommendations to create the IS-BAO Management Committee;
- changes to the IS-BAO Standards Board Terms of Reference; and
- changes to fee provisions.

3.2 Role of Standards

The IS-BAO continues to be primarily an industry code of practice: The International Civil Aviation Organization defines an industry code of practice as follows:¹

- Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organization’s Standards and Recommended Practices, other aviation safety requirements and the best practices deemed appropriate.

Note—Some States accept and reference industry codes of practice in the development of regulations to meet the requirements of Annex 6, Part II, and make available, for the industry codes of practice, their sources and how they may be obtained.

The European Aviation Safety Agency (EASA) is still developing its rules for non-commercial operation of complex motor-powered aircraft. However, in its latest draft material, it has referred to “officially recognized industry standards” and their use by operators in declaring “their capability and means” of complying with the related rules. The draft EASA Authority Requirements direct the competent authorities (usually the national aviation authority) to take into account an operator’s use of industry standards when establishing their safety oversight programs.

With some important nuances in different regulatory jurisdictions, aircraft operators may demonstrate compliance with the safety requirements in their jurisdictions by demonstrating

¹ International Civil Airline Association (ICAO) Annex 6, Part II.

compliance with IS-BAO. The Task Force assumes that this trend will grow. Moreover, the Task Force highlighted the need for the Governing Board and the Standards Board to consider the consequences to the industry if certain state jurisdictions direct IS-BAO to be a mandatory standard for their operators.

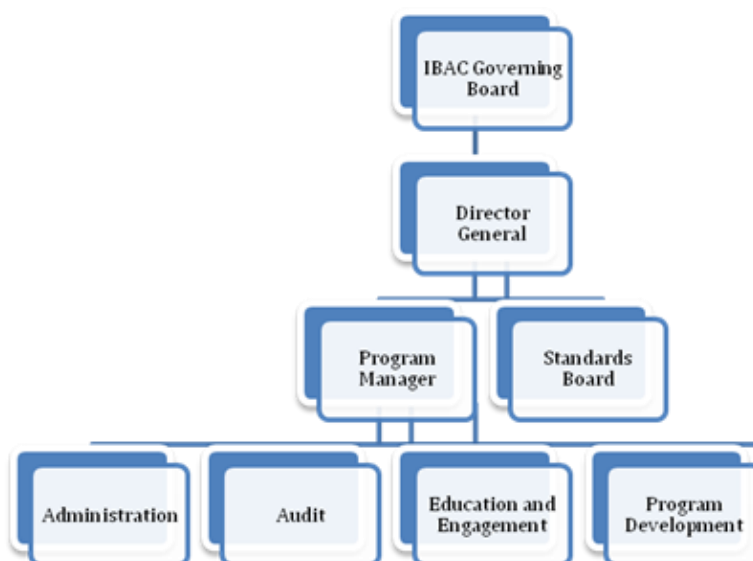
3.3 Relationship to IBAC

The IBAC Governing Board retains formal responsibility for the IS-BAO and the IS-BAOP. It has the legal authority to discontinue or modify the program as it sees fit, though it would be extremely unlikely to do so. Nevertheless, that the Governing Board has this residual authority is symbolically and substantively important to maintaining the link between the IS-BAOP and the business aviation community. This link is reinforced by the Governing Board's role in nominating individuals to the IS-BAO Standards Board, on the recommendation of the Director General.

The Director General acts as the effective chief executive officer of the IS-BAOP in that the Director General is responsible for the outcomes of the IS-BAOP, the performance of IBAC employees who manage and deliver the IS-BAOP, and the management of the IS-BAOP's finances. The Director General provides the policy and executive link to the IS-BAOP's board of directors—the IBAC Governing Board and its effective policy branch, the IS-BAO Standards Board.

3.4 Management Structure

Through the Director General, the IS-BAOP is managed with the following structure:



3.4.1 IS-BAO Program Manager and Management Committee

The Committee exercises delegated authority by the Governing Board as the internal management coordinating body responsible for setting IS-BAO policy, coordinating activities and oversight of IS-BAOP.

The IS-BAO Management Committee provides the ongoing oversight and coordination of the many related activities associated with the IS-BAOP. The Committee currently consists of:

- IBAC Management Staff;
- Governing Board Liaison representation; and
- Other designees as considered appropriate by the Governing Board.

The IS-BAO Management Committee conducts monthly coordinating meetings (via teleconferences) and one full (face-to-face) meeting once per year. Its responsibilities include:

- Reviewing monthly activities and coordinating actions to balance workload and ensure completion of tasks;
- Developing, approving and issuing IS-BAO policies and directives;
- Overseeing the issue of IS-BAO Certificates of Registration;
- Assessing new concepts and assigning responsibility for action;
- Reviewing IS-BAO Revolving Fund status; and
- Reviewing status of the audit oversight program.

3.4.2 Standards Board

The Standards Board manages the maintenance of the standards and generic company operations manuals.

The Standards Board consists of a minimum of 6 and maximum of 15 Members, selected according to the following distribution:

- One to two members from the IBAC Governing Board;
- Approximately three to five volunteer members from flight departments, with a wide range of geographic representation (NA, Europe, SA and Asia);
- One representative from a training organization;
- One representative from the General Aviation Manufacturers Association;
- Two representatives of the helicopter industry;
- Representatives from a minimum of two business aviation associations; and
- The IBAC Director General.

The Standards Board meets a minimum of once per year. Its responsibilities include:

- Reviewing proposed changes to the IS-BAO standards;
- Providing guidance to the IS-BAO Standards Manager as required;
- Approving changes to the IS-BAO;
- Approving changes to the Audit Procedures Manual;
- Approving addition of new members; and
- Submitting an annual report to the Governing Board.

The IBAC secretariat, through the Standards Manager, Audit Manager, and other professionals provide administrative support to the Standards Board.

3.5 Relationship to Other Civil Aviation Authorities

The IBAC-BAO Government Relations program consists of the following activities:

- Supporting the Director, ICAO Liaison in providing input to ICAO on SARPs related to business aviation, SMS, and other operational issues;
- Supporting Member Associations (MAs) to provide credible input to State regulatory programs

- on business aviation and SMS issues;
- When appropriate, dealing directly with States on regulatory programs related to business aviation and SMS issues; and
- Promoting the use of the IS-BAO and its associated SMS Toolkit as a tool for operators, both commercial and non-commercial, to use in meeting their regulatory obligations, while maintaining the independence and integrity of the IS-BAOP.

4. Programs

To support the adoption, implementation and maintenance of the IS-BAO, the IS-BAOP currently operates a number of activities for the benefit of the industry: the sale of publications related to IS-BAO, registering flight departments that implement IS-BAO to an accepted standard, auditing certified flight departments to ensure the consistent and ongoing effective adoption of IS-BAO and the training and education of individuals in IS-BAO.

4.1 Publication Sales

The IS-BAOP issues a number of written products designed to disseminate IS-BAO throughout the industry:

- Five variations of the Generic Company Operations Manual
- CD with extensive guidance material
- SMS Toolkit
- Partnership on SMS e-Learning program

IBAC Member Associations administer the sales of publications. The selling price of IS-BAO Programs was originally established at \$950 USD, of which \$900 was returned to IBAC and \$50 retained by the selling association. As of 2011, the price was increased to \$1,200, with selling associations retaining \$150.

The first year produced a large number of quick sales that provided a reserve for the program (\$150,000); then the program stabilized for a few years with revenues generally equalling expenditures. Through 2007–2009, expenditures were greater than revenues due to investment in new products (CEN, SMS Toolkit and SMS e-Learning). Following completion of the special projects in 2009, sales increased rapidly and accelerated into 2010. For the first few years, the great majority of IS-BAO sales were to flight departments in the United States, but increasingly sales came from other parts of the world.

Member Association	IS-BAO Sales						
	2005	2006	2007	2008	2009	2010	Total to date
ABAA (Australia)					1	1	2
ABAG (Brazil)	-	0	0	0			3
BBGA (United Kingdom)	2	0	2	8	2	10	35
BAASA (S. Africa)	--	0	2	0	1		5
CBAA (Canada)	2	3	1	0	1	3	15
EBAA (Europe)	4	2	0	9	6	18	52
EBAA-F (France)	-	2	0	0			5
GBAA Germany	1	1	1	2	4	1	12
JBAA (Japan)	-	0	0	0			5
IBAA (Italy)					2		2
MEBAA (Middle East)					2	15	17
NBAA (United States)	115	60	115	105	172	400	1247
Total	124	68	121	124	191	448	1400

Sales for 2002, 2003 and 2004 do not appear in this chart but are included in the totals.

IS-BAO sales revenues in 2010, including the Audit Procedures Manual and binders, were approximately \$450,000. Expenditures for the core program (discounting workshops and special projects) were approximately \$312,000. Some expenditures such as those for the Director General and Director ICAO Liaison, are not accounted for in the totals.

Recent increases in demand have primarily related to the safety standard becoming better known and the value spread by “word of mouth”; however, it is also estimated that a significant increase in the demand results from the evolution of regulations such as the ICAO Annex 6 Part II additions that became effective November 18, 2010. Some States such as Bermuda have implemented the ICAO standards and require that visiting aircraft meet the provisions by April 2011. It is expected that as EASA finalizes regulatory provisions for NCC (2012) there will be further demand and likely an overall increase in demand from States other than the United States. The United States has to date had by far the greatest number of sales, and future sales are likely to be similar to those of 2010 for the foreseeable future. It is largely unknown what the ongoing steady-state sales are likely to be, but given that business aviation is very much an itinerant industry as companies open and close, initiate and cancel their flight departments based on many factors, it is probable that sales will continue in the vicinity of 300–400 per year assuming that there continues to be unsatisfied demand in the industry.

4.2 Audit and Registration

The Audit and Registration Program (ARP) comprises two elements: auditing and registration.

Auditing includes:

- Design and maintenance of audit standards, processes and reports;
- Auditor qualification;
- Auditor training;

- Auditing of an operator;
- Reporting the audit; and
- Evaluation and approval of the audit.

Registration includes:

- Reporting the audit to the registrar;
- Preparation and shipping of registration documents; and
- Recording the registration.

All elements of the ARP are subject to quality assurance through review and crosschecking work performed by members of the ARP team. Accurate and expeditious audit processing is a common theme for all activities.

The Program has grown measurably, essentially doubling the number of registrants during the past year. Consequently, an additional contractor was hired in January 2010 to accomplish the auditing processing and relieve the Standards Manager of some of her multiple tasks. In addition, the Audit Manager, independent auditors, Standards Manager, Regulatory Manager and Registrar are integral parts of the ARP. Therefore, the ARP relies heavily on teamwork to accomplish its goals.

All ARP documents are promulgated, transmitted and processed electronically via e-mail attachments. Program instructions, policies, bulletins, registrant and auditor listings and, recently, program standards are all available on the IBAC website. Signed paper copies of the audit documents are provided to registrants for their records; official records are stored electronically.

The program is promoted/marketed through the following methods:

- Trade publication articles and news items
- Regulatory requirements issued by ICAO and States that favor the use of IS-BAO
- Word-of-mouth from within the corporate and charter aviation communities and through IBAC Member Associations

The ICAO standards that became effective in November 2010 undoubtedly created the surge of registrations experienced during 2010. Yet, word-of-mouth promotion has also contributed to the surge of registrations.

The Registrar's workload has grown considerably during the past year due to the increase in registration applications and additional services provided to the registrants. This workload will likely increase with the inclusion of the helicopter community, the continuing popularity of the program and advanced stage audits available for existing registrants. The increasing workload for the Registrar may begin to affect the ability of the organization to provide timely service to registrants.

4.3 Education

The IS-BAO manual and Audit Procedures Manual are sold through IBAC and its member Associations. Complimentary copies are provided to government policy officials and some education organizations. In 2010, the annual amended versions of the documents manuals were converted to electronic format and provided through a password-protected section of the website. While there are still a number of manual holders who have not received their passwords and downloaded the materials, all indications are that this is an efficient and effective method of distributing the annual revisions. Sale of manuals is a primary funding source for the IS-BAOP.

Since this system has just been implemented and prices increased in 2011, we do not recommend a change to the program at this time.

The IS-BAOP has a limited marketing budget generally limited to the publication of brochures. This is consistent with the non-commercial philosophy of the program. Additional education, marketing and promotion is provided through a number of media including participation in industry or association events, provision of workshops, personal contact (IBAC and industry word of mouth), publications and the IBAC Member Association websites.

The IS-BAOP fulfills its educational function through the following activities:

- **Personal contact** (meetings/e-mail/telephone): A considerable amount of on-demand time is spent responding to inquiries and participating in discussions through personal contact. In addition, information is provided to auditors and other parties to further promote the program.
- **Newsletters** (IS-BAO/Auditor/IBAC): IS-BAO and Auditor newsletters are issued twice a year.
- **Website**: The site provides a forum to advertise workshops, register for workshops and provide information on the program.
- **Workshops**: Workshops are a funding source for the program.
- **SMS e-Learning** (with Flight Safety International): This provides a funding source for the program.
- **Presentations**: Presentations are provided upon request to industry groups, conferences and government. No fee is charged. This is an integral part of the education process.
- **Media**: Interviews, articles, informational DVD, etc.
- **Member Association Promotion**
- **NBAA Airmail/Av Manager sites**: No formal process has been established to monitor or respond to information on these sites. The NBAA airmail site is used for an IBAC airmail system to deliver newsletters/information.

5. **Alternative Models and Proposals**

The Task Force was briefed and considered several other operational and governance models employed by other organizations in the aviation and other industries. The Task Force drew from these other comparator organizations to provide guidance on how best to structure its governance and business model, including the American Association of Airport Executives, the International Air Transport Association, International Association of Ports and Harbours, and regulatory authorities from other industries. This work is summarized in InterVISTAS' submission in Appendix "A".

6. IS-BAO Purposes

In general, the Task Force does not recommend any material change in the purposes of the IS-BAO Program from those expressed in its original Business Plan. However, through its deliberations, the Task Force framed the future strategic principles for the Program as follows:

Purpose Statement
IS-BAO is a leading, trusted, respected and global standard of aircraft operation safety that is valued by its community for the quality of its program and recognized by an increasing number of Aviation Authorities.
IS-BAO operates as a not-for-profit entity.
IS-BAO is a voluntary standard.
IS-BAO is a means by which business aircraft operators can enhance the safety of their operations, demonstrate their commitment to operating safely, and promote a positive safety culture in the industry.
IS-BAO relies on the support and input of industry participants, particularly its registered operators, auditors and supporters to develop policy, standards and operation improvement.
The IS-BAO Program promotes the harmonization of aviation safety best practices and standards around the world.
The IS-BAO organization is an operation that effectively manages growth and actively promotes safety to the industry.
IS-BAO and its products and services will be readily available resources for the community.
IBAC will govern the management of the program and the content of the Standards/Best Practices through the office of the IBAC Director General.

These principles define how the Program should be managed and operate.

7. Governance and Management

The Task Force affirmed the following principles:

1. **IBAC should remain the notional owner of IS-BAO and the IS-BAOP.** This reinforces IS-BAO's future as a key linkage in the business aviation community and the IS-BAOP's role in developing IS-BAO as a set of best practices and standards for the business aviation community, developed by the business aviation community.
2. **IBAC should continue to exercise its authority through IBAC's Director General.**
3. **The Standards Board should remain an entity distinct from the staff that manages the IS-BAOP.** The practices and standards approved by the Standards Board must continue to be developed by industry participants for the IS-BAO to be perceived as credible by the industry.
4. **The IBAC Governing Board should continue to be responsible for the Terms of Reference, authority over the IS-BAO Business Plan and appointing members to the Standards Board.**

IBAC is a council of Member Associations that are trade associations, rather than a group of individuals or discrete flight departments. The consumers of the services, those who benefit directly from the operation of IS-BAO, exercise their role in the governance of IBAC and hence the development of IS-BAO through the Member Associations. Therefore, it is still appropriate that the IBAC Member Associations continue to nominate the members of the Standards Board to the Director General, who then recommends such individuals to be appointed by the IBAC Governing Board, rather than having them directly accountable to or appointed by a body of users or consumers of the service, e.g., flight departments.

A Program Manager/Director of IS-BAO should be appointed to have direct responsibility for managing the IS-BAOP's operations. This person would have the sole responsibility for the performance and finances of the IS-BAOP, a function currently undertaken collectively by the Management Committee.

8. Affirmation of IS-BAO as Industry Driven

Generally, the Task Force does not recommend any material change to Program's business model. However, the Task Force acknowledges the Program's evolution beyond one that is focused on the promulgation of safety standards. Originally, the IS-BAO Program was framed largely as the Standards Setting activity as being an industry code of practice (the "core" activity) and the other program elements -- registration, audit, and training as merely "by-products" of the organization. Very early in the program, it was realized that these were essential elements of the IS-BAO.

It was recognized that the IS-BAO is an effective tool to promote a community and positive culture of safety within the business aviation industry. The support of such a culture requires more than the promulgation of rules. For participants within a community to adopt and promote behavioral norms expected of the community by collective members, the community must engage in activities that promote such behavior. For the IS-BAO Program, promoting safety in the aviation industry requires more than the creation of the IS-BAO Standards. It requires a training program to help people understand, adopt, incorporate, and practice adherence to those Standards. The registration program enables participants to demonstrate publicly a commitment to an adherence to the code of practice. This promotes the legitimacy of the standard to individuals and organizations within the community and outside the community. Indirectly, the registration function also provides the means by which those who do not comply with the code of practice are publicly demonstrated to not adhere to the community's expectations. Finally, the audit program provides the means by which community standards and expectations are monitored and enforced, thus reinforcing the legitimacy of the Standards. All of these activities are self-reinforcing and each is necessary, but each on its own is insufficient, for the successful promotion of a positive safety culture within the industry.

Second, the resource utilization of the IS-BAO Program demonstrates that it deploys and engages most of its resources – financial, labour, reputation, and informational – on its auditing, registration, training, and liaison functions and not on the maintenance and development of the IS-BAO Standards themselves. The resource usage supports the theoretical argument that the successful adoption of IS-BAO by the industry requires much more than the creation and distribution of the written Standards themselves. For that to occur, the IS-BAO Program must engage in all of these other activities, making them just as much "core" activities as the creation of the Standards themselves. Nevertheless, IBAC has recognized that it is essential that the Standards, recommended practices, guidance material and related products that make up the IS-BAO be maintained so that they are current and underpin the integrity of the Program.

The Task Force believes that the IS-BAO Program should continue to play a direct role in the development and issuance of the standards and related products, the delivery of training, and the registration of operators. It should also continue to allow Member Associations to market the program and allow third-party auditors to conduct audits, with IS-BAO Program staff reviewing the audit to provide audit program oversight and product for quality assurance.

The Task Force's recommendations to maintain the basic business models of its programs reflects the Task Force's affirmation of these core ideas, specifically in the area of Program Sales, Audit and Registration, and Education.

8.1 Program Sales

Though the Task Force identified three main models of Program distribution, it continues to recommend that the Member Association continue to play a significant role in the production and promotion of the Standards and associated publications while the IS-BAO Program maintain its role in maintaining its integrity. The Task Force identified the following three models:

8.1.1 Option 1: Intellectual Landlord (Developer/Publisher/Brand Manager)

The IS-BAO Program develops and provides business aircraft operators with a current and dynamic safety code of practice, creating safety value. IBAC develops, publishes and manages the brand, while Member Associations market and sell.

The IS-BAO Program publishes and sells copies of information assets; in return, the customer receives rights to use the information, but the IS-BAO Program retains the right to make additional copies and resell the information. Clients purchase rights to the intellectual property and the updates for use as they wish; they obtain the use of a trademark and core products. The by-products are sold separately, creating multiple revenue streams (IS-BAO, workshops, SMS Toolkit, e-Learning).

8.1.2 Option 2: Contractor (Developer/Publisher/Implementer)

In this model, the IS-BAO develops a safety code of practice and guides operators through implementation of the code for a fee.

The principal business is developing and maintaining a safety standard and supporting products and by-products. Services for implementation of all aspects of the products are contracted through the IS-BAO Program.

There is one main revenue stream from contracted implementation, including revenue from workshops, and a secondary revenue stream from by-products such as SMS products.

8.1.3 Option 3: Developer/Outsource Manager

In this model, IS-BAO Program manages the currency of the standard and outsources all other aspects. IS-BAO Program provides analysis of new best practices and revisions to the standard and secretariat services for the Standards Board, maintains the standard with an annual issue of amendments, and manages outsource contracts for all other aspects.

8.1.4 Summary of Options

Business Function	Option 1 Intellectual Landlord	Option 2 Contractor	Option 3 Developer/Outsource Manager
Marketing	Associations	IS-BAO Program	Outsourced
Training & e-Learning	IS-BAO Program	IS-BAO Program	Outsourced
Standards Development	IS-BAO Program	IS-BAO Program	IS-BAO Program
Publication	IS-BAO Program	IS-BAO Program	Outsourced
Liaison with CAA's	Associations	IS-BAO Program	IS-BAO Program
Audit	IS-BAO Program (oversight)	IS-BAO Program (oversight)	Outsourced
Implementation	Associations	IS-BAO Program	Outsourced

8.1.5 Task Force Recommends Option 1

The Task Force recommends that the IS-BAO Program continue to promote the IS-BAO Standards and Program under Option 1. Member Associations should continue to play a significant role in promoting the IS-BAO and its programs and services. This ensures that the IS-BAO Standard and its promotion remains a program overseen by operators for the benefit of operators.

The Task Force believes that Option 3 relinquishes too much control for the quality of the program. It would not be consistent with a core principle that the administration of the Program be, and perceived to be, under the direct oversight of industry. Further, through direct oversight, the IS-BAO Program can more effectively ensure that integrity and quality of the Program and the creation and maintenance of the IS-BAO Standards. In contrast, option 2 risks creating an entity divorced from the ends and aspiration of Member Associations. It is not consistent with the governance principles and structured affirmed by the Task Force in which IBAC retains ownership over the Program. Further, option 2 is not consistent with the Task Force's view that the industry should play a key role in developing, supporting, and promoting the Program as it is meant for the industry's benefit.

Option 1 accomplishes the goal of ensuring that Member Associations, IBAC, and the IS-BAO Program have direct control over the program and is able to ensure ongoing integrity and quality of the IS-BAO Standards. The Task Force believes that the IS-BAO Program benefits by having the Member Associations support IS-BAO externally and provide local implementation support. It enables the IS-BAO Program, and specifically the Standards Board, to focus on maintaining the Standards.

A number of requests have been received from the aviation community to expand the scope of IS-BAO to include non-operating entities such as fixed base operators (FBO), aircraft handlers and maintenance and repair organizations (MRO). While the common view of most IBAC personnel appears to be that IS-BAO should focus on serving operating entities such as business and corporate aviation operators and air charter companies, it would be possible to remove selected parts of IS-BAO, such as flight operations and aircraft equipment, and modify operations manual requirements to accommodate aviation support activities. This should be explored in greater depth because of the level of interest exhibited and the potential for an additional revenue stream that could assist in offsetting other Program costs.

8.2 Audit and Registration

The Task Force estimates that the audit program will continue at a level of about 30 – 40 audits per month. Therefore, the Task Force does not recommend any change to the model by which IS-BAO Audits are conducted. Third-party auditors should continue to conduct the audit activity. This ensures that the audits are seen as conducted by an objective third-party. If the IS-BAO Program established, monitored (through the audit program), and enforced (through the registration process) the standard, industry participants could perceive the IS-BAO Program to have a conflict of roles. However, by allowing an arms-length body to take on at least one of the roles, in this case, the role of audit and monitoring, the IS-BAO Program is relieved of that role conflict.

The Task Force concluded that there may be significant advantages to employ data base technology to management of audit program records and to employ audit software similar to that used by the IOSA program.

8.3 Education

The Task Force believes that the IS-BAO Program should continue to offer and deliver the education program using the current model and does not advocate any material strategic changes at this time. In particular, the Task Force believes that having the IS-BAO Program staff deliver educational programs directly ensures that the training on the program is accurate and of high-quality. However, there may be scope to deliver some of the training through on-line media.

8.4 Relationship with Civil Aviation Authorities

The IS-BAO Program can evolve in one of two directions:

1. Encourage States to cite IS-BAO registration specifically as a means of demonstrating compliance with their rules e.g. similar to the instance of proposal from the British Overseas Territories.
2. Continue to promote IS-BAO as a voluntary industry code of practice, which operators may use as a tool for meeting their regulatory obligations and enhancing the safety of their operations.

The Task Force recommends that IS-BAO remain a voluntary program and therefore recommends against adopting Option 1. The first option is not consistent with the “voluntary” intent of the program and its role in promoting the industry rather than regulating it. At this stage of the program’s evolution, it is not capable of assuming the legal, political and operational requirements necessary to become a proxy for State regulation. However, without assuming the regulatory role

for civil aviation authorities, the IS-BAO Program can pursue three activities as part of its government relations mandate. Specifically, IBAC and its Member Associations could continue to:

1. Work with civil aviation authorities to harmonize their business aviation safety–related rules with the IS-BAO and recognize the IS-BAO operator registration as evidence of meeting regulatory requirements;
2. Work with ICAO to develop SARPS and associated Annexes and manuals; and
3. Support the Member Associations that work with national or regional civil aviation authorities in developing rules and safety oversight strategies.

9. Business Plan Consequences

9.1 Summary

To achieve its growth expectations, a consistent application of IS-BAO throughout the industry, and the implementation of an organization that can be financially sustained in the next 3-4 years, we recommend that the IS-BAO Program undertake somewhat different activities than what is currently adopted. Specifically, IS-BAO should:

- Maintain and expand the face-to-face educational activities undertaken by the IS-BAO Program and charge appropriately for them;
- Maintain its current model of allowing third-party providers to provide audit services, subject to oversight by the IS-BAO Program; however, the IS-BAO Program may consider levying a larger fee on its auditors to reflect the value that the IS-BAO brand adds to their practices and ability to generate revenue;
- Consider expanding the general promotion of the IS-BAO program, not necessarily advertising, to extend the recognition of IS-BAO as a qualifying brand;
- Implement organizational processes and systems to support the Program's new focus, including, implementing a more robust central information system capable of managing internal operational, safety and regulatory data, and capable of use by users operating in diverse environments, geography, and time zones;
- Consider employing electronic media such as webinars, to supplement the face to face educational activities.

9.2 Theory of Change

To achieve its goals, achieved consistently with the principles, as stated earlier in this paper, the IS-BAO Program should consider adopting a theory to make IS-BAO as easy to adopt as possible, while undertaking profitable activities to cover the costs of maintaining the IS-BAO and to fund reasonable activities that support the Program's growth. Our recommendations attempt to optimize the following factors:

- Maximize the number of operators who adopt IS-BAO;
- Maximize the number of operators who choose to register as an IS-BAO compliant operation;
- Maximize the number of operators who choose to undertake higher levels of registration;
- Minimize the number of staff required to support such growth;
- Minimize the need for advertising expense;
- Maximize public relations activities that promote the IS-BAO, in a manner consistent with its association mandate and promotion budget expectations;
- Minimize the activities required to ensure the consistent delivery of those programs over which it can monitor directly;
- Maximize the activities required to ensure the consistent delivery of those programs over which it cannot monitor directly; and
- Maximize the control over the quality of regulatory activities.

9.3 Standards Delivery

IS-BAO Program's core function, as expressed by the Task Force, is to maintain and develop the norms and practices that business aircraft operators should undertake to ensure safe operation. Repeatedly, the Task Force has expressed a desire that the industry should voluntarily adopt such norms and that, ideally, such adoption should be universal in the industry. The Task Force considered a suggestion by InterVISTAS that the IS-BAO Program could choose to no longer charge a fee to those who request a fixed copy of the IS-BAO, but earning revenue from value-added services. Those recommendations are found in InterVISTAS' Discussion Paper submitted to the Task Force.

The Task Force rejected the recommendation based on three major conclusions:

- Based on existing sales patterns, the Task Force believes that the IS-BAO Program has not fully saturated the market and there is still strong demand for the printed Standards. There is still significant opportunity for business growth within the industry for which operators are prepared pay.
- The Task Force believes that the IS-BAO Program runs the risk of de-valuing the reputation of the Standards if it lowered its price, particularly after just having raised its price.
- The Task Force believes that the IS-BAO Program's core function should still remain the development, production, and distribution of the Standards and not on other services such as audit, registration, and training and that the industry will continue to be prepared to pay for such content.

The Task Force will continue to monitor the strategy risks identified by InterVISTAS in pursuing this strategy, specifically:

- the existing strategy depends on finding new customers to fund the ongoing program; the publication offering does not provide any stable, predictable, and recurring revenue;
- the market for such products has a natural limit, specifically the number of business aircraft operators;
- the product is subject to easy copying and substitution; for example, operators can purchase one copy of the product and copy it for consumption and use within and outside an organization; as operators change staff, staff will disseminate copies of material to other providers;
- the low marginal costs of producing additional units of publications, making subject to unauthorized reproduction; and,
- the ease of which other standards providers, such as other training and auditing organizations, could produce, promulgate, and deploy competing standards, particularly if governmental organizations choose not to name specific standards as being required operating standards – a position of which the Task Force supports.

Some methods that the IS-BAO Program management may choose to monitor and mitigate these risks include:

- Renewing and implementing an original intent to charge a recurring fee for updates to the IS-BAO Publication, producing stable recurring revenue for IS-BAO and revenue to support the necessary, but ongoing, development of the Standards;
- Exploring other distribution methods, particularly online static distribution and dynamic desktop and mobile applications whether by license with other businesses or through the development

- of new internal operations;
- Focusing efforts on developing greater value-added services, particularly in its Education and Training activities; and
- Licensing arrangements with third-party content publishers.

This is not meant to be an exhaustive list; but, it is meant to illustrate the variety of tactics management can pursue should it perceive the imminent manifestation of any of the strategic risks identified by InterVISTAS. The primary goal is to ensure that the IS-BAO Program can continue offering the Standards as its primary value-creating activity, while ensuring a steady and predictable stream of revenue to fund its maintenance and growth.

9.4 Audit and Registration

We do not recommend any major changes to the basic auditor and registration program. However, to reflect our belief that the IS-BAO Program maintains an excellent, scalable, and sustainable quality assurance program, we recommend that the IS-BAO Program management consider increasing the revenue that it realizes from its auditors and registration.

Auditors who rely on the IS-BAO brand enjoy benefits that other safety auditors do not. As IS-BAO becomes a more widely recognized standard (particularly if its content is made freely available), there will be increasing demand for auditors' services and only those auditors who can carry the IS-BAO brand will benefit from such interest and growth. As such, the IS-BAO Program is entitled to realize a share of the economic benefits generated by these auditors. Specifically, the IS-BAO Program creates for these auditors:

- Industry credibility and acceptance with the program;
- General promotion of the standards through its marketing and education activities;
- Quality assurance of the brand by ensuring that all auditors operate on a level substantive "playing field"; and
- Instant qualification by being qualified by the IS-BAO Program;

There are numerous ways in which the IS-BAO may choose to change its pricing structure for auditors. Various options can include (and in combination and not exclusively);

- Annual fee (currently used)
- First-time registration fee
- Per audit fixed fee
- Per audit royalty (percentage of total fees earned on audit)

The Task Force did not identify any particular mix of fees that would be appropriate. However, we recommend to the IS-BAO Program management that they consider what quantity of revenue will be necessary to sustain a scalable, competent, and sustainable quality assurance operation and the revenue mix that achieves that goal.

The IS-BAO Program will still achieve its goals of ensuring the consistent adoption of IS-BAO using its current audit monitoring methods. Similar to its ability to monitor the quality of printed publications, though to a lesser degree, the IS-BAO Program is able to monitor the outputs and outcomes of the audit program and to take corrective action when necessary.

9.5 Marketing

Consistent with the belief of many on the Task Force, we believe that the IS-BAO Program should retain its training activities and not delegate such functions to outsourced providers. In fact, we further recommend that IS-BAO focus its expansion efforts in this specific service offering for a number of reasons:

- IS-BAO is least able to monitor the quality, both of outcomes and outputs, of training and education programs provided by outsourced providers
- the margins on such programs is the highest of any of its programs
- with proper planning, the expansion of a training and education program can be highly scalable and extendible
- the scalability and ability to extend the program through training and education programs is consistent with the IS-BAO Program's core value and mission of promoting the IS-BAO throughout the industry
- eliminates the incentives for third-party providers to provide such programs without attribution and potentially in conflict with IS-BAO, such as providing so-called "harmonized" training and audits where the IS-BAO is applied inconsistently

We recommend that the IS-BAO Program increase its expenditures in face-to-face training services. It can offer:

- Scheduled workshops;
- Customized workshops on request;
- Webinars and other real-time online learning events; and,
- One-on-one teaching.

We recommend that employees or independent contractors accountable to the IS-BAO Program deliver the training sessions. By doing so, the IS-BAO Program can capture all of the economic value from a high-margin activity and simultaneously enjoy superior monitoring and control over such activity.

An advantage of "in-sourcing" training and education activities is that the trainers will have direct contact with those who are working with the IS-BAO. Like the audit program, such contacts represent valuable opportunities to gather feedback about the industry, the IS-BAO, and how IS-BAO can evolve. The Program cannot realize these benefits if training is delivered to outsourced providers.

9.6 Information Technology

We highly recommend that the IS-BAO implement a dramatically more robust information system. In working on this project, it was clear that there does not appear to be a central facility housing complete and robust financial, operational, safety, marketing, resourcing, industry, and strategic data. For example, when financial information was requested, data had to be obtained from multiple sources and such data was not in a format that could readily be used by a bookkeeper, accountant, or business analyst. Similar events occurred when trying to obtain complete information regarding operations, number of training sessions delivered, breakdown of training sessions, number of IS-BAO publications issued since the inception of the program. We suggest that without a central information repository and means by which such information can be recalled,

aggregated, and analyzed, the IS-BAO Program management will find it difficult to produce accurate costing, pricing, and volume planning and analysis.

From an operational perspective as well, the IS-BAO Program would benefit greatly if it were able to aggregate data and findings from the numerous audits it conducts. Currently however, the IS-BAO Program is not capable of a systematic review of findings that may emerge from audits. Such findings provide valuable insight into industry-wide areas of risk, identifying a potential need to review parts of the IS-BAO.

9.7 Registration

The Task Force suggests that the IS-BAO Management consider raising fees for the issuance of Certificates of Registration. Currently, the Program charges \$350 per Certificate of Registration, essentially the cost of producing the plaque. This fee does not reflect the full cost of issuing formal Certificates of Registration and does not reflect the full value provided by being an IS-BAO Registered flight operation. This value is greater particularly for those operations that choose to pursue Level 2 or Level 3 registrations. The IS-BAO Program may also choose to set more frequent renewal opportunities so that it generates another source of sustainable, recurring revenue for the Program.

10. Conclusion

The Task Force affirms the basic goal driving the IS-BAO Program's original mandate, the creation and distribution of an affordable, effective, and trusted safety standard for business aircraft operators. Though somewhat re-stated, the Task Force recommends no material change to the Program's guiding principles:

- a not-for-profit operation;
- a voluntary standard;
- a means by which business aircraft operators can enhance the safety of their operations; and,
- supported, promoted, and governed by the industry.

In complying with these principles, the Task Force recommends that no material changes be made to the governance or the organization of the Program. Specifically:

- the Program will remain a program owned and governed by IBAC, through the Governing Board, to the Director General and the Standards Board, and then through the Director, IS-BAO Program;
- the Standards Board, with support from the IS-BAO secretariat and management, will continue to oversee the development and maintenance of the Standards exclusively;
- it will rely on IBAC Member Associations to promote the adoption of IS-BAO and its implementation by their Members;
- it will directly provide training on IS-BAO Standards and their implementation to operators;
- it will continue the operator registration process; and,
- it will oversee an audit program, but continue to rely on accredited third-party auditors to perform audits on operators and not undertake such audit activities itself.

Though the Task Force recommends no material changes to the basic offerings of the Program, it recommends that future management of the IS-BAO Program:

- implement a more formal management system and build capability to capture, store, and analyze operational, financial, and regulatory information;
- recognize revenue to support expected increase demands on the Program's audit quality assurance operation by increasing, or broadening the sources of, revenue in the audit offering; and
- develop sources of predictable and scalable revenue by identifying potential areas of recurring revenue, such as publication renewal fees, different publication delivery models, appropriately priced increased registration fees, and increased training offerings.

By implementing these changes, the IS-BAO Program can strengthen its capabilities to meet the expected growth in demand for its publications, reinforce the value that operators will realize by participating in the IS-BAO community, and support the necessary staffing and systems to ensure the Program's continued success.

Appendix A

Submission to the International Business Aviation Council Task Force on the International Standards - Business Aircraft Operations Business Model

The Task Force invited InterVISTAS Consulting Group Inc. to present operational models used by other industry associations and regulators to inform the Task Force on alternatives. This Submission summarizes some of the models presented to the Task Force at its meeting in Montreal, Quebec in February 2011.

Operational Models from Transportation Sector

American Association of Airport Executives

The American Association of Airport Executives is an example of a market-driven organization. This not-for-profit association is involved in a range of policy, training and industry activities, and credentials individuals based on formal curriculum and testing (including material on safety). It is one of two major airport associations in the United States.

Membership fees represent only 4% of the association's revenues. Ancillary services, fee-based products and for-profit services generate the balance (96%). For-profit products include a national biometric warehouse for airport workers. Executives for the association have a relatively low remuneration package, but receive a lucrative percentage share of profits.

The Task Force was careful not to draw too much from this comparator organization as its core mandate, function, and target audience is significantly different from that of the Program. Specifically, IBAC, affirmed by the Task Force, has directed the Program to operate on an explicitly non-profit basis with a primary goal of promoting a safety culture, with professional education and training being a means to that end rather than a discrete purpose of the organization.

International Air Transport Association

The International Air Transport Association (IATA) provides standards and plays an industry advocacy role. It engages in both non-profit and for-profit activities, including a consulting arm. IATA's Operational Safety Audit (IOSA) is funded from general membership dues, and all members must have IOSA or lose their membership. The model is to maintain a roster of auditors (7 firms) against a standard defined by IATA.

IBAC and Program management have historically not followed the IATA model. Specifically, IOSA registration is mandatory amongst IATA members. Further, the target audience member for IOSA is, on average, significantly larger in size and greater in complexity than the typical operation that would adopt IS-BAO. IATA manages a significantly wider external operation to support this particular operation and is able to fund it given the mandatory nature of the program. Such funding source and mandate is not consistent with IS-BAO's model.

International Association of Ports and Harbors

The International Association of Ports and Harbors (IAPH) maintains an advocacy role only to work with International Maritime Organization (IMO) safety standards. Its Committee has no self-regulatory model. Instead, the committee is wholly based on recommending changes and sharing best practices to meet international organization requirements in safety and security.

Examples from Other Regulatory Organizations

Though pursuing very different models as they are formed under different legal frameworks, there were some regulatory organizations that provided useful guidance to the Task Force. Specifically, modern approaches to securities, accounting, and health care regulation emphasize the fostering of a “culture of compliance” to encourage members to follow rather than relying on formal rules and enforcement tactics to support those rules. These examples animated the Task Force’s observations that the IS-BAO and the Program seeks ultimately to foster the “culture of safety” within the industry and that the Program should encourage the development of several activities within the industry to promote safety through the whole industry.

Canadian Securities Dealers

Securities rules are maintained by both state regulators and by self-regulatory organizations and associations, each acting within their legal, geographically-based jurisdictions. For example, in Canada, securities regulation is conducted by provincial securities commission and by private regulatory associations, such as the various stock and derivative exchanges (the TMX Group for example) and dealer associations (“Investment Industry Regulatory Organization of Canada”). Similar arrangements exist in the United States with the United States Securities and Exchange Commission and the 50 state regulators of securities markets and self-regulatory organizations such as the Financial Industry Regulatory Authority. Multiple professional education providers compete to provide different educational services and programs. Compliance, registration and registration are “in-sourced.”

Accounting

Rules for accounting professionals are maintained by the various Chartered Accountancy organizations in their various jurisdictions, such as the Canadian Institute of Chartered Accountants in Canada, Financial Accounting Standards Board in the United States, and the International Accounting Standards Board which establish international norms. In this model, the development of rules is completed by the various standards setting bodies; however, separate state administered professional organizations oversee licensing and regulation of the profession. Further, multiple private operators provide training, education, and management support for members (accountants) to understand and administer accounting standards, wholly separate from the standards setting bodies and the professional regulators.

IS-BAO Audit/Registration Project Development

Purpose

This paper will describe the current Audit/Registration Program (ARP) and explore its potential evolution and alternative work process solutions.

Program Description

The ARP is designed to audit aviation operator conformance to IS-BAO standards and to recognize affirmative audit results via IBAC registration.

Current Program Design

The ARP comprises two elements:

- Auditing
 - Design and maintenance of audit standards, processes and reports
 - Auditor qualification
 - Auditor training
 - Auditing of an operator
 - Reporting the audit
 - Evaluation and approval of the audit
- Registration
 - Reporting the audit to the registrar
 - Preparation and shipping of registration documents
 - Recording the registration

All elements of the ARP are subject to quality assurance through reviewing and cross-checking work performed by other members of the ARP team. Accurate and expeditious audit processing is a common theme for all activities.

The program has grown measurably, essentially doubling the number of registrants during the past year. As a consequence an additional contractor was hired in January 2010 to accomplish the auditing processing and relieve the Standards Manager of some of her multiple tasks. In addition the Audit Manager, independent auditors, Standards Manager, Regulatory Manager and Registrar are integral parts of the ARP. Therefore, the ARP relies heavily on teamwork to accomplish its goals.

All ARP documents are promulgated, transmitted and processed electronically via email attachments. Program instructions, policies, bulletins, registrant and auditor listings and, recently, program standards are all available on the IBAC website. Signed paper copies of the audit documents are provided to registrants for their records; official records are stored electronically.

The program is promoted/marketted through the following methods:

- Trade publication articles and news items
- Regulatory requirements issued by ICAO and States may favor the use of IS-BAO

- Word-of-mouth from within the corporate and charter aviation communities

ICAO standards which became effective in November 2010 undoubtedly created the surge of registrations experienced during 2010. Yet, word-of-mouth promotion has also contributed to the surge of registrations.

The Registrar's workload has grown considerably during the past year due to the increase in registration applications and additional services provided to the registrants. This workload will likely increase with the inclusion of the helicopter community, the continuing popularity of the program and advanced stage audits required for existing registrants. The increasing workload for the Registrar may begin to affect the ability of the organization to provide timely service to registrants.

Options for Changing Program Scope/Processes

It is estimated that the current level of 12-15 audits processed per month will increase slightly to 16-20 due to a combination of new registrants and repeat audits for existing registrants. This will place additional demand on both the audit and registration functions of the organization.

Existing records and audit tracking mechanisms employ spreadsheet technology. These sheets are not placed in a centrally accessible location such as the IBAC website for all team members to share, rather they are maintained principally by the Audit Manager and Registrar in their personal files. Therefore, researching information and inserting data is done offline and not readily available to other team members. Similarly, all audit and registration documents are maintained separately and not readily available to others.

A significant amount of time is consumed by the Audit Review Group (consists of Audit, Regulatory and Standards Managers) in providing auditors with comments and requesting changes to elementary errors in audit reports; the review group could have more time to provide review of more substantive and policy level issues if these elementary items could be handled elsewhere.

Potential solutions for these issues include:

- A relational database that would accommodate auditor, audit and registration data available to all for reference, research and production of registration materials would greatly expedite and refine existing processes. This fully integrated data entry and information retrieval system would save much entry and research time while enhancing records and information accuracy.
- An online audit reporting system would permit auditor data entry into the above database; this system could provide foreground edits that would reduce elementary input errors. The online audit documents would be resident in the database and not have to be transferred to the Audit Manager for preliminary review and then be forwarded to the remainder of the Audit Review Group.
- Much of the actual registration process would be automated through use of the database as well; the registrar would perform a quality control function in processing the registration rather than executing the multiple tasks now required for manual registration.
- Additional full-time or part-time help for the Registrar should be considered to provide a backup and for augmentation during high workload periods.

A number of requests have been received from the aviation community to expand the scope of IS-BAO to include non-operating entities such as fixed base operators (FBO), aircraft handlers, and maintenance and repair organizations (MRO). While the common view of most IBAC personnel appears to be that we should stick to operating entities such as business and corporate aviation

operators and air charter companies, it would be possible to remove selected parts of IS-BAO, such as flight operations and aircraft equipment and modify operations manual requirements to accommodate aviation support activities. This should be explored in greater depth because of the level of interest exhibited.

Options for Changing the Management Processes

The existing management processes appear to work well. The addition of the audit/registration database should relieve existing personnel from many manual administrative tasks thus permitting more time to manage and further improve the ARP.

Resource Implications

Initial design and maintenance fees for the proposed ARP database should be the only resource requirements. While database development and proving processes are unknown at this point an estimate of \$50,000 would be a good starting point.

Additional Registrar personnel, either full part-time, will require funding to the level of desired augmentation. Initially, one part-time registrar assistant should be adequate. Then, this position could be made a full-time asset, as required. However, the benefits of the database and attendant automated functions should be explored prior to committing to additional personnel.

Recommendations for the Task Group Considerations

- Implement an ARP database
- Determine the desirability for on-line audit submissions.
- Explore the implications of extending IS-BAO to aviation support activities
- Determine the level of additional support required for the Registrar.

IS-BAO Task Force Working Group - Education

1. Purpose: Provide at least 2 operating models that IS-BAO could deploy to operate the education program, including the general sale of IS-BAO materials.
2. Program Description:
 - a. The IS-BAO manual and Audit Procedures Manual are sold through IBAC and its member Associations. Comp copies are provided to government policy officials and some education organizations. This last year, revisions to the manuals were converted to an electronic format and provided through the website/ password. While there are still a number of manual holders who have not yet received their passwords and downloaded the materials, all indications are that this is an efficient and effective method of distributing the annual revisions. Sale of manuals is a primary funding source for the IS-BAO program. Since this system has just been implemented and prices increased in 2011, do not recommend a change to the program at this time.
 - b. The IS-BAO program has a limited marketing budget generally limited to publication of brochures. This is consistent with the non-commercial philosophy of the program. Additional education, marketing and promotion is provided through a number of mediums including participation in industry or association events, provision of workshops, personal contact (IBAC and industry word of mouth), publications, and through the IBAC website. Education/marketing and promotion of the program can be classified in the following areas.
 - i. Personal contact (meetings/ e:mail/ telephone) A considerable amount of on-demand time is spent responding to inquiries, discussions through personal contact. In addition, information is provided to auditors/ other parties to further promote the program.
 - ii. Newsletters -(IS-BAO/ Auditor/ IBAC) IS-BAO and Auditor newsletters are issued twice a year.
 - iii. Website -Provides a forum to advertise workshops, register for workshops and provide information on the program.
 - iv. Workshops (funding source)
 1. Introduction to IS-BAO
 2. Auditor Accreditation
 3. SMS (train the trainer)
 - v. SMS eLearning (with FlightSafety International) This provides a funding source for the program.
 - vi. Presentations. Presentations are provided upon request to industry groups, conferences, government. No fee is charged. This is an integral part of the education process.
 - vii. Media (interviews/ articles, etc.)
 - viii. NBAA Airmail/ Av Manager sites. No formal process has been established to monitor or respond to information on these sites. The NBAA airmail site is

used for an IBAC airmail system to deliver newsletters/ information. This site is maintained by IBAC staff in Montreal.

3. Current Program Design:

a. Promotion/marketing:

- i. IBAC publishes 3 brochures to describe the IS-BAO program (Introducing the SMS Toolkit, Building an Aviation Safety and Security Culture, and IS-BAO). These brochures are distributed at industry events and provided as handout material at the Introduction to IS-BAO workshop. The IS-BAO brochure can also be downloaded from the IBAC website.
- ii. Much of the promotion is completed by direct contact, word of mouth either among industry representatives or between industry and IBAC/ Association staff or with government officials. The industry uses multiple means to obtain information or discuss the program including Association websites (eg NBAA Airmail/ AvManagers Forum). Information is also provided through direct contact via phone or e:mail, industry events or forums (roundtables, conferences), media publications, newsletters, and website information. An airmail system is established through the NBAA server to provide contact to manual holders, workshop attendees, and auditors. The names/ airmail listing is maintained by the IBAC office.

b. Workshops:

- i. Introduction to IS-BAO: Provides an overview of the IS-BAO program including a review of program benefits, structure, standards, SMS, and audit program. It is intended for operators who are considering or are in the process of IS-BAO implementation, auditors, and other interested parties (government, insurance, finance providers, etc.)
- ii. Auditor Accreditation workshop: This is conducted by IBAC staff and experience has demonstrated that it is most beneficial to schedule this workshop in conjunction with the Intro workshop to save travel costs and facilitate registration. While there are a large number of new auditors at this time, it is expected that the number of new auditors will level off. There was a significant number of new auditors in 2010 and auditors will need to attend this workshop each 2 years for renewal (as of now approximately 135 per year). In addition there are increasing numbers attending for information and not seeking accreditation.
- iii. Development of SMS Workshop/ train the trainer Annual maintenance of this workshop is required and to send the updates to selected trainers. Also should consider oversight of the programs.
- iv. Connection with the NBAA Manual Workshops. Manual workshops are conducted by NBAA selected providers. Oversight/ monitoring of these workshops should be considered.

4. Options for Changing the Scope:
 - a. Increase number of workshops and oversight of workshops/ add workshops such as ISO auditor training. It was suggested that IBAC develop additional ISO training/ accreditation for new/ renewing auditors. The current policy is that auditors have audit experience or training prior to IBAC accreditation. There is no set standard for this training other than an ISO/ ASQ internal or external audit training course.
 - b. Increase interaction through member Associations. Ensure links through member websites/ actively involve Associations in meetings with government. Continue participation in industry events sponsored by member Associations.
 - c. Increase Standards Board participation
 - d. Actively market the IS-BAO program
 - i. Paid advertising- This could have some adverse perceptions that IS-BAO is a commercial product contrary to the philosophy of the program
 - e. Evaluate other means of delivering information (chat room, Facebook, Twitter, website information, webinars, e-learning, etc.)

5. Options for Changing the Management Processes:
 - a. Scheduling workshops. Workshops are scheduled based on demand. The current process works well- no changes are recommended.
 - b. Workshop registration. Registration is handled through the Montreal office. Once registered, applicants are listed on the website (protected site) and information is downloaded by the Standards Manager to prepare the roster/ prepare for the workshop. Amendments to attendee information is provided to Montreal following the conduct of the workshop. This information is used to process auditor accreditation. Additional information is provided to NBAA for issue of PDP certificates.
 - c. Workshop conduct
 - d. Workshop maintenance Workshops are updated each year based on the annual revision, feedback, instruction methods, etc. Considerable financial discounts are obtained (70%) in printing in bulk quantities rather than copying material for each individual workshop.
 - e. Financial considerations. The Standards Manager currently prepares the annual revision, and prepares the workshop materials for printing. Other costs include shipping and other workshop supplies. Substantial discounts (FedEx office) are obtained through bulk printing. Shipping costs are reduced or eliminated by carrying materials to the workshops (recommended for international workshops) due to executive airline status (free baggage). However, because of the two workshops being conducted back to back, the number of books has increased and shipping, when possible, may be a better alternative. Another consideration is bound copies of the workbooks rather than the hard binders to save on weight and bulk. Another option is to have the workbooks printed in Montreal and shipped directly to the workshop locations. The current process of obtaining industry hosts

for the workshops (to provide the facility and possibly catering/ local promotion) in exchange for comp registrations has proved effective and enables the increased number of workshops. Sale of the manuals/ workshop fees currently provide income to cover the costs of the program; however, additional programs such as the helicopter program will require review of the funding. It is also recommended that a formal accounting system be developed to track costs to better evaluate program needs and future program growth.

6. Resource Implications: The growth of the program necessitates review of resources in order to adequately meet the need for workshops, industry presentations, support of member Associations and other program demands.
7. Recommendations for the Task Group Considerations:
 - a. Add additional (personnel) resources dedicated to Education effort. Continue to conduct workshops to meet the demand. Increase oversight of workshop program (Standards Manager will conduct or observe select workshops conducted by IBAC staff or vendors) Experience has demonstrated that the conduct of workshops by IBAC staff (vs train the trainer) is essential to promote the program. The workshops provide a direct forum to not only impart information, but to receive feedback on the program. It also maintains the philosophy of the non profit status of IBAC. It is essential that auditor accreditation be completed by IBAC staff to promote the integrity of the auditor accreditation process and IBAC oversight. Consideration should be given to additional auditor accreditation such as an ISO approved course.
 - b. Explore alternative means to provide information (social media/ association websites/ paid advertising). The airmail system could be expanded to other sources to expand the scope of coverage. However, it is essential to maintain a database of manual holders (passwords) in order to deliver the electronic annual revisions. Actively monitor sites to respond to comments on the program.
 - c. The new helicopter program may require coordination with the helicopter associations / government to provide additional training. It is expected that there will be continued expansion of materials/ projects requiring training/ new product development (such as helicopter GCOM, SMS toolkit, etc)

Work Group Report

Government Relations

1. Purpose

This paper will develop options for future strategies to promote the acceptance of the IS-BAO by civil aviation authorities as a means for business aviation operators to meet their regulatory obligations and to enhance operational safety.

2. Program Description

The IS-BAO Government Relations program consists of the following activities:

- Providing input to ICAO on SARPS related to business aviation, SMS and other operational issues;
- Supporting Member Associations (MAs) to provide credible input to State regulatory programs on business aviation and SMS issues;
- When appropriate, dealing directly with States on regulatory programs related to business aviation and SMS issues;

Promoting the use of the IS-BAO and its associated SMS Toolkit, as a tool for operators, both commercial and non-commercial, to use in meeting their regulatory obligations, while maintaining the independence and integrity of the IS-BAO program.

3. Current Program Design

Working with MAs and regulatory authorities on issues related to the IS-BAO and aviation regulations and supporting the Director, ICAO Liaison on operational issues, has been a prime responsibility of the IBAC Standards Manager. Over the past four years the workload associated with that position expanded exponentially, so the position of Director, Regulatory Affairs was established. This position assumed responsibility for support of the Director, ICAO Liaison for specific operational ICAO issues such as the re-write of Annex 6 Part II and as alternate member of the ICAO OPS Panel. It also was assigned responsibility to support EBAA in the EASA rulemaking activities and liaison with civil aviation authorities on SMS issues.

For example, during the period 2006 – 2010, EASA undertook a very heavy regulatory development agenda, and IBAC and EBAA devoted 5 to 10 days per month in support of the activities. However, such opportunities are not typical. Support to ICAO activities is mainly provided by the Director, ICAO Liaison, but additional operational expertise has been provided to the Annex 6 Part II development process and to SMS and OPS Panel work.

4. Options for Changing the Scope

The IS-BAO program can evolve in two directions:

1. encourage States to specifically cite IS-BAO registration as a means of demonstrating compliance with their rules, similar to the proposal in the British Overseas Territories.
2. continue to promote IS-BAO as a voluntary industry code of practice which operators may use as a tool for meeting their regulatory obligations and enhancing the safety of their operation;

The Working Group recommends that IS-BAO remain a voluntary program and therefore recommends against adopting option 1. The first option is not consistent with the “voluntary” intent of the program and its role in promoting the industry rather than regulating it. At this stage of the program’s evolution,

it is not capable of assuming the legal, political, and operation requirements should it become a proxy for State regulation. However, without assuming the regulatory roles civil aviation authorities, the IS-BAO program can pursue three activities as part of its government relations mandate. Specifically, IBAC and its MAs could continue to:

1. work with civil aviation authorities harmonize their business aviation safety related rules with the IS-BAO and recognize the IS-BAO operator registration as evidence of meeting regulatory requirements;
2. work with ICAO to develop SARPS and associated Annexes and manual; and,
3. support the MAs who work with national or regional civil aviation authorities in developing rules and safety oversight strategies.

5. Options for Changing the Management Process

The Working Group advocates no change to the existing management process. However, it anticipates an increased volume of work that may need to be assigned to an existing staff function.

6. Resource Implications

To oversee the activities listed in section 4, we anticipate ongoing requirement to execute these activities to be **20 to 30 days per year**, plus expenses. Currently, the IBAC Standards Manager or another individual with appropriate expertise could undertake this activity until the volume of work expanded to justify the engagement of an employee or contractor, reporting to the Standards Manager, to oversee increased activities.

7. Recommendations for the Task Group Consideration

Based on the foregoing, the Government Relations Work Group recommends no material change to IBAC's government relations strategy. IBAC should continue to promote the IS-BAO as a voluntary industry code of practice which operators may use as a tool for meeting their regulatory obligations and enhancing the safety of their operation. IBAC should continue its current activities listed in section 4 of this report.

8. Background

The IS-BAO continues to be primarily an industry code of practice. ICAO Annex 6 Part II defines industry codes of practice as follows, with the accompanying note:

Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organization's Standards and Recommended Practices, other aviation safety requirements and the best practices deemed appropriate.

Note.— Some States accept and reference industry codes of practice in the development of regulations to meet the requirements of Annex 6, Part II, and make available, for the industry codes of practice, their sources and how they may be obtained.

It is also noteworthy that Annex 6 Part II also contains references to industry codes of practice as sources for guidance material that may be used to comply with the SARPS contained in that Part.

The EASA rules for non-commercial operation of complex motor-powered aircraft are still under development but the latest draft material includes references to "officially recognized industry standards" and their use by operators in declaring "their capability and means" of complying the related

rules. The draft EASA Authority Requirements rules direct the competent authorities (usually the national aviation authority) to take into account operator's use of industry standards when establishing their safety oversight programs.

To become an "officially recognized industry standard" the IS-BAO was processed through the European Standards Association (CEN) recognition process by way of a CEN Workshop.

In an effort to broaden their use of industry standards EASA is in the process of developing a comprehensive policy. It will be available in the near future and is expected to incorporate current practices whereby industry associations maintain control of their standards. Those that meet certain integrity and official recognition criteria will be recognized by regulatory authorities without the industry standards becoming a proxy for the civil aviation regulatory authority.

The one instance where this line is less clear is in the British Overseas Territories Aviation Regulations (OTARs). In those regulations IS-BAO registration is specifically cited as a means of demonstrating compliance. A number of the British Overseas Territories have aircraft on their Registries that are based in locations all around the world, thereby complicating their regulatory oversight responsibilities. It would appear that they concluded that the IS-BAO had the required integrity for them to accept IS-BAO registration as demonstrated proof of the operator meeting their regulations, which are based on the SARPS of Annex 6 Part II, and it provided them with an opportunity to leverage their resources. While this may appear a win – win, it may have potentially negative ramifications which will be discussed later.

The US FAA is also in the process of citing the IS-BAO and two other similar programs, as a means that operators can use to meet the requirements of the Seventh edition of Annex 6 Part II. They are drafting an InFO designed to make operators aware of the new provisions in Annex 6 Part II, noting that the three cited industry standards address the associated SARPS, whilst having a verification system that operators can use to demonstrate to civil aviation authorities that they meet the requirements. The FAA is taking this action because competing legislative priorities preclude their development of the required amendments to make FAR Part 91 ICAO compliant. It should be noted that an Information for Operators (InFO) message is informative only and has no regulatory status. It contains information and recommended action to be taken by the respective operators.

IBAC and EBAA have, for a number of years, participated in the JAA and EASA rulemaking activities in a consultative role as members of review groups and on Steering Committees as industry experts. It was in such a capacity, on the advice of EASA, that IBAC also led the development of a SMS Toolkit as part of the IS-BAO and also as a standalone product for operators wishing to develop an SMS but not fully implement the IS-BAO and obtain registration. Indeed, throughout this period, the focus was on allowing operators to use IS-BAO and its associated SMS Toolkit as a tool for meeting their regulatory obligations while maintaining the independence and integrity of the IS-BAO program. This objective added significant complications to the CEN recognition process and resulted in the requirement for IBAC to negotiate a specific agreement with CEN addressing a number of key principles and processes.

IBAC provided a considerable amount of input during the development of the Seventh Edition of Annex 6 Part II. In that process the IS-BAO was used as a reference point for what might reasonably be expected from a well managed non-commercial business aviation operation.

While IBAC has a seat on the ICAO Air Navigation Commission and is intricately involved in a broad range of ICAO issues and activities, as a follow-up to the involvement in the development of the Seventh edition of Annex 6 Part II there has been increased direct involvement in SMS issues, the OPS Panel and a range of other Annex 6 issues.

Work Group Report

Program Sales

1. Purpose

The Program Sales Work Group (WG) objective is to generate ideas and concepts for the ongoing delivery and growth of the IS-BAO program. This WG report describes the background, status and options for potential changes. Recommendations are made as a basis for further discussion by the Task Group with the ultimate goal of determining the best business model for delivery of the program and best management structure for managing that business model.

2. Program Description

The purpose of the IS-BAO is aviation safety. Although other benefits were identified (See Attachment B), safety was the rationale for creation of the safety standard, hence it can be argued that the core product is 'safety'. Many founding principles were established when the IBAC Governing Board decision was made to develop the code of best practices and most of these principles were re-confirmed by the Board when a decision was made to research new business models. Basic principles will be presented in this Paper as a guide towards new options. The clients and beneficiaries of the Program are business aircraft operators. The purpose is aviation safety.

For the purposes of this Paper, the 'program' consists of the system to fund, research, develop, update, produce and deliver the core products. The principal product is the International Standard for Business Aircraft Operations (IS-BAO). The IS-BAO is updated annually by an IS-BAO Standards Board following research on new best practices and consideration of new regulatory provisions, particularly in the ICAO Annexes. Annual updates of the program ensure currency and are considered critical to the program. IS-BAO by-products are:

IS-BAO Support Documents

- a) Five variations of the Generic Company Operations Manual,
- b) CD with extensive guidance material,

Audit Materials

- c) Certificate of Registration (includes managing processes for audit oversight, monitoring, selection of auditors and due diligence processes),
- d) Audit Procedures Manual,
- e) Internal Audit Manual,

Operator Education and Assist

- f) Workshops for Introduction and Auditor Accreditation,
- g) Assistance to operators implementing the IS-BAO,
- h) SMS Tools Kit,
- i) Partnership on SMS e-Learning program

Program Management

- j) Policies on IS-BAO development and management,
- k) IS-BAO website,
- l) Letters of congratulation to CEOs,
- m) Assistance to operators on regulatory requirements (such as SMS rules),

Also under development is a helicopter Edition of the IS-BAO. For purposes of this WG Report only the program and the principle document and support will be discussed. Other WGs will cover most of the bi-products such as the C of R, auditing and workshop products.

3. Current Program Design

a) Preliminary Program Design

The IBAC Governing Board considered the development of an industry safety standard in 1999 based on a secretariat paper presented to the Board. The decision to proceed was made immediately and an aggressive development program was initiated. A Project Manager was contracted to coordinate the work of a Task Force, which worked in teams. A final product was finished and tested through 2000 – 2001 and launched at EBACE in 2002. Some of the design principles established by the Board were as follows:

- i. The Standard will be a 'Code of Practice' and associations identify good operators to help development.
- ii. The 'code of practice' will be common to all areas of the world, making it an international standard that will encourage harmonization of good operating practices.
- iii. The standard will apply principles established in ISO standards, but be dedicated only to safety, hence there would be no attempt to gain ISO endorsement.
- iv. It will be a voluntary standard for which Associations would encourage Members to implement.
- v. Very little marketing will be done with the understanding that if the standard is of benefit, operators will sell it through 'word of mouth'.
- vi. The standard was to be operated as a 'not-for-profit' entity, with program funds being reported separately from the IBAC core program.
- vii. Funds to develop the program to come from the IBAC program and returned at zero interest over 15 years.
- viii. The safety standard was considered the core product, but it was recognized that there would be value in operators being able to verify implementation through an audit.
- ix. Governance of the standard content was assigned to a Standards Board, primarily made up of business aircraft operators. Secretariat services would be provided by the Standards Manager.
- x. IBAC Governing Board is to maintain authority for the IS-BAO Business Plan and related financial policy issues.
- xi. The safety standard was to be updated annually with new best practices and new regulatory requirements.
- xii. ICAO Standards for International GA operations would be adhered to, but State rules would be implemented only when considered a best practice (the Standard requires each operator to ensure State of Registry regulations are satisfied when implementing the standard).

The design of the standard was based largely on wording and phrasing of ISO standards, but a structure was specifically designed to be user friendly for aviation managers (it was felt that the ISO structure would cause too much confusion). It was also decided that the standards would be very succinct and most of the detail would be retained in Acceptable Means of Compliance (AMCs) that would serve as both a baseline and guidelines for operator design of their systems and processes. It was also determined that operators would benefit from Generic Company Operations Manuals (GCOMS) and that there should be a structure that was familiar to operators in North America and another for those familiar with JARs (now EASA) format. These were developed as part of the principle product and operators were given the choice of format. A Safety Management System (SMS) was established as the foundation of the safety program. Additional assistance was contracted to help with the design of an SMS that could be easily implemented by small operators.

b) Program Delivery

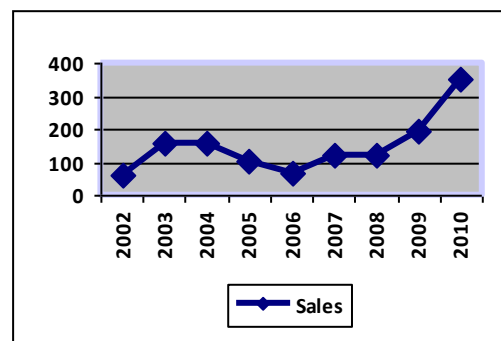
The full IS-BAO program is described in the IS-BAO Business Plan approved by the Governing Board (originated in 2002 and updated in 2010). The program through the first years was managed by a Standards Manager under contract who was responsible for keeping the standard and by-products current, providing secretariat services to the Standards Board, approving auditors, monitoring audits and presenting workshops and presentations to groups (A more complete list of program activities is attached). The IBAC Office Manager assumed additional duties as IS-BAO Administrator, responsible for printing and distributing documents, maintaining, mailing, and invoicing clients for the workshops, as well as maintaining the IS-BAO website. The Director of ICAO Liaison supervised the administration work and coordinated issue of the annual revision. The Director General provided the financial management and GB reporting support. The workload through the first six years was manageable under this arrangement.

In the last few years the program expanded rapidly to the point that the delivery system was experiencing workload strain. A Management Committee was formed to ensure distribution of workload, an Audit Manager was contracted to manage the C of R and auditing program, the Regulatory Affairs Director took over document management and a number of policy decisions were made to ensure ongoing transparency and effective management (new policies are on the IS-BAO website), including transition to electronic amendments. A very rough estimate of annual days of work for the principle product delivery (IS-BAO) is as follows:

Standards Manager – 30 days **estimated** (does not include workshops as this will be reported separately)
 IS-BAO Administrator – 92 days (printing, mailing, receivables, website etc, 102 total less 10 for wkshops)
 Regulatory Affairs Director– 66 days (33 days-document mgt, 33days-Management Committee etc)
 Director ICAO Liaison – 26 days
 IBAC Director General - 48 days (Management Committee, accounting and Letters to CEOs)
 Total management = 170 days. Total administration = 92 days

c) Program Sales

Sales are administered by IBAC Member Associations. The selling price was established at \$950 USD (see Business Plan), of which \$900 is returned to IBAC and \$50 retained by the selling association. As of 2011, the price was increased to \$1,200, with selling associations retaining \$150. The selling price was established based on the need to maintain a not-for-profit revolving fund for which revenues must approximately match expenditures, based on rough projections of sales each year. Expenditures were for general management, Standards Board administration, presentations to organizations, coordination, printing, mailing, communications, assisting operators, audit oversight, issue of C of R, etc. Costs for the Workshops and for special projects were budgeted separately on a non-profit basis.



The first year produced a rapid number of sales that provided a reserve for the program (\$150,000) and then the program stabilized for a few years with revenues generally equaling expenditures. Through 2007 – 2009, expenditures were greater than revenues due to investment in new products (CEN, SMS Tools and SMS e-Learning). Following completion of the special projects in 2009, the sales increased rapidly and accelerated into 2010. Through the first few years the great majority of IS-BAO sales were to flight departments in the US, but increasingly sales in other parts of the world increased.

Association	IS-BAO Sales						Totals
	2005	2006	2007	2008	2009	2010 to date	
ABAA (Australia)				1	1	1	3
ABAG (Brazil)	-	0	0	0		3	6
BAAI (India)						1	1
BBGA (United Kingdom)	2	0	2	8	2	10	35
BAASA (S. Africa)	--	0	2	0	1		5
CBAA (Canada)	2	3	1	0	1	3	15
EBAA (Europe)	4	2	0	9	6	18	52
EBAA-F (France)	-	2	0	0			5
GBAA Germany	1	1	1	2	4	1	12
JBAA (Japan)	-	0	0	0			5
IBAA (Italy)					2		2
MEBAA (Middle East)					2	12	14
NBAA (United States)	95	60	105	105	172	305	1152
Total	104	68	121	124	191	354	1307

- Sales in 2002, 2003 and 2004 included in totals

Revenues in 2010 for IS-BAO sales including Audit Procedures Manual and binders were approximately \$450,000. Expenditures for the core program (discounting Workshops and special projects) was approximately \$250,000 (to be verified). Some expenditures, such as those for the Director General and Director ICAO Liaison, are not accounted for in the totals

d) Projection of Future Demand

Recent increases in demand have primarily related to the safety standard becoming better known and the value spread by 'word of mouth'; however, it is also estimated that a significant increase in the demand results from evolution in regulations such as the ICAO Annex 6 Part II additions that became effective November 18, 2010. Some States such as Bermuda have implemented the ICAO standards and require visiting aircraft meet the provisions by April 2011. It is expected that as EASA finalizes regulatory provisions for NCC (2012) there will be further demand and likely an overall increase in demand from States other than the US. The US has to date had by far the greatest number of sales and future sales are likely to be similar to those of 2010 for the foreseeable future. It is largely unknown what the ongoing steady state sales are likely to be, but given that business aviation is very much an itinerant industry as companies initiate and cancel their flight departments based on many factors, it is probable that sales will continue in the vicinity of 300-400 per year, providing ongoing steady state revenue for the core program in the vicinity of approximately \$370,000 per year.

4. **Options for Changing the Scope**

Various options for a business model are presented below. Options are predicated on two principles directed by the IBAC Governing Board, namely that the program is to remain under governance of the IBAC GB and that it is to remain a "not-for-profit" program. Business models for our purposes can be defined as "the method of doing business by which the IS-BAO safety standard can be maintained and increased for ongoing benefit of operators and business aviation safety in general". It should consist of two elements: (a) what the business does, and (b) how the business can be sustained doing these things. **The program objective is safety value rather than profitability.**

Option 1 Intellectual Landlord (Developer/Publisher/Brand Manager)

What - Develops and provides BA operators with a current and dynamic safety code of practice. Creates safety value.

How - Principle business is maintenance of intellectual property (IS-BAO) and its supporting products. By-products are specific sub-elements of this property.

- The Program publishes and sells a copy of information asset; customer receives rights to use the information, but the Program retains the right to make additional copies and resell the information.
- Rights to the intellectual property and the updates are purchased by clients for use as they wish.
- Purchasers obtain use of a trademark and core products.
- Other by-products are sold separately.
- IBAC develops, publishes and manages the brand. Member Associations market and sell.
- Multiple revenue streams (IS-BAO, Workshops, SMS Tool Kit, e-Learning)

Option 2 Contractor (Developer/Publisher/Implementer)

What – Develops safety code of practice and guides operators' implementation for a fee.

How – Principle business is development and maintenance of a safety standard and supporting products and by-products.

- Contracts services for implementation of all aspects of the products.
- One main revenue stream from contracting implementation, including revenue from Workshops.
- Secondary revenue stream from by-products such as SMS products.
- Sales made from Program directly.

Option 3 Developer/Outsource manager

What – Manages currency of the standard and outsources all other aspects

How - Provides analysis of new best practices, revisions to the standard and secretariat services for Standards Board.

- Maintains the standard with annual issue of amendments.
- Manages outsource contracts for all other aspects.

5. Options for Changing the Management Structure

Option 1 Matrix Management (current model)

Characteristics

- Matrix Management Concept managed through Committee chaired by DG
- Oversight by GB through DG reports at Board meetings.
- Standards Manager providing general coordination and daily management.
- Additional persons contracted to manage specific duties (Audit oversight and Document Mgt)
- Total of 3 managers under daily contract, plus 3 staff members doing IS-BAO tasks.
- IBAC staff (DG, Off Admin, Direct ICAO Liaison) conducting part of tasks.
- Financial record keeping through DG and Off Admin.

Pros

- Very flexible and adjustable to market demands
- Uses expertise to best advantage.
- Does not provide for good succession.
- Trade-off economies of sharing space and personnel with IBAC program.
- Takes advantage of ICAO printing, courier, mailing etc.

Cons

- Weak financial record keeping
- Lacks strong central management focus.
- Takes IBAC staff away from other IBAC tasks

Option 2 Independent Incorporated Entity

Characteristics

- IS-BAO incorporated entity reporting to the IBAC Governing Board
- Manager appointed by and reporting directly to the Board.
- Manager has mandate over staffing positions.
- Manager fully responsible for financial management.
- Office separated from IBAC office (location other than at ICAO).
- Linked to IBAC only through the Governing Board.

Pros

- Strong central management.
- Improved focus and coordination and can be more reactive.
- Better record keeping.

Cons

- Likely to be more expensive. More overhead costs.
- Is not as flexible to peaks and valleys.
- New oversight required due independence.
-

Option 3 Stand Alone Management Program Reporting to the Director General

Characteristics

- A Division of the IBAC program dedicated to managing the IS-BAO.
- A manager and staff appointed (probably on contract).
- Administration and financial management provided by the Division.
- Office separated from IBAC (location other than at ICAO).

Pros

- Strong central management.
- Improved focus.
- Better record keeping.

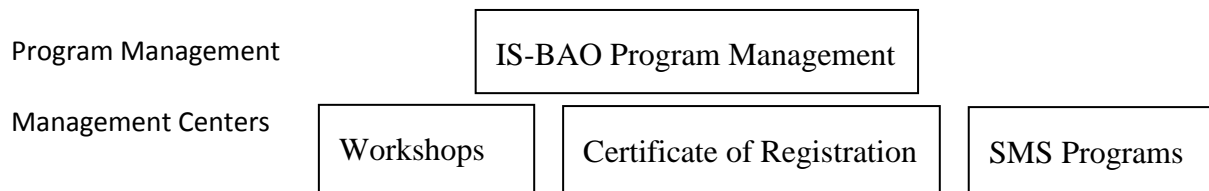
Cons

- Likely more expensive. More overhead.

6. Work Group Recommendation

The Work Group recommends that the task Group as a whole discuss all options for the Program Sales business model and management structure and to integrate the thinking with the results of the other three Work Groups.

Based on the preliminary review, the Program Sales Work group recommends a business model similar to the current model with IBAC serving as the intellectual landlord for the business aviation safety standards. By-products should be managed as distinct 'management centers' under the broad IS-BAO Program.



Option 3 is recommended for the Management Structure - Stand Alone Management Program, under the general direction of the Director General, with further discussion needed on how the administrative aspects will be delivered. The secondary option that is considered feasible is a Stand Alone Management Program under the general direction of the Governing Board.

The Sales Program Work group also recommends the need to consider a more robust governance program with the possibility of setting up an IS-BAO Board of Directors or an Oversight Committee of the Governing Board.

IS-BAO Tasks

Work Item	Notes
IS-BAO Management Committee	
Organization & Chair	Monthly meetings
Report to Governing Board	Develop report twice annually
Terms of Reference	
IS-BAO Business Plan	Update approx every 5 years
Policy Development	Continuous
Policy Approval	IS-BAO Policies needed for full transparency
IS-BAO Insurance	At basic level. Needs reconsideration
IS-BAO Standards Board	
Secretary, scheduling, reporting etc	Annual meetings of the Board. Agenda, Minutes etc
Preparation of proposed amendments to IS-BAO	All potential changes assessed and recommendations made to the Board
Standards Board Members	Consideration and appointment.
Document Management	Make all related changes to the documents based on decisions taken by the Board
Standards Maintenance	
Content proposals to Stds Brd	Annual submission to the Standards Board with proposals for change to the standards and supporting material.
Editor	
Publication	
Distribution	
Updating documents	
Formatting	
Review and analysis process	
Annual revision	
Distribution Lists	
SMS	
Policy	
Conferences	
Toolkit	Annual update.
eLearning Updates	Regular update and liaison with FSI
Toolkit Workshop Liaison	Maintenance of Workshop and approval process.
IS-BAO Workshops	
Annual update of Introduction Workshop presentations and materials	
Maintain Auditor Workshop Program	

Workbook printing/collating	
Workshop scheduling, planning and administration (collections and records)	
Registration	On line registration being worked
Pre/Post records/administrative	address corrections/ financial records/ roster/ feedback/ etc.
Conduct of workshops	43 in 2010 but should be increased
IS-BAO Presentations	
Maintain Presentation Material	Develop website library (protected)
Schedule Presentations	
Operator meetings	
Conference Coordination	
PPT Presentations	A file to be set up on the website – password protected.
Promotion and Education Material	
IS-BAO Newsletter	
Website	
Airmail Address Lists	. Three lists to be maintained (will need auditor names, also).
NBAA PDP Program	Liaise with Jay Evans
Audit Program	
Audit Policy	Policy developed by John/Kathy and approved by the Management Committee
Audit Oversight Project	Project to enhance oversight of audit program.
Schedule Auditor Renewal Workshops	
Deliver Auditor initial and renewal Workshops	John to arrange appropriate person to deliver workshops
Auditor Advisory Group	
Auditor Qualification Review and recommendation for accreditation	Review Committee of three persons to review all borderline applications.
Auditor accreditation notices and recordkeeping	.Auditor credentials (letter/ badge) Excel spreadsheet records (due dates) , website updates, Airmail
Audit Reviews	Review Committee to review each audit report
Audit Monitors	John to schedule and arrange for self, Kathy or Ray to conduct
Auditor files	Central electronic files and online back up.
Operator Registration	
Operator Files	Central electronic files and online back up (Backed up at NBAA)
Records	Central electronic files and online back up.
Letter to CEO	
Auditor Newsletter	
Auditor Distribution List	

Payment records	
Government Interface	Dependent on subject/ project. To be coordinated through the Mgt Com
Association Interface	Dependent on subject/ Board meetings
Insurance Broker/Underwriters Interface for Promotion of IS-BAO	
Mentoring Program	With Valero/ Stage III operators
Business Case Development	
Regulatory Liaison	
EASA	
ICAO	
CEN	
Other States	
Special Projects	
On-Demand Work (phone, e:mail)	

Specific benefits to a flight department:

Self-Education – IS-BAO helps flight departments learn from experiences of their peers.

Assist to New Operators – New flight departments can adopt a code of best practices from the beginning of operations.

Assisting Rapid Growth – Growing flight departments can introduce professional standards to facilitate and safely manage change.

Reduces Potential for Repeat Errors – Professional standards help avoid mistakes.

Raises Confidence of Board of Directors – International standardization provides global benefits. Company executives understand the concept of industry standards to facilitate international commerce. Recognized global standards give the non-aviation executives and Board members a means of measuring the quality of flight operations.

Assurance to Employees – Employees flying on company aircraft will benefit from knowing that the flight department meets professional safety standards.

Pride in Achievement – Company executives, flight department managers and staff can feel the pride of achievement.

And for the business aviation community as a whole:

Raises the Safety Bar – Standardization fosters safety by encouraging professional operations.

Raises Confidence of Regulators – Regulators are given confidence that the business aviation industry is capable of self-governance to a high safety level.

Assist to Regulators – Enables deployment of scarce safety resources to high-risk areas.

Alternative to Historical Regulatory Programs – Provides society with an alternative to traditional regulatory oversight, through application of 'industry self-monitoring'.

Enhances Communication Amongst Operators – A team approach to keeping the standards current benefits the industry as companies learn from each other's experiences with new equipment and procedures.

Institutionalizes Best Practices – Provides a systematic means of capturing best practices and making them available to the industry as a whole.

Public Recognition of a Well Managed Industry – A self-administered global standard fosters public confidence.

Promotes Global Harmonization – Business aviation assumes a responsible and proactive role in promoting global harmonization of operating procedures and requirements.



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