

AIRCRAFT SAFETY

Seal of Approval: The Story Behind Independent Safety Audits

by Andrew Richmond



Wyvern Wingman, ARGUS Platinum, and more recently IS-BAO and ACSF. You see at least one of these logos on the home page of most every charter operator. Those icons are there to assure charter customers that the company is independently audited and certified to meet a certain standard of safety. There is much more to it than that, however. How an operator elects to participate in these audits, and why the charter clients use them, uncovers a complex series of decisions which ultimately have a tremendous impact on the charter industry.

I set out to learn more about the major auditing organizations—why and how they came to be, examining how they

differ and often complement each other, and the reasons a charter operator might choose one standard over another.

Do We Really Need Safety Auditing Firms?

The first question is, why do third-party auditing firms exist at all? And if they're essential, what took so long? After all, safety has been an issue since the first days of private aviation. According to Wikipedia, in 1908 a man named Thomas Selfridge became "the first person to die in a crash of a powered airplane." The pilot was Orville Wright. Two years later, Charles Rolls (as in Rolls-Royce) also died in a Wright biplane.

Over the years there have been numerous crashes involving private planes—from high profile incidents like Amelia Earhart's in the thirties and Sen. Ted Kennedy's in 1964, to scores more involving crop dusters, exhibition flyers, aviation enthusiasts, and air charter flights. Yet the first independent Part 135 charter safety standard was not established until 1991.

Isn't FAA Approval Enough?

Let's start with the FAA, since no charter company can operate without FAA approval. Surely that's sufficient. I asked Joe Moeggenberg, president and

CEO of ARGUS International, for his perspective. "The FAA's resources are becoming incredibly limited. They have a difficult time getting funding, and their resources are being focused on the airlines. FAA I35 audits are strictly compliance audits. They check records, make sure training is done and medicals are up to date, but they don't do process and procedure audits. I believe that as time goes on the FAA will continue to limit time spent on I35 operators."

Wyvern Consulting's Managing Director, Brent Moldowan, also commented. "I think it's well recognized within the industry that the Part 135 world is pretty diverse," he said. "Each certificate has unique qualities, operates with different sets of manuals, different aircraft, all approved by the FAA, of course, but there was no shared, definitive safety standard."

So the business aviation industry sees a need for even higher standards and best practices to further ensure safety in the air and on the ground. To say nothing of safeguarding the aircraft itself, a capital asset than can be worth tens of millions of dollars.

Four Compelling Reasons for Charter Operators

1. Customer Assurance and Marketing.

A Wyvern, ARGUS, IS-BAO, or ACSF logo can help persuade customers that their charter flight will be safe. Charter operators use third-party certifications in their marketing to attract new customers and gain a competitive edge.

According to Rob Zeiting, a Los Angeles based aviation industry expert, "For average consumers, third-party certification is a decision making

tool. It becomes a validation that the company subscribes to some safety standard and cares about quality. For charter operators, this means the more certifications validation you can get the better." Rob added that third-party certification is also a validation for the operators themselves, as a sign of their own commitment to safety.

2. Flight Department and Broker

Demands. Most corporate flight departments require at least one third-party certification. They have been audited themselves and often want to work with charter companies that operate to the same standard. As Joe Moeggenberg stated, "most leisure travelers are familiar with the logos, but not what's behind the standard." However, he said, flight departments and charter brokers are extremely knowledgeable and have demanding expectations.

This also holds true with companies that broker jets. Blair Lacorte, Chief Executive Officer at XOJET, said: "We won't even look at operators who do not have ARGUS Platinum, Wyvern, or IS-BAO ratings." Another example is The Flight Department, a leading charter broker that, according to founder and president, Brian Waldron, is "a Wyvern-only company" using only operators who pass Wyvern's audit standard.

Aviation consulting firms play a role as well. "Our corporate and high net worth clients ask us to affirm that the charter operator satisfies their exacting requirements for that particular trip," said Peter Agur, the Managing Director and Founder of the Van Allen Group, a management consultancy focused within business aviation. "They often want the operator to meet even higher standards

than Wyvern or ARGUS Platinum. For example, many of our clients insist that both pilot and co-pilot are type-rated in that specific aircraft."

3. Potential Liability Mitigation.

In the event of a crash or other incident, a charter company or charter broker can be open to potential litigation. An independent certification of safety practices could demonstrate that the company was doing everything possible to protect its customers.

4. Real Value to Customers and Operators.

The fact is that third-party audits are valuable investments that pay off every time a plane lands safely. And that, after all, is the number one concern of customers and the number one goal of charter operators and brokers. "Audits force self reflection to help you become a better company," XOJET's Lacorte said. "They provide a historical snapshot of where we are with each audit point, showing what we've learned from previous audits and the improvements we've made."

The bottom line is that, in a sense, charter companies have little choice—and spending a few thousand dollars on an audit to gain hundreds of thousands in revenue is hardly a tough business decision. Whether to participate with all four auditing firms is a more complicated topic, which I will address later in this article.

Introducing the Major Players

Founded in 1991, Wyvern Consulting Ltd. was the first safety auditing firm, followed in 1995 by Aviation Research Group/US (now ARGUS International, Inc.). These competing for-profit

companies are similar in many ways. Each has a set of standards, a process their trained auditors must follow, and offer levels of certification at different price points. And they both aggregate valuable information—such as preflight data on a specific plane and crew—that they market to flight departments, charter brokers, and retail consumers. There are differences, too, but let's look first at the two nonprofit auditing organizations

In 2002 the International Standard for Business Aviation Operations (IS-BAO) made its debut. This standard was established by the International Business Aviation Council (IBAC), which has permanent observer status with the United Nations Specialized Agency for aviation matters.

Then in 2009, the Air Charter Safety Foundation (ACSF) established their Independent Audit Standard (IAS). ACSF is a nonprofit foundation dedicated to improving the safety of air charter and shared aircraft ownership operations (fractional ownership).

IS-BAO and ACSF were developed in collaboration with other industry organizations around the world. Both standards are built around a Safety Management System (SMS)—a formal mechanism to evaluate and mitigate risk, and improve and promote a company's safety practices, procedures, and culture. While Wyvern and ARGUS certify that an operator meets their standards, IS-BAO and ACSF register a company to a public list of firms that satisfy their audit criteria.

Now for some details about these independent safety standards, and the organizations that developed them. In addition to learning about their own standards and services, I asked each of

these organizations if the typical charter customer truly understands what audit certification signifies? And are four standards too many?

The Wyvern Standard

Wyvern Consulting, now owned by Avinode, developed The Wyvern Standard™ in cooperation with an advisory panel of individuals from Fortune 100 company flight departments, as well as other aviation professionals now called the Customer Advisory Board (CAB).

A charter operator can ask to be audited to earn either Wyvern Wingman status or become Wyvern Registered. Wyvern Wingman operators must pass annual physical audits. Wyvern Registered operators provide their data to the Wyvern system, but are not physically audited. As of October 2011 there were 90 Wyvern Wingman Operators.

Wyvern also has a partnership with IATA-accredited Aviation Quality Services (a Lufthansa company) which is authorized to perform Wyvern, ACSF, and IS-BAO audits outside of the Americas.

Wyvern Trip-by-Trip Auditing

Wyvern's trip-by-trip auditing service provides aircraft and crew details. The audit can be conducted against The Wyvern Standard established by the CAB, or the FAA standard, which generally requires less pilot flight experience. The client can also establish custom, confidential criteria. The client purchases a subscription at a Basic, Premium, or Enterprise level for access to increasing amounts of information.

What Makes Wyvern Different

“One of the things we have going for us is our legacy,” said Managing Director Brent Moldowan. “We have a 20 year history of zero fatalities on Wyvern-compliant flights. Our Customer Advisory Board remains very involved, meeting a couple of times a year to review the standard, and we are constantly monitoring operators. For example, we look for problems if there are wholesale changes such as a new management team—and move quickly to delist specific aircraft or crew members.”

Auditors have an average of 36 years of aviation experience, and an average tenure at Wyvern of six years. Wyvern trains auditors yearly—onsite and online—to keep them up to date on the Wyvern standard.

According to the company's website, Wyvern assigns two specialists to every audit: one for operations and one for maintenance. Operations auditors must be ATP rated with extensive flight experience and a background in both management and quality assurance. Maintenance auditors must have the highest available maintenance certification and extensive management experience.

Each year approximately eight operators fail their Wyvern audit and are unable to rectify any discrepancies. And in a typical year five operators are delisted from the Wyvern Report.

When I asked whether four standards was too many, Brent said that the competition benefits the consumer and “challenges companies to continually improve their standards and offer new products.”

ARGUS Platinum, Gold Plus, and Gold Standards

ARGUS conducts charter operator audits and trip-by-trip safety checks (tripCHEQ). With TRAQpak, they market intelligence data service, aircraft operating cost reports, market research, and aviation and travel consulting. And through their PRISM subsidiary, the company offers training and business aviation systems solutions (PRISM).

Charter Operator Audits

There are three ARGUS certifications for commercial operators: Platinum (the highest level), Gold Plus, and Gold.

- Platinum charter operators are physically audited to the more demanding platinum standards every 24 months
- Gold Plus operators are physically audited every 24 months, but are not held to the Platinum standard.
- Gold operators are not physically audited, but provide information that is verified by ARGUS through FAA and other records.

As of October 2011 there were 88 Platinum, 22 Gold Plus, and 313 Gold charter operators.

Operators that do not qualify for any ARGUS rating are classified as DNQ. Companies with inadequate information or history are classed as Non Rated.

ARGUS tripCHEQ Auditing

ARGUS tripCHEQ (Charter Evaluation and Qualification) is a trip-by-trip auditing product that provides details about the aircraft and crew for a specific charter flight.

Trip auditing can be done against the ARGUS safety standard or custom criteria set by the customer. They can

purchase the data by subscription, or pay for the tripCHEQ on a trip-by-trip basis.

What Makes ARGUS Different

“There are many factors that set ARGUS apart,” said President and CEO Joe Moeggenberg. “For instance, every year we undergo an audit by the International Air Transport Association (IATA) to insure our internal policies and procedures (auditor training, quality control, etcetera) meet IATA’s high standards. We are one of eight companies worldwide to be IATA endorsed to conduct IOSA audits. Along with IOSA, we can audit to ARGUS Platinum, IS-BAO, and BARS standards. That means an operator can have ARGUS, IS-BAO, and BARS audits conducted during the same visit.”

ARGUS trains auditors annually, to ensure they consistently audit to the same standard. New auditors must have formal IOSA, IS-BAO or other training before starting ARGUS training, and a minimum amount of time in the industry. Operations auditors are mostly former pilots, maintenance auditors are all former mechanics or have a maintenance background. There are currently 48 full time and 52 contract auditors.

According to the company, about five percent of operators fail the audit each year, usually because the proper documents are unavailable or are not up to date. The low failure rate is due to the fact that most companies know in advance whether they’ll pass the standard, and won’t pay for the audit if they know they’re not ready.

Joe said that, “as it stands right now, the number of audit standards seems about right.” He added that the competition does make things “tight” in the U.S., but that there are numerous market opportunities in other countries.

IS-BAO

“IS-BAO was established by the business aviation community worldwide,” said IBAC Director General Don Spurston. “It is a code of safety practices developed by representatives from all sectors of the business aviation community, including both corporate and on-demand charter operators. It not a commercial endeavor, but has as its objective the facilitation and communication to operators of best practices collected by the community of operators and associations worldwide.” He added that updates to ensure currency are managed through a Standards Board consisting of current flight department managers.

What Makes IS-BAO Different

Spurston said that IS-BAO is first and foremost a Safety Standard. It is founded on a Safety Management System developed specifically for business aircraft operations. SMS has proven to facilitate safety improvements in aviation for the last ten years and is increasingly being recognized for its safety benefits. The SMS in IS-BAO is built on international standardization principles and is recognized and endorsed by the international community, including by the President of the Council of ICAO.

There are three stages of IS-BAO Registration:

IS-BAO Stage I

Conducted by specially trained and certified examiners, the Stage I IS-BAO audit is a systematic and objective review of a company’s aviation operations and maintenance framework to verify conformity with the standard.

- Safety Management System (SMS)
- Organization and personnel
- Standard operating procedures
- Training programs

- Domestic and international flight operations
- Aircraft equipment and maintenance
- Company operations manual
- Emergency response plan
- Environmental management
- Occupational health and safety
- Transportation of dangerous goods
- Security

The audit emphasizes transparency, thoroughness, and cooperation between the audit team and company personnel. Auditors seek to uncover the cause of a non-conformity, not just the symptoms. Problems can often be corrected before the audit is completed. After successful completion, the charter operator becomes IS-BAO Stage I Registered.

IS-BAO Stage II

IS-BAO Stage Two verifies that safety and operational systems, policies, and procedures are being effectively utilized throughout the company. This audit reviews company policies and procedures, but the emphasis is on thorough one-on-one interviews with employees in all departments. The auditor seeks to determine whether these employees understand the policies, procedures, and documents, and comply with them as part of their daily workflow.

IS-BAO Stage III

A physical audit to achieve Stage III registration focuses almost exclusively on one-on-one interviews to determine what is or is not working, what needs to be improved, and whether the established processes effectively identify and mitigate risk.

The best practices incorporated in IS-BAO are applicable to all operators, large and small. As of October 2011, over 150 on-demand charter operators have achieved an IS-BAO Certificate

of Registration. The list of IS-BAO Registered Operators is updated continually at www.ibac.org/is_bao/registered-operators.

ACSF IAS

The Air Charter Safety Foundation works to enhance safety through collaboration, education, and research. ACSF administers the International Audit Standard (IAS), a detailed, publicly available 211-page document. It is aligned with the IOSA single audit standard for the airline industry and adjusted for Part 135 charter and Part 91(k) fractional ownership operations. The foundation has oversight of the standard to ensure its integrity.

- The IAS audit evaluates the company's SMS based upon published International Civil Aviation Organization and FAA standards.
- Audited companies are required to conduct a comprehensive internal self-audit prior to the arrival of the on-site audit team.
- Successful completion requires that audit elements be both implemented and documented.
- An on-site IAS audit is required every 24 months.
- Operators must adopt and implement operational risk assessment.
- Auditors are not chosen by the operator. The ACSF draws from a pool of available, ACSF-accredited audit companies and auditors to complete an audit.
- All participants must adhere to a firm conflict of interest policy, and an operator will never have the same auditors on sequential audits.
- Operators are subject to suspension or removal from IAS Registry if they cease to meet the ACSF IAS standard.

IAS Registered Operators are listed at www.acsg.aero/registry. As of September 2011, there were 28 companies listed on the registry. All of them are commercial operators.

ACSF Trip-by-Trip Auditing

ACSF also offers Trip Specific Reporting. This fee-based service provides details about a charter customer's trip, aircraft, and crew. Annual Audit reports on any ACSF IAS registered company are also available for purchase.

What Makes ACSF Different

ACSF President Bryan Burns said that IAS is "the most comprehensive standard for charter operators—auditing for compliance, best practices, and the SMS. Our customers are charter operators, as well as educated end users, who truly understand the standard, as opposed to labels and brand recognition."

Bryan explained that ACSF revenues come through membership fees, donations, their annual safety symposium, and a minimal registration fee, as with IS-BAO. "We encourage operators to download and utilize the standard, regardless of whether we conduct the audit."

ACSF provides a pre-audit check list that preps the operator on exactly what to expect months in advance. "We do not conduct audits ourselves," Bryan said. "We accredit independent auditors who are trained annually. We want to keep an arm's length from auditors with no influence of how the process goes. Our own internal committee then double-checks each auditor's findings, and our employees participate as observers when an auditor conducts his first ACSF audit." He says that half of audited companies fail the first time, usually because they are not prepared for the SMS portion.

Bryan feels that there are too many audit standards. “We need one single universal standard, like IATA/IOSA has with the airline industry. You can have measurable, quantitative results with a standard that is universally understood and accepted.”

The Challenge for Charter Operators

Each of these aviation safety organizations can provide a greater level of insight to a charter operator on improving operations and increasing their margin of safety. The challenge for the charter operator is deciding which of these four organizations to partner with. Should an operator choose to work with all four firms? If it does, the costs could well exceed \$100,000 per year, factoring in the fees paid to these firms, as well as time employees must spend in preparing for and participating in each audit. And when they finish their final audit for the year, the time to renew the first one they completed may be just around the corner. This puts the operator in a perpetual cycle of going through audits and updating manuals and procedures to satisfy the findings of each audit.

If operators elect to narrow their selection to one or two audits, they must determine which certifications their clients will insist upon. Should they choose the wrong firms, they risk losing business. As each of these audit firms attempts to gain market share by creating greater visibility to their audit services, the market has the potential to

shift as to which firms a client deems necessary before booking flights. In the past, large charter brokers have created a major shift in the industry by aligning with one particular auditing firm, forcing a large number of operators to participate in these audits or risk losing a substantial volume of charter business. Operators must be prepared to shift their strategy as well. As many Part 135 operators have concluded, it is safest to be accredited by all four firms in order to maximize acceptance within the industry and project the greatest commitment to safety. Operators pay a steep price, however, both in membership fees and the time commitments from their executive team.

If you are a charter operator, which approach is right for your operation? Ask your clients what matters most to them, and how they determine which firm best meets their requirements. Take the time to educate them on what the various ratings mean, and what they don't mean. Once you understand what your charter clients are thinking, you will be in a better position to select your strategy.

In the final analysis, as I mentioned earlier, charter operators have little choice but to have at least one independent safety certification. The combination of customer assurance and marketing advantages, flight department and broker demands, potential liability mitigation, and improvements in safety essentially makes the decision for them. It's simply part of the cost of doing business if they want to grow and succeed in the charter industry.



Andrew Richmond is CEO of TWC Aviation, Inc., a privately-owned, international provider of worldwide jet charter, aircraft management, sales and acquisition services. Mr. Richmond is committed to building lasting relationships with customers, employees, and vendors—and to fostering a service-focused, team-oriented work environment. He has served as CEO since 2001.

Under his leadership, TWC Aviation has expanded rapidly to manage one of the world's largest fleets of private jet aircraft, with a focus on large-cabin, long-range jets from every manufacturer. TWC has locations across the U.S. and abroad. The company is audited by third-party safety firms, achieving IS-BAO Stage II and ACSF registered status, and Wyvern Wingman and ARGUS Gold certifications. Mr. Richmond has an M.B.A. from the University of California at Irvine, and a B.S./B.A. in Business and Management Information Systems from Boston University.