2002

Government Aviation Safety Oversight - Trust, but Verify

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Roosevelt played the major role in shaping the postwar world. Under his aegis, a series of international conferences elaborated blueprints for the cooperative components of the postwar world order: for what became the United Nations (at Dumbarton Oaks), for world finance (at Bretton Woods), for food and agriculture (at Hot Springs), for relief and rehabilitation (in Washington), and for civil aviation (in Chicago).¹

¹ HENRY KISSINGER, DIPLOMACY 405 (1995).

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** James Loos, Member of the ICAO Air Navigation Commission nominated by the United States (1994-1997). Jim Loos began his FAA career as a controller in Kennedy Tower and subsequently moved to the New York Common IFR Room when that facility opened in 1968. After three years as an instructor at the FAA Academy in Oklahoma City he moved to Washington, D.C. to work in the Office of International Aviation. He attended his first ICAO meeting, the tenth meeting of the North Atlantic Systems Planning Group, in 1974. His positions since then have included Special Assistant to the Associate Administrator for Air Traffic, Manager of the Accident and Incident Division in the Air Traffic Service, and Chief of the Air Traffic Staff in the FAA's Brussels Office. In 1994 he was nominated by the U.S. Government to be a Member of the ICAO Air Navigation Commission, assuming that position in October 1994. From October 1994 to November 1997 he was also the Deputy U.S. Representative to ICAO. Jim left Montreal in November 1997 and retired from the FAA in January 1998.
Unfortunately, the Chicago Conference of 1944 was a failure by many measures. On November 30, 1944, with the meeting already extended for five days, the New York Daily News headlines read, “Parley to End With Air Pact Row Unresolved.” On the following day the conference was called “a flop” by the same paper. The London Times reported, “Conference a Failure.”

The meeting produced one of the most effective international organizations in the United Nations system, but that’s not what it set out to do. The U.S. objective was to set up an international air transport regime allowing the “free” flow of air transport between countries with frequencies determined by the market rather than bilateral agreements—what today would be called a global system of “open skies.” Other representatives had a post-war system in mind that was regulated with a far more heavy hand of government. The result was, with regard to economic issues, quite unsatisfactory for both.

On the technical side the picture was much more encouraging. Fiorello La Guardia, Mayor of New York, was a member of the U.S. Delegation and he is reputed to have explained the technical accomplishments of the meeting with “everybody is against bad weather.” In fact, twelve subcommittees of the conference each produced draft technical annexes on subjects including Airways Systems, Rules of the Air, Licensing, Airworthiness, Charts and Maps, and Search and Rescue, each of which was close to the substance of the corresponding Annexes in existence today.

So the disaster about to befall the Conference, alluded to in the newspaper headlines, was not on technical matters but on the economic regulation of air transport. Neither side won a clear victory. The resulting compromise was relatively simple. The draft Convention establishing the International Civil Aviation Organization (ICAO) said little on the air transport issue. Instead, two other agreements were presented. The International Air Services Agreement4 established the first two freedoms of right of transit and the right to land for non-traffic

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2 Duane Freer, ICAO at 50 Years: Riding the Flywheels of Technology, ICAO J., Nov. 1994, at 26.
presents. The International Air Transport Agreement\(^5\) established the four basic freedoms, with an option for the fifth. The former took effect; the latter was only recognized in the Western Hemisphere. Resolution of the air transport question largely remained for bilateral negotiations.

In addition, the meeting produced the Interim Agreement\(^6\) setting up a Provisional International Civil Aviation Organization, to remain in effect until a permanent convention was ratified; a permanent Convention\(^7\) establishing an International Civil Aviation Organization with advisory powers and laying down certain air navigation principles that shall be followed by the signatories; and the above referenced drafts of Technical Annexes to the Convention.

The Provisional ICAO came into existence on June 6, 1945.\(^8\) The first meeting of the Provisional Council convened in Montreal on August 15, 1945 with 19 of the 20 States elected to the Council by the Chicago Conference attending.\(^9\)

The permanent body was formally constituted on April 4, 1947, thirty days after the deposit of the twenty-sixth ratification of the Convention.\(^10\) The First ICAO Assembly convened shortly thereafter on May 6, 1947, and the Council met on May 28, 1947, one day after the close of the Assembly.

In 1946 the United States and the United Kingdom, meeting on the island of Bermuda, reached an agreement on air transport rights.\(^11\) The Bermuda Agreement was the model for all


\(^8\) The Provisional ICAO was limited to three years, so it was scheduled to end its existence on June 6, 1948.

\(^9\) The nineteen were Australia, Belgium, Brazil, Canada Chile, China, Colombia, Czechoslovakia, Egypt, El Salvador, France, India, Iraq, the Netherlands, Norway, Peru, Turkey, the united Kingdom and the United States. Mexico attended the third session beginning on January 21, 1946. Provisional ICAO, Report on the Work of the Organization, \textit{supra} note 6, at 9.

\(^10\) In fact, by April 4, 1947, 38 States had notified ICAO of their ratification of the Convention.

such air transport agreements for years to come, establishing a
bilateral and relatively restrictive system in place of the multilat-
eral and open regime that was unreachable in Chicago.

I. ICAO STANDARDS

As of June 20, 2002, some 188 States have acceded to the Chi-
cago Convention (the Convention) and are members of ICAO.
Each member State has agreed (see articles 37 and 38 of the
Convention) to comply with the standards and procedures set
forth in the (now) 18 Technical Annexes to the Convention, or
to specifically notify ICAO of its inability to do so. Participants
in the Chicago Convention felt that to make ICAO Standards
mandatory on States would be a negation of state sovereignty,
but to make the standards less than mandatory would make
them ineffective. The solution was to make the standards
mandatory unless a State files a “difference” to that standard.
ICAO in turn publishes these “differences” for the use of other
States, which may or may not agree to accept them. (While
compliance with the standards of ICAO is not mandatory, it is
also true that another State may decline to accept air transport
operations that do not comply with the standards of ICAO in
some material way.)

The 18 Annexes to the Convention contain detailed standards
and recommended practices that should be followed by all
member States in establishing and carrying out government re-
sponsibilities related to civil aviation:

Annex 1: Personnel Licensing
Annex 2: Rules of the Air
Annex 3: Meteorological Service for International Air Navi-
gation
Annex 4: Aeronautical Charts
Annex 5: Units of Measurement to be used in Air and
Ground Operations
Annex 6: International Commercial Air Transport
Annex 7: Operation of Aircraft
Annex 8: Airworthiness of Aircraft
Annex 9: Facilitation
Annex 10: Aeronautical Telecommunications
Annex 11: Air Traffic Services
Annex 12: Search and Rescue
Annex 13: Aircraft Accident and Incident Investigation
Annex 14: Aerodromes
Annex 15: Aeronautical Information Services
Annex 16: Environmental Protection
Annex 17: Security
Annex 18: The Safe Transport of Dangerous Goods by Air

Supplements to each Annex contain detailed lists of each specific difference notified to ICAO between the national regulations of States and the corresponding international standards contained in the Annex.

In its present form, the Convention and its Annexes remain the fundamental basis for promoting safety of flight throughout the world. But the Convention is not a self-executing document. If a country is to reap the many benefits of international commercial air transportation, the country has agreed, by the terms of the Convention, to provide for safety oversight of those operations. Governments do not always recognize this obligation. From our experience, many governments that do recognize their safety oversight obligations have certainly not devoted adequate resources to fulfilling those obligations.

A. FAA INTERNATIONAL AVIATION SAFETY ASSESSMENT (IASA) PROGRAM

In years past, the United States had assumed that countries which had acceded to the Chicago Convention were complying with its provisions governing safety of flight operations. There was no enforcement of this obligation, nor was an enforcement mechanism provided for in the Convention. Then on January 25, 1990, Avianca Flight 52, a Boeing 707 that had left Bogotá for New York's John F. Kennedy Airport via Medellín, ran out of fuel and crashed at Cove Neck, New York, killing 73 people. This tragic accident gave rise to considerable publicity drawing attention to the differences between U.S. Federal Aviation Administration safety standards and those followed by the civil aviation authorities of other nations. The debate was fueled by commercial interests of a number of operators in the Southeastern U.S. who complained that airlines operating under non-U.S. flags were able to undercut the U.S. carriers because of the substantially lower costs of inadequate foreign safety regulations.

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Congress heard the complaints of airlines that felt pressures of unfair competition, and was concerned about the apparent lack of FAA oversight of foreign airlines. In fact, a major part of this concern arose from the practice of a few U.S. citizens who established foreign flag airlines operating outside the U.S., escaping much of the regulatory reach of U.S. authorities. These airlines exploited the "loopholes" in the system by transporting cargo between, for example, Miami and South America under a non-U.S. flag and without the need to have detailed FAA oversight.

In Congressional hearings held in mid-1991, FAA noted that it prescribes a very limited regulatory framework for non-U.S. airlines that either operate into the U.S., or operate U.S.-registered aircraft anywhere in the world. FAA announced that it was changing its policy as regards safety oversight of non-U.S. airlines that operate into the US, and would for the first time "examine more closely the capabilities of foreign civil aviation authorities to meet their surveillance and oversight responsibilities under international law." Thus began FAA International Aviation Safety Assessment (IASA) Program.

FAA has no regulations that require a non-U.S. airline to comply with standards of ICAO. Indeed, ICAO standards are not directly applicable to the airlines, but are for a government to apply as part of its oversight of airlines. The Department of Transportation, however, licenses non-U.S. airlines to operate into the U.S. under terms of a bilateral air transport agreement. Part of the process of licensing requires that DOT make a finding of fitness of the carrier to perform the requested operations. This fitness finding includes an evaluation of the adequacy of safety oversight provided by the country whose flag is flown by the airline. Thus, the legal thread that gives efficacy to the IASA program runs primarily through the DOT legal au-

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17 See, e.g., 14 C.F.R. §§ 211, 302.
thorities, not FAA regulations. FAA acts as the technical arm of the U.S. Government, but the ability to give legal substance to FAA technical findings lies in the ability of the DOT to grant or revoke commercial authority to operate into the U.S.

That said, there is concern in some quarters that FAA has used its regulatory authority in the conduct of the IASA program in ways that go beyond what 14 C.F.R. pt. 129 provides. Among other things, foreign airlines that operate into the U.S. are issued, under 14 C.F.R. pt. 129, "operations specifications" that regulate and restrict their operations. These operations specifications list each specific aircraft that the carrier is permitted to use in operations into the U.S., and what routes may be flown. When FAA has determined that the country of the carrier does not satisfactorily implement ICAO safety oversight standards, it is by enforcement of these “op specs” that restrictions are imposed on a carrier. Some argue that FAA’s use of the operations specifications in this manner in practice goes beyond the authority conveyed by 14 C.F.R. pt. 129, but the issue has never been brought to the courts.

II. EARLY DAYS OF IASA

The IASA program was intended to be conducted in accordance with newly developed guidance material and well-documented policies, to determine other countries’ compliance with ICAO standards. Like many good intentions, this intent took a long time to realize and is in fact only now becoming a reality. The program began with undocumented and non-standardized assessments, by specialists in flight operations and maintenance regulations, of whether a country complied with the minimum standards for aviation safety oversight as contained in Annexes 1, 6, and 8 to the Convention. With airlines from nearly 100 countries serving the U.S. at the time, a method needed to be developed to select the order in which countries would be assessed. An informal policy quickly became “the rule:” Since DOT had to make new findings each time a country’s airlines established new service or expanded existing service, DOT and FAA staff agreed that a positive FAA assessment would be a prerequisite for those changes. Countries whose safety oversight appeared to be questionable, and countries that actively sought

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19 See Government Oversight of Loophole Airlines, Hearing Record, supra note 13.
FAA assessment assistance, were dealt with next. The remaining countries were to be handled as time permitted.

FAA assessments initially resulted in one of 3 categorizations. Category 1 countries were those whose safety oversight was determined by FAA to meet the requirements of ICAO. Category 3 countries were those whose safety oversight was found by FAA not to meet the minimum requirements of ICAO, and whose airlines did not serve the U.S. Category 2 countries similarly were determined not to meet the minimum ICAO safety oversight standards, but the situation was deemed to be not so serious as to place them in Category 3, thereby denying their airlines the right to fly to the United States. Rather, initial intentions were to reserve Category 2 as a temporary one, with the full expectation that (1) the safety oversight of the foreign government combined with increased surveillance of U.S. operations by its carriers at U.S. airports provided adequate assurance of safe operations to the traveling public; and (2) the country was working diligently to correct the shortcomings identified by FAA, and would work its way out of Category 2 within a short period (perhaps 6 months to a year). Since countries in Category 2 did not meet the minimum safety oversight standards of ICAO, DOT staff would be unable to make a finding that their carriers were fit for any expanded or new airline operations. Thus, their operations were “frozen” at the level permitted at the time of the assessment. This, FAA believed, provided an economic incentive for the airlines to pressure their governments to correct the oversight deficiencies cited in order that the airlines might be permitted to expand their services to the United States.

For many reasons, FAA plans and expectations were unfulfilled, and the first few years of IASA activity generated many complaints of inconsistent application of policy, an absence of transparency, a lack of coordination with ICAO, and an absence of documented operating guidance to both inspectors and those subject to assessment.20 Many of these complaints were not without basis.

One of the early determinations made was that 22 countries would enjoy presumptive “Category 1” status.21 Australia, Ca-

20 See, e.g., Papkin, op cit.
21 In fact, what happened was that some countries in whose safety oversight performance FAA staff had full confidence were immediately listed in Category 1, and several European States whose oversight capabilities were not so well known
nada, Japan and New Zealand are countries with which the U.S. enjoys close and long-standing cooperation in civil aviation, and FAA believed that it knew well their compliance with ICAO standards. In the case of the 18 European nations that were, in the early 1990's, full members of the Joint Aviation Authorities (JAA), FAA elected to recognize the capability of the JAA to ensure those countries' compliance with ICAO standards, and forego independent unilateral FAA assessments. FAA had, for some time, participated with JAA on inspection standardization teams in Europe, evaluating the oversight of JAA member countries. FAA, by this experience, had confidence in JAA technical ability to ensure that member States of JAA had in place appropriate safety oversight systems. In fact, this "recognition" of JAA was done in no small part to bolster the standing of JAA in the international community and provide more incentive for JAA to provide international leadership in operational airline safety oversight. Until that time, JAA emphasis had largely been on the certification of design, construction and series production of civil aircraft, with less attention being given to operational airline safety matters.

For the first three years or so, FAA Assessments were done without public announcement of their findings. FAA believed that it would politicize the process to trumpet shortcomings in safety oversight in the public arena. Since FAA had determined that identified deficiencies for countries whose airlines continued to operate into the U.S. (i.e., Category 2 countries) were not so serious as to present an immediate danger to the traveling public, FAA reasoned that the public interest would be best served by rapid correction of the deficiencies by specialists, rather than protracted arguments in a more political environment. Findings of the FAA assessments typically included one or more of the following:

- outdated or otherwise inadequate legislation and supporting regulations;
- inadequate system for the initial certification of air carriers in accordance with ICAO provisions;


23 This recognition was not without problems, most recently illustrated by the FAA categorization of Greece as a Category 2 country, with unacceptable safety oversight of its airlines.
inadequate operator surveillance following initial issuance of air operator certificate;
- lack of properly approved operations/maintenance manuals and minimum equipment lists typical on flight crew training programs and proficiency checks;
- performance of aircraft maintenance by mechanics without proper licenses; and
- excessive flight duty times between rest periods.

On September 2, 1994, the Department of Transportation announced, with some fanfare, that of thirty states assessed by FAA, nine states were found not meeting ICAO standards and four states received conditional approval. The states were identified by name. Initially this public disclosure was not enthusiastically embraced at the technical levels in FAA. Many felt that public disclosure would make it more difficult to gain the cooperation of the subject State. The political position was that the public has a right to know when a safety problem has been identified. Public disclosure became firmly established as a principle of public policy in regard to IASA.

A. ICAO Efforts to Create an Assessment Program

Public announcement of IASA Assessment results made a great difference in the minds of other nations, and of ICAO. FAA put effort into working to encourage ICAO itself to move to a program to address the problems with safety oversight. This was difficult for several reasons. First, ICAO is a relatively small organization, with substantially fewer than 100 professional specialists in the Air Navigation Bureau, the unit that would (and now does) administer such a program of assessments. Second, the U.S. and its closest allies have long forced ICAO to adhere to

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24 Of the thirty-three States, twenty-two were in Latin America and the Caribbean, four were in Africa and the Middle East, two were in Asia-Pacific and two in Eastern Europe.

25 This was a good thing. In the end, it is clear that without the full commitment and eager support of the political leadership in a country that does not have adequate safety oversight, the deficiencies will not soon be corrected. On the other hand, with that high level commitment, the documentation of the standards in ICAO Annexes, and now in extensive handbooks and related guidance material, makes it possible for countries with even relatively modest economies to successfully establish appropriate safety oversight systems.

26 A continuously updated list of FAA assessment findings may be found at the FAA web site, http://www.faa.gov/avr/iasa/index.htm.
Proposing such a large new program without “breaking the bank” was not something that appeared feasible. Finally, most States were not viewed as potentially receptive to the idea of others coming in to evaluate the quality of their safety oversight performance. On the other hand, many countries called for a more “balanced” multilateral approach, rather than the unilateral program of the U.S. An approach to ICAO was initiated.

In 1992 the United States prepared a working paper, cosponsored by Canada, for the 29th ICAO Assembly. The paper called attention to the deficiencies that had been found in safety oversight and emphasized the need for safety oversight improvement. Assembly Resolution A29-13 included the following language:

- Reaffirm that individual State’s responsibility for safety oversight is one of the tenets of the Convention.
- Call on contracting States to reaffirm their safety oversight obligations, especially the important safety provisions contained in Annexes 1 and 6 of the Chicago Convention.
- Urge contracting States to review their national legislation implementing those obligations and to review their safety oversight procedures to ensure effective implementation.
- Call on all States able to do so to provide requesting States with technical cooperation in the form of financial and technical resources to enable those States to carry out their responsibilities for safety oversight of air carrier operations.

The adoption of this resolution marked the beginning of ICAO’s rapid transition from an organization that had written, but not in any way policed, aviation safety standards to an organization that today puts the promotion of proper safety oversight at the top of its priority list.

Between 1992 and 1995, FAA made major efforts to bolster its international staff and encourage other States to live up to the safety oversight obligations of the Convention. ICAO also reviewed States’ safety oversight standards, as part of a Technical Cooperation Project, and found an alarming lack of compliance with ICAO standards in 6 States of the Asia-Pacific region.

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27 At least on an informal basis, the G7 countries—The U.S., Canada, France, Germany, Italy, Japan and the UK—have consistently voted in block for these strict controls on ICAO expenditures for many years.

28 Letter from David Hinson, FAA Administrator to Dr. Philippe Rochat, Secretary General, ICAO (Mar. 30, 1994).
spite the very great difficulties that such a policy change implied, senior people at ICAO and representatives to ICAO from a number of countries began to support an ICAO assessment program of some kind.

The ICAO Council approved the Safety Oversight Program, as well as the related mechanism for financial and technical contributions from member States, on June 7, 1995. The program was endorsed by the 31st Session of the Assembly in October of that year and became operational in March 1996.

Between June 1995 and March 1996, a great deal of effort went into the organization of the material on which to base the conduct of the assessment and the development of a training course for members of the assessment teams. Using voluntary contributions of funds and personnel from a number of States, a great volume of high quality material was developed for use by the assessors from ICAO, for their training, and as detailed reference material for member states.

The program included not only assessments, but also a mandatory training program for assessment team members, safety oversight seminars/workshops conducted by ICAO for the benefit of member States and the follow-up activity. This follow-up frequently included the assistance (on a reimbursable basis) of the ICAO Technical Cooperation Bureau (TCB), a section of ICAO devoted to providing training and other assistance to ICAO member States on a reimbursable basis.

The Safety Oversight Program initially had four primary characteristics:

1. the assessment;
2. funded by State contributions;
3. on a voluntary basis; and
4. with confidential findings. \(^{29}\)

The secretariat issued a Council working paper containing a progress report on the implementation of the original program. \(^{30}\) It included the following numbers:

\(^{29}\) While the reports generated by the assessments were confidential there was a provision to provide other contracting states with a summary report of the findings. However these summary reports were written in such general terms that they were basically useless.

Thirteen States had made financial contributions to the program.\(^3\)
Six States had seconded experts to the program at ICAO Headquarters and seven other States had assigned experts to safety Oversight assessment missions.
Twenty-six States informed ICAO that they did not require an assessment.
Eighty-eight States requested an assessment.
Sixty-seven of those States had been assessed.
Thirty-five of those States had submitted an action plan (eight prepared by the ICAO TCB).
Seventeen other States had requested TCB to prepare a Project Document/Action Plan.

This means that:
- Less than half of the States (47%) requested an assessment.
- Around seventy States didn’t even respond to the question in the working paper asking if they desired an assessment.
- Almost seventy percent of the South American States requested assessments.
- Thirty African States requested assessments (about 65%).
- Twenty-five percent of the European States requested assessments.
- One hundred percent of the North American Region requested assessments.\(^2\)

The results of assessments were confidential. The secretariat did report on its assessment findings in terms of gross numbers, however, as discussed below.

B. The ICAO Universal Safety Oversight Audit Program

The fact that the ICAO assessment program was voluntary, that it was not a comprehensive audit, and that it lacked transparency because of its confidentiality provisions caused many to continue efforts to improve the program. Without changes in such areas, the ICAO program was viewed as helpful, but not enough to be relied upon as a substitute for the unilateral U.S.

\(^3\) The United States contributed $150,000 and two specialists to work on the staff in Montreal.
\(^2\) There are only two States in the North American Region, the United States and Canada.
IASA assessments. The issue was not that the ICAO assessments were not as comprehensive, or as technically valid as those of FAA. In fact, the 1994-1995 efforts that were expended by ICAO in developing detailed documentation and training set the stage for what could be argued to be a program that was both more consistent and better staffed by inspectors who were more up-to-date in the ICAO standards and recommended practices than the similar practices of FAA. U.S. FAA inspectors generally had little training in these matters, and no standardized guidance documentation for the conduct of their audits. The real issues were a lack of depth of the ICAO assessments, a lack of transparency, the confidentiality of the program, and its voluntary nature.

After the adoption of the framework for the voluntary assessment program, the ICAO Air Navigation Commission and the Secretariat continued to develop means to strengthen the program. These efforts were arduous both in substance and in the need to balance strong concerns about sovereignty, and a desire not to make the results public on the one hand, but to make them available to other states for aviation safety improvement. The President of the ICAO Council, Dr. Assad Kotaite, developed the mechanism to make "mandatory" audits acceptable to the member states. By 1997, ICAO developed a suggested program that had the potential to meet these objectives. An extraordinary meeting of Directors General of Civil Aviation (DGCA) was called for November 10-12, 1997 to discuss the safety oversight program and develop support for the implementation of this initiative.

The 1997 DGCA Conference was a milestone event in the history of ICAO. There are only two bodies with "legislative" power in ICAO, the Assembly of member States, meeting en banc, and the Council, elected by the Assembly. All other ICAO bodies are advisory. The Air Navigation Commission is provided for in the Convention, but its function is to give technical advice to the Council. ICAO has developed divisional meetings and Air Navigation Conferences to get States' advice, technical input and agreement on a variety of matters, but the divisional meetings and conferences' recommendations still have to go through the ICAO approval process. The 1997 DGCA Conference was neither an Air Navigation Conference nor a divisional meeting.

33 They would be mandatory, with the agreement of the individual States. It seems contradictory, but it works.
and therefore had no precedent in the hierarchy of ICAO decision-making. But it had the undeniable authority of its participants, possibly the most senior level group gathered to discuss a technical agenda since the very early days of the Provisional ICAO. It was agreed by the Council that any new program recommended by the DGCA Conference would also require an Assembly resolution supporting a change in the nature of the program from voluntary to mandatory, so the question would need to be taken to 32nd Assembly in 1998.

When the DGCA Conference began, a number of papers prepared in advance of the meeting outlined the issues to be discussed. One of the more substantive papers to form the debate, "Results From the ICAO Safety Oversight Programme" revealed some interesting statistics from the first 45 assessments conducted by ICAO under the assessment program:

- Only 35 percent of the States (15) had basic aviation legislation that is kept current through an amendment and revision mechanism.
- Some 47 percent of the States (21) had a code of air navigation regulations encompassing, for example, operating regulations for the establishment of a CAA (civil aviation authority). However only 24 percent of the States (5) had an amendment procedure in place.
- While 42 percent (19) had regulations and orders on operations, only 22 percent of the States (4) had enforcement provisions in place and 29 percent (5) had an appropriate content and amendment procedure.

In addition:

- Although 75 percent of the States (33) analyzed had a CAA organizational structure, in only 51 percent of them (23) the CAA had adequate legal status.
- Only 22 percent of the forty-five States (10) had adequate staffing and qualified inspectors to perform safety oversight functions.
- 29 percent of these forty-five States (13) were considered to have adequate funding to conduct their activities.
- Only 13 percent (6) were found to have adequate inspector training, while 18 percent (8) had established a

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system for the certification and inspection of training centers.

With regard to certification and supervision of commercial air transport operators, the report disclosed the following:

- Only 40 percent of the States (18) analyzed had an established system for the certification of commercial air transport operators.
- Only 24 percent (11) had an established system for the surveillance of certificated commercial air transport operators.
- Only 9 percent of the States (4) had adequate inspector guidance material for the conduct of their duties.
- Only 31 percent (14) had the authority to refuse, revoke or amend an AOC (airline operating certificate).
- Only 20 percent (9) had a requirement for the exchange of mandatory airworthiness information.

Forty-five States is about twenty-five percent of the total membership, but the numbers should not be extrapolated to cover the entire Organization. Most early assessments were requested by and conducted in developing States whose officials knew they had a problem. Nevertheless, these data clearly showed the opportunity for improvement that awaited an effective mandatory audit program.

The ICAO Universal Safety Oversight Audit Program (IUSOAP), developed in detail by the President of the Council, the Air Navigation Commission and Secretariat, as recommended by the DGCA conference, and as approved by Council and the 32nd Assembly, has the following characteristics:

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35 The Universal Safety Oversight Audit Program represents an ICAO success story. In just about 6 years a cultural change occurred, moving ICAO from a fifty-four year passive reliance on States’ compliance with Article 38, to an Organization aggressively pursuing the implementation of its Standards, Recommended Practices and procedures. Credit goes to all the members of the Air Navigation Commission, and the Secretariat during that time, especially Richard Allison, who chaired the Commission ad hoc working group for the entire period; Mike Comber, President of the ANC in 1995; Victor Aguado, President since 1996; and Marcel Cadieux, Chief of the ICAO Ops. Air section of the Air Navigation Bureau, who actually implemented the programs at the start. In the Council Dr. Kotaite, the President of the Council, was a most valuable player, along with Carol Carmody, the U.S. Representative (who not only had to keep the Council on the right road, but had to energize the FAA at the right moments as well) and Douglas Evans, the United Kingdom Representative (who helped ensure the strong UK and ECAC stand on the program).
1. an audit rather than an assessment; \(^{36}\)
2. universal (mandatory);
3. much larger degree of transparency; and
4. funded from the ICAO budget.

At the implementation of the new program 67 States had already been assessed under the voluntary program. It was decided that these States would simply undergo an assessment follow up audit to review their progress and upgrade the States to the new requirements. The remaining 117 States (now 120, with 3 new accessions to the Convention since that time) would get full audits and all States would be subject to follow-up audits one to two years after the initial audit.

A team comprising three to eight members would conduct the audits. The core team members, covering each of the licensing, maintenance and operations disciplines, would have received formal ICAO training. (There may be team members who are undergoing informal OJT.) Each mission would include two States and five to twenty-one days would be spent in each State. The audits include industry visits, but the focus is on the government.

The audit consists of review of compliance with the Chicago Convention and State regulations; conformance with ICAO Standards; and adherence to recommended practices, related procedures, guidance materials, and relevant industry practices in general use. Specifically, the ICAO teams look at national aviation legislation and specific regulations; organizational structure and legal status of the State’s CAA; system for certification and continued surveillance of aircraft, personnel and operators; and implementation of Standards and Recommended Practices.

The products and timeline are:

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\(^{36}\) What is the difference between an audit and an assessment? An audit, at least in this case, is much more thorough than an assessment. Where the assessment concentrated on Standards and Recommended Practices, the audit also considered existing guidance material and industry practice.
There were several outstanding questions. First, in the short term:

1. **Quality of the ICAO Assessments/Audits.** The summary reports have been very well received because they, in fact, did allow a proper assessment of the safety oversight capabilities of the audited States. However, from the beginning of the ICAO Safety Oversight Program, some have felt that there needs to be a quality assurance mechanism in place to ensure that all States are being audited on an equal basis. Various proposals are being discussed in ICAO to implement some kind of quality assessment.

2. **Follow-up activity** – the “fix it” part. Significant shortcomings have been found in a number of States and many of those States feel they require assistance. The 33rd Assembly established a voluntary fund to provide assistance to States, but it appears unlikely this will provide significant relief.

3. **What about IASA.** The final question, and perhaps the most interesting, is what changes might occur in FAA’s IASA program?

Then, in the longer term:

1. **Expansion of the Program.** The DGCA Conference agreed that the program should be expanded to include airports (Annex 14) and air traffic services (Annex 11) at the appropriate time. The appropriate time was to be determined by the success of the established program and the availability of resources. The 33rd Assembly agreed that the time had come and recommended expansion of the program to include Annexes 11 and 14, and selected provisions of Annex 13 (Aircraft Accident and Incident Reporting). The events of September 11 lead to

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the implementation of mandatory audits related to Annex 17, Security. The question is how well will ICAO be able to implement these new programs without diminishing the existing IUSOAP?

2. **The nature and funding of the program after the initial audits are complete.** The 32nd Assembly agreed to fund a significant portion of the IUSOAP program from surplus money from the previous triennium. The 33rd Assembly agreed to fund a significant portion of the expanded program from surplus money. However, at the time of the Assembly, the expansion was not anticipated to be “operational” until the third year of the triennium. The next Ordinary session of the ICAO Assembly will be asked to fund audit programs for seven to ten Annexes. This goes against a general policy on the part of some major contributor States to move from “zero real growth” to “zero nominal growth” in the UN specialized agencies’ budgets.\(^\text{97}\)

C. **Evolution of the FAA and ICAO Programs**

By late 2001, the ICAO Safety Oversight Program had become ensconced as a truly effective audit program. At the end of the year, the ICAO accomplishments\(^\text{98}\) were truly remarkable: the total number of audited States numbered 178, in addition to 5 territories. Of those, 165 States had submitted corrective action plans to address improvements that the audit had pointed to. Also, ICAO had prepared 159 summary reports of the audits for the use of member States. In addition, ICAO established\(^\text{99}\) a set of fundamental auditing principles in which each audit team member was trained: sovereignty; universality (of the audits); transparency and disclosure; timeliness; all-inclusiveness; systematic, consistent and objective (audits); fairness; and quality. To provide guidance in these principles, documentation and training has also been made available:\(^\text{40}\) Safety Oversight Audit Manual; Safety Oversight Manual, Part A, The Establishment and

\(^{97}\) Simplistically “zero real growth” allows for increases due to inflation, “zero nominal growth” does not. It must be said that the U.S. State Department supported IUSOAP expansion and did not insist on ZNG during the 33rd Assembly.


\(^{40}\) A comprehensive publications catalog is available at www.icao.int.
Management of a State’s Safety Oversight System; Safety Oversight Pre-Audit Questionnaire; Safety Oversight Auditors Handbook; and Auditor’s Training Courses.

FAA has completed, as of late 2001, IASA assessments of 97 countries, 25 of which have been found not to meet ICAO standards for safety oversight. Broadly speaking, an examination of nearly all of the situations in which FAA has found oversight shortcomings has shown that audit material developed by ICAO concerning these countries shows similar deficiencies. Because of this, FAA is in the process of changing its fundamental policies, aiming to use the information developed by ICAO in FAA’s assessment summary reports as an update on the compliance of the safety oversight system in other countries with ICAO standards. In addition, FAA intends to adopt ICAO documentation for the conduct of FAA IASA assessments, and is in the process of developing guidance material for FAA inspectors that will set this standard for them. The FAA goal is to eliminate, insofar as practical, unilateral U.S. visits and assessments of other countries in favor of reliance on ICAO developed material. It is important to note that in pursuing this goal, FAA cannot cede the authority of the Administrator to ICAO (or any other body) when it comes to judging the compliance posture of other countries with regard to ICAO safety oversight obligations. The U.S. will always retain the authority to determine for itself if others comply satisfactorily with these obligations. But increased reliance upon, and acceptance of, the ICAO activity, instead of carrying out completely unilateral (and in some ways redundant) assessment visits, should be the norm for FAA in the future.

This approach can be expected to increase the transparency of FAA’s program and at the same time increase efficiency and reduce the cost of FAA programs.

D. DOES OVERSIGHT MATTER?

One may justifiably question whether the government oversight of airlines is, in the scheme of things, an important factor

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41 FAA announced a revision to the Categorization of IASA results. Only 2 categories are now used: Category 1 for countries whose oversight meets ICAO standards, and Category 2 for those whose oversight is substandard. Changes to the International Safety Assessment (IASA) Program, 65 Fed. Reg. 33,751 (May 25, 2000).

42 That is not to say that FAA would cede its ability to “see for itself.” If ICAO developed material is inadequate, raises unanswered questions, or other circumstances warrant, FAA would revert to an on-site assessment if another country sought to expand its services, or create new airline service to the U.S.
in airline safety. Several studies have shown that the quality of safety oversight is strongly correlated with the safety record of airlines. In 1996, Capt. Amjad Faizi (Chief Pilot, Corporate Safety, of Pakistan International Airlines) noted that airlines from countries whose total traffic represents only 16% of the world total had experienced, in one year, 66% of the hull losses, 83% of the approach and landing accidents, and 75% of the CFIT (controlled flight into terrain) accidents in the world. He noted that, in most of these countries, "slackness in regulatory functions is perhaps the biggest hurdle" to reducing this poor accident record.

Ronald Ashford has made a real contribution by analyzing the safety records of airlines from countries that had been assessed by FAA for compliance with ICAO safety oversight standards. At the time of his analysis (early 1997), 60 countries had received FAA IASA assessments, and 33 of the countries had been found by FAA to comply with ICAO safety oversight standards. For the five-year period ending 30 June, 1996, the fatal accident rate of the countries complying with ICAO standards was about 8 times better than that of the countries found not to comply with ICAO safety oversight standards. Finally, ICAO has seen the similar correlations in its analysis of accident data. A strong tie between accident rates and unsatisfactory safety oversight is clearly evident in the results of ICAO audits.

Proper safety oversight of commercial airlines by governments, as is required by international treaty, has been shown to be highly correlated with relatively good safety records for these airlines. These data, coupled with the common sense notion that adherence to international obligations is expected by other nations, has led to a welcome emphasis on safety as a high priority in ICAO and a sea change in the way government safety oversight is viewed throughout the world. The FAA IASA program has resulted in at least 19 countries upgrading their safety oversight programs to better meet the standards set by ICAO.

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44 Global Airline Safety - The Problem and Possible Solutions, presented at the ICAO Conference on Safety Oversight in the CAR Region, Montego Bay (Oct. 22-24, 1997).
46 Aruba, Bahamas, Bolivia, Columbia, Costa Rica, Ghana, Israel, Jamaica, Jordan, Korea, Kuwait, Morocco, Netherlands Antilles, Peru, Philippines, Poland, and Turkey. El Salvador and Trinidad & Tobago have unfortunately slipped back
The safety leverage provided by these improvements is difficult to measure precisely. But as Ashford has shown, the actual airline safety records demonstrated by countries that meet ICAO oversight standards are markedly better than those that do not. In addition to those countries that have been upgraded into Category 1 by FAA, it is inescapable that both the ICAO and FAA programs have brought about a heightened sense of safety awareness in all countries. This cannot but have helped contribute to the continuing decline in international civil aviation fatal accidents.

III. CONCLUDING REMARKS

Oversight quality does matter, and the data support that notion. The 33rd ICAO Assembly in 2001 and subsequent discussions have set ICAO on a clear course to expand its safety oversight audit program to encompass the full range of safety and security standards ICAO has established. States must continue to support these efforts both financially and with in-kind services of seconded personnel and cooperation, as has been the case in the past, because ICAO has no source of funds other than those raised by annual assessments and voluntary contributions of its members.

The changes wrought in the past decade within ICAO have had extraordinarily positive impacts on safety awareness throughout the world. Experience shows that this will result in lives saved through accidents avoided. But we cannot assume that all problems are solved. There remain budget issues in ICAO because the "zero growth" policies of the G7 countries continue to cause problems for properly accommodating the funding of audit programs within the ICAO budget. This must be changed if the program is to continue. Countries whose audits identify deficiencies must find means to correct those deficiencies, beginning with commitments at the very highest political levels. Without such a commitment, experience has also shown that safety shortcomings will persist, and avoidable accidents will result.

[Private Communication, Robert D. Papkin]