

Presentation to

AeroVision 2000

Symposium on Visioning Aviation

Into the New Millennium

Subject: Global Safety Standards for the Next Century

Purpose – to make a good system even better.

Good morning ladies and gentleman. It is indeed a pleasure for me to be with you today, and particularly to be back in this beautiful city; although given this is hometown, I guess I am a bit biased.

I am honored to be among such a distinguished group of speakers. I believe it fair to say, that between the speakers we heard yesterday, and those we are hearing from today, we have many of the key institutional leaders that have the ability, power and position to influence shaping of the aviation system for the next millennium. There is no mysterious "they" in the vocabulary of these speakers. These are the people who can make things happen.

I speak for both myself and business aviation in saying that we believe strongly that aviation is a very advanced system, and unquestionably one of the most exciting fields within which to work, but there is still room for improvement. We can make this excellent system even better.

This morning I will not say much regarding the need to enhance safety, as we have heard plenty over the last few years, particularly following the 1996-year in which the number of fatal accidents gave rise to considerable concern. At this forum two years ago, we heard from many people who projected an unsettling future of accident numbers given the substantial growth of aviation, along with a flat line accident rate projection.

Have we stood still since that time? The answer is a resounding NO!

I believe that in the last few years, we in the aviation community have taken extraordinary steps towards enhancing global aviation safety. In particular, I believe we must congratulate the International Civil Aviation Organization (ICAO), under the leadership of Dr. Assad Kotaite, who we will hear from shortly this morning. ICAO's initiative in designing and implementing the International Safety Oversight Audit Program is of extraordinary importance to enhancing the future of global safety. This program has great potential, not because it alone will force change, but because if supported by the developed nations of the world, through courageous decision-making based on audit results, it will provide the leverage to influence change in the less safety conscious nations.

However, the program has yet to be proven. As we might say, the proof is in the pudding. It could all turn to mush if there is no substance in the way of resources, expertise, quality assurance, dispute resolution and a resolve by all involved to not let the political realities hijack the results.

I mention the safety oversight program this morning for two reasons. First, it has extraordinary potential for enhancing aviation safety, and secondly, because the program relates closely to the theme of this morning's session – visioning safety standards for the new millennium.

I am sure we will hear more on this from Dr. Kotaite.

I would like to summarize before I start. It is our feeling that in fact we do have a problem with the safety standards for the global aviation system. I am not speaking about the standards of performance achieved today in aviation; otherwise our safety record in developed countries would not be as good as it is. Rather, the problem is in the deficient written standards, for which we expect the industry to use as the minimum requirement - in essence the rule-base for operators, service providers and facility maintainers around the world. Could it be that this is the most important route cause of our substantial regional variation in the safety record?

We do not have one safety standard internationally and perhaps as a direct result we do not have one level of safety performance. We cannot tell the globetrotting traveler that there is one level of safety wherever he or she travels. Furthermore, the lack of international standards presents a vacuum that national and regional authorities are trying to fill, at great cost and confusion to the industry.

In the next few minutes, I will expand on this concern and present some thoughts on how this could be improved. Ultimately, it will need the collective participation of organizations represented here today, in a partnership to make a good system even better.

Defining the problem – a lack of international safety standards.

The International Business Aviation Council has, like most of your organizations, safety as its first priority. We are willing to act, as part of the partnership, to improve safety standards internationally. Business aviation worldwide consists of over 20,000 aircraft, therefore we believe we have a substantive need to be amongst the leaders in change management. I say this not because we want only to influence the overall system, but we want the business aviation safety record to be among the best. This will require us to be aggressive and organized in our approach with the business aviation community and with the design of the global aviation system.

Aviation is very globalized, perhaps more so than any other industrial sector. The industry is transnational and interdependent in its make-up. Many operators fly to virtually all corners of the globe and aircraft are manufactured in complex multinational programs. The air navigation system fits together like a gigantic jigsaw of FIR pieces, all of which require an extraordinary level of cooperation and coordination. Aircraft, other than grassroots recreational vehicles, essentially all fly on international routes, even if it is only for crossing one or two borders.

However, the rules of safety vary considerably from one country to the next.

Not only does this cause concern for the traveler, who should benefit from a uniform global safety record in this increasingly global village, where populations are globetrotting for business and recreational reasons, but it causes considerable economic burden and inequity for the international operators. I believe we can all relate to the need for simple and consistent procedures - after all this is the basis for requiring operators to have Standard Operating Procedures. It should follow then, that the operating rules should be simple and consistent, regardless of where in the world you are flying.

Yet the rules are different. This makes for confusion and opportunity for error. We all know that with an increase in opportunity, or exposure to error, the probability of accidents will increase.

The concern I have is that, although we are making great strides to improve our safety record, the effort towards international harmonization of regulations is still lagging.

I recognize that the will has been often expressed. Indeed, if we go back to the ICAO Assembly earlier in this decade, Resolution A29-3 was accepted, saying that the Assembly – "Urges States and Groups of States, which have not done so, to take positive action to promote global harmonization of national rules for the application of ICAO standards".

The problem is that it is not happening fast enough. Further, as I will explain, we must go much further than apply the existing ICAO standards.

In fact, in some ways the desire of nations and regions to improve on the safety record has, and still is, causing a proliferation of the problem. By a proliferation, I mean a proliferation of local and regional rulemaking, producing safety standards that can be, and are, substantially different from those in other parts of the world. This can cause both confusion and economic imbalance, both of which can cause safety concerns.

Let me use an example. ICAO Annex 6 contains SARPS for the Operation of Aircraft. Section 4.2.10.2 requires that an operator formulate rules to limit duty periods and the provision of adequate rest, and dictates that the operator's rules should be in accordance with regulations established by the State. The problem is that there are no international standards published to provide for consistency in States' regulations.

We know that there is a vast range of options for creating new rules for flight and duty time. A standard that merely says that the rules must exist can result in vast differences in design from country to country.

We all know Murphy's Law, and of course it is working well in this instance. For example, at the European Business Aviation Association Conference we were advised of ongoing work in the European Union to create flight and duty time regulations, to be imposed on operators in European States.

Flight and duty time rules are very difficult to create. There is no simple methodology and no simple solution. Both the process and the results produce substantive emotive positions, both in the industry and in the labor associations. The rules can be extremely expensive, both in direct financial impact and in labour unrest. I dare say that flight and duty time rules are the most difficult and divisive rules an aviation community is likely to develop.

It therefore concerns me is that there are no international standards that can be used as the baseline for national and regional rule making. It concerns me that the EU is in a position to commence the design of regional rules that are likely to be different than those in other regions. Yet it is inevitable that this will happen if there is no international baseline.

There are, of course, other examples, although perhaps not generating the same emotional impact. I could likely provide a long list, but let me give you a few examples that will help illustrate.

Annex 6 contains the SARPS for the International Operation of Aircraft. Great insight was evident when initially developed in the 1940's. However, although continually updated, it is in need of a major overhaul to bring it up to what we should expect in today's air transport operations.

Numerous references are made throughout the document to the need for training of Flight Crew and Flight Attendants, and to have the training approved by the State. Again, the problem is that there are no international standards against which States can establish their rules, hence the potential for great variation and inadequate requirements.

Furthermore, as we know, a recommended practice is defined as "desirable in the interests of safety". Many excellent Recommended Practices in the Annexes should be upgraded to standards. Many examples are possible, but I will read one –

The operator should issue operating instructions and provide information on aeroplane climb performance with all engines operating to enable the Pilot in Command to determine the climb gradient that can be achieved during the departure phase for the existing take-off conditions and intended take-off technique. This information should be included in the Operations Manual. (4.2.3.3).

Why is this not a standard? Why are a number of other critical navigational practices not standards, such as establishing minimum flight altitudes?

Alternatively, the Annex still contains a standard for the Radio Operator (9.1.2.). Is this necessary in aeronautical regulations today?

I have no doubt that you all have experiences with the need for better standardization. In business aviation, we have concern about the number of landing accidents as a percentage of the total number of accidents. This points to many issues, but one is the need for Improved airport safety standards. Why for example do we not have a consistent standard for runway condition reporting? Why in this modern age of aviation do we tolerate the differences in altimetry procedures throughout the world?

International standards are needed such that the Safety Oversight audit program can clearly identify deficiencies as being in "non-compliance". I am sure that the conscience of safety oriented nations will force the rest.

We see a renewed vigor around the world for good safety standards and an improved safety record. There is a willingness, but the institutional base needs improvement.

I mentioned earlier, the tremendous potential of the ICAO Safety Oversight Program. If it works as it can, but not necessarily as it will, as it is still unproven, it will have a substantial impact. But it will never be as effective as it could be if the audits were based on more substantive standards. As it now stands, for example, if a State has rules for flight attendant training, it would be in compliance even if the rules were inadequate. The auditors might raise an observation that the rules, although meeting ICAO SARPS, are not substantive; however, the official record is that they 'comply'. In fact, a State could be 'in compliance' with all of the SARPS and yet still have a weak safety foundation.

Thankfully, States are by and large responsible and understand that they must go much further than the basic standards of simply having a rule on a given broad subject.

The problem is, however, that if there is no international standard on a given system, States can and do develop a substantially different rule than their neighbor. Therefore, the actual situation will be worse than the results of the safety oversight audit program indicate. I might also add that there is not a positive feeling regarding what we will see when the results of the ICAO's audits start rolling out.

We must also be cognizant that the audit program serves only to define the problem. Fixing the problem is a whole new ball game as we have not yet addressed the extensive resources needed to fix the problems identified during the audits.

Fixing the problem.

What then is the solution to the standards problem? How do we institute a global system based on common international standards such that each nation's rules are founded on a common baseline? Identical worded rules need not be the goal, but we should have a system that will provide for a harmonized global system.

It is our belief that there should be one international set of safety standards. Those standards should be established by the International Civil Aviation Organization, and all regional and national rule-makers should establish rules using these standards as the baseline. We should accelerate an international standards development program, and divert resources away from local and regional rulemaking exercises.

Regional and national institutions should recognize ICAO as the world leader for the development of more substantive aviation safety standards. Concurrently, ICAO should be more aggressive in its leadership role in the development of comprehensive standards. The rapid implementation of safety oversight is a good example of what can be done if there is vision and resolve.

The advantages of having one substantive set of global safety standards are clear.

It prevents confusion, and safety concern, as a result of differing rules in this very globalized community.

It reduces the financial burden on operators.

It eases coordination efforts in safety oversight teaming in regions and sub-regions.

It eases coordination requirements for air navigation service providers.

It eases the burden on regulators, as there would be no need to re-invent the wheel and dedicate extensive resources to develop a local standard.

The solution I am suggesting is to establish a task force, or other project management approach, to build more comprehensive standards within the context of the ICAO Annexes. I am suggesting that nations and regions rally around ICAO's leadership in the development of comprehensive standards in an accelerated program.

I am fully cognizant of the extensive management and resource impacts of such a proposal. However, I am confident that if the resolve is there it can be done. If I again use flight and duty time rules as an example, these rules would be part of the project management list of activities. A project team would then tackle the issue head-on. The team would consist of full-time participants from a number of nations and from the industry associations. Resources now dedicated to regional or national rule making could be diverted to this international effort. The result would be new ICAO standards that would serve as the baseline for national and regional rule making. Rules would be harmonized globally and nations and regions would save substantial resources through a pooling of expertise. Nations would escape the adversarial and emotive pull in their rule making. Smaller nations could adapt the collective standards all or in part as their aeronautical code.

There is of course a collateral benefit of such an approach. National and regional authorities can devote more attention to fixing safety oversight problems in their certification, licensing, inspection and enforcement roles.

The ICAO Convention is clear in placing responsibility with each State for the safety oversight of its respective airspace, airports, aircraft, personnel and operators. The safety framework established by each State is hierarchical, with one layer of the system dependent on the one below. Safety rules are one of the foundations of the hierarchy and must exist if the rest of the framework is to function. Yet assigning resources to one level can drain from other levels. An inordinate amount of time spent on rule making can draw resources away from the certification, inspection and enforcement roles.

Formula for results.

The formula I am suggesting is for:

ICAO to take an aggressive international project management approach to developing comprehensive Annex based standards.

Nations, regions and the industry associations to support ICAO's effort with managers and technical expertise.

Nations and regions to divert resources from developing local and regional standards to contribute to:

international standards teams; and

helping to fix safety oversight problems that the ICAO audit program is about to identify.

The proposed solution is not necessarily costly. It means rearranging priorities to ensure that resources parallel our priorities. It means one agency, ICAO, leading in the preparation of international standards, with national and regional authorities putting efforts into fixing the safety oversight problems.

This approach is affordable, but will require aggressive management. The vision of what is needed must be clear and firm targets must be set. This is not a job for others; this is a task in which we all must participate.

What is required is the resolve to establish a global safety record that does not vary from region to region. The safety oversight program can help us get there, but ultimately it depends on a number of things being in place - one of these is comprehensive global safety standards that will serve as the baseline for a national safety rules.