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Luncheon Address

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It is a pleasure for me to be able to spend some time here with you at this Conference. The technical sessions of this morning and the next few days promise to provide a first rate update on where we are and, perhaps more important, stimulate new ideas and thinking on where we can be, if we all work together.

What I want to do in the next few minutes is provide what I hope to be some food for thought on broad issues of safety, and how we can best work to improve it in the coming years.

In one way, safety can be measured as an absence of one's exposure to risk. Thus, the rules and practices we follow in aviation are directed at reducing the exposure to risk. We all know, of course, that we cannot completely eliminate risk in any human activity. We also know that any action to reduce risk carries with it a cost. That cost may sometimes be viewed as being absorbed by the airlines or the manufacturers but, of course, that is wrong. Manufacturers don't have any money that they don't get from airlines who purchase their aircraft, and airlines don't get money to purchase aircraft from anyone other than those who pay to travel or ship goods by air. In fact, when you think about it, travel costs are absorbed by the general public, who either travel for pleasure, or buy goods and services whose costs include a portion of the business travel undertaken by the company from whom they purchased those goods or services. So, aviation safety risk cannot be eliminated, and any incremental reduction in risk will be paid for by the general public.

Today, in most countries of the developed world, we have a fine air safety system, one whose risks are very low by almost any standard. You have all heard the statistics, so I won't bore you with much detail. In the United States, for example, there has not been an air crash of a large airliner with passenger fatalities in over 2 years, and the Swissair tragedy was the first such crash of an airliner from a JAA member country in nearly 5 years.

Against this backdrop, FAA, JAA, Eurocontrol and ICAO jointly sponsored the Very Large Transport Airplane Conference last month in The Netherlands. Part of that conference was devoted to a discussion which, quite frankly, I found somewhat disturbing. The question under debate was "What level of safety should be applied to aircraft with a passenger capacity considerably larger than the largest aircraft presently certificated, which today can seat 660 people?" The discussion was quite lively, with some people maintaining that the public reaction to a crash of such an airplane involving such a horrific loss of life demanded a higher level of safety than that presently assumed in the regulations for smaller aircraft, regulatory changes made so that the crash of a VLTA would never happen. This, of course, is an unachievable goal. Others maintained that the present generation of aircraft had such a good level of safety that such an increase in regulatory requirements was not appropriate. The conclusion of the workshop was, as you might expect, an intermediate one--to accept present

regulations as the baseline, and examine opportunities for safety increases on a case by case, rule by rule basis.

I was somewhat surprised at the discussion. How could we adopt a different level of safety for the VLTA, when less than 3 years ago FAA adopted a rule declaring that one level of safety would apply to all scheduled transportation in aircraft seating 10 or more passengers? I believe that there is, in the United States, no such thing as a crash of a passenger airliner that is tolerable to the public. I suspect that is true in many countries of the world.

This is why the political leadership of recent Administrations have adopted such slogans as "zero accidents," and "one level of safety," and have directed that the FAA adopt a goal reducing accidents by 80% within 10 years. Any safety improvement that could be applied to the VLTA should be considered for application to all airline aircraft, regardless of size. The reality is that, whether intended from the beginning or not, any rules adopted for the VLTA are almost certain to be applied to other transport aircraft.

When we look at the goals set by the political leadership, if we accept them as the beginning of a new way of working, perhaps we should look at some safety regulations in a different way than we have in the past. At present, for example, based on rules first written many decades ago, we accept the fact that a type certificate has no expiration date and, with few exceptions, production of an aircraft under that type certificate is similarly unbounded. Thus, we have some aircraft being produced today that meet, in some cases, safety standards that are ancient, in terms of today's rapidly evolving technologies. Changing the configuration of these aircraft to take advantage of the breakthroughs made in your laboratories typically involves very difficult and expensive retrofit programs. Look, for example, at the huge costs likely to be involved in an upgrade of all seats in aircraft, or the replacement of insulation blankets in all aircraft, to cite two topical retrofits under consideration.

Why don't we rethink these rules, and require all aircraft to conform to the certification standards in effect at the time of their production? We would have to allow for production lead times, and thus a lag time of, say, 6-8 years would have to be allowed between enacting the new rules and making them effective for new production aircraft. Then, as our safety technologies improve, with a relatively brief time lag they would be incorporated into all new production aircraft, regardless of type certification date, compared to our present system of grandfathering essentially forever new production and derivative designs.

What are the barriers to setting this new paradigm? First, of course, are the rulemakings themselves. Knowing that the new rule will be incorporated into new production in a short time not only speeds the safety improvement, but it changes the economic analysis parameters that must be considered. I think, though, that this is a relatively modest barrier. There is no reason why this policy could not be adopted beginning immediately. Then, for all future certification standard improvements, a very specific evaluation of the benefit of adopting the new standard in aircraft in current production would be required, and most of the time the rule would be written to require that. I recognize, of course, that rare cases might arise in which this approach is not desirable for some reason.

The real problem, if we want to upgrade aircraft in production today is the transition. Today, aircraft are produced to many different standards, depending upon the date of their original certification. Some aircraft have some

standards that go back to the '60's. I don't suggest that we arbitrarily apply every new certification standard to all airplanes which do not today comply with them. Rather, updating the standards under which they are produced will require a comprehensive review of each of the new rules that might be applied, and a decision as to the safety benefit of requiring compliance with each of them. It would be a difficult transition task, but one which is certainly worth considering.

Whether or not we accept the desirability of updating the certification standards to those effective today for all aircraft in current production, it seems to me it is worth at least considering this change for all future modifications to FAR 25 or JAR 25. We would at least substantially reduce the amount of variation in safety standards applied to new technology aircraft and derivatives by changing what we do tomorrow, even if we can't rewrite the rules written yesterday. It is perhaps a small step, but one that could be made relatively easily, and make aircraft safety incrementally better over time.

Let me use the remaining few minutes allotted to urge something that should not be news to anyone, but is in fact something that we need to continually reaffirm. Safety regulations are best made by working together, in public discussions which air the sometimes conflicting but always important views of all parties who have an interest in the rulemaking.

Informal discussions held before rules are proposed serve a number of useful purposes. First, of course, they serve to provide a good basis for understanding the views of various interest groups. In doing that, they provide a framework within which the rule makers can find a compromise which best serves all needs. Generally, this compromise will not meet everyone's desires, but at least it will have taken them into account. Secondly, discussions with the affected parties serve to provide the rule makers with more information about the practicability of various approaches, and the relative costs of implementing the rule in various ways. Third, and perhaps more important, these discussions tend to give people an opportunity to feel that they have contributed to the decision process, and in doing so it draws them together. People don't always expect to win. But people do expect that their views will be heard, especially by governments making rules which will directly affect their business. When people believe that their views have been heard, they are far more supportive when the decision is announced, than if they believe their views have not been sought. Public confidence is important to matters of aviation safety, and discord caused by a lack of listening is an avoidable source of unwarranted public concern about safety matters.

Too often these days, for one reason or another, pre-decisional discussions are being stifled in matters of aviation safety. In many cases, I believe it is an over-zealous legal interpretation of "ex parte" restrictions which leads to this action. This is not in the public interest. We have a policy of openness in the US government, and it is simply not "illegal" to talk about regulatory matters before decisions are made. There are, of course, procedures to be followed in such discussions, but forbidding such discussions is certainly not the only thing one can do, nor is it the best thing to do. Open discussion is in the public interest.

It is not always the lawyers, of course, who are to blame. One only need look at the shock that came across the aviation community a few weeks ago when the FAA announced its intention to require a retrofit on insulation in almost every jet airliner. FAA intention to make this rule was announced without benefit of precise definition of the technical problem to be solved; without completing

development of test criteria, which are to be available to the public in 6 months; without benefit of having each of the materials to be replaced tested to the yet-to-be-developed test standard; therefore without benefit of industry evaluation of which insulation materials would have to be replaced; without international harmonization of the approach to be followed in addressing this issue; and, of course, without a precise idea of the costs of this action, which have been reported to be potentially in the range of billions of dollars. It is hard to imagine why all of these unanswered questions were tolerated before the decision to regulate was announced.

I hope that future rulemaking and other aviation safety policy decisions will not follow this path. Industry and other interest groups are perhaps most frustrated when their expertise is not used to at least provide data that is important to good decision making. Industry has always been willing to participate in the development of data needed to evaluate regulatory options, and other interest groups correctly believe they have a right to do so. Government and industry and the interested public need to work together, both before and after rules are made, to provide the travelers with the best and most efficient safety improvements possible. Neither government nor industry can do it alone. The public interest, and public confidence in our safety systems, are best served by partnership, a partnership that has worked so well to provide the extraordinary safety we all enjoy in commercial air travel.

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