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MY NEW PERSPECTIVE ON NTSB AND FAA CERTIFICATION

ANTHONY J. BRODERICK

THERE ARE a lot of things I could say here, and those of you who know me will be relieved that I will tell no lawyer jokes, nor will I engage in any lawyer bashing. That gets old really fast at a meeting like this! I have elected to talk about two things that are of interest to me, and I hope will stimulate your thinking. First I would like to comment on what I have come to call the “unintended economic consequences of certification regulations,” and then I would like to shift gears and make a proposal for a modest change to the way NTSB issues its accident reports and safety recommendations.

I. UNINTENDED ECONOMIC CONSEQUENCES OF CERTIFICATION REGULATIONS

When safety improvements are to be made to aircraft, they can be required either by changes to the Part 25 certification rules, or by changes to the Part 121 operating rules. In changing the operating rules, the playing field for operators and manufacturers is level. All U.S. operators must comply equally, though of course there is no requirement that foreign operators comply with Part 121. In changing the certification rules, however, I believe unintended things can happen, since these rules only apply to new aircraft designs, for which new type certification is required. They do not apply to new production, no matter how long ago the aircraft was originally certificated.

When the FAA developed its regulatory philosophy many decades ago, the duration of a production run of aircraft was short. A few dozen models of most piston engine types reflected good sales, and keeping a model in production for several years reflected a very successful design. Beginning with the second generation of jets, however, things have been quite different. The MD-90 in production today, and the B-737 derivatives, are approved using a mid-1960s set of certification rules with, of

course, many voluntarily accepted, and some mandated changes. But not all changes are voluntarily accepted when a manufacturer builds a derivative design. This can create an uneven playing field in a highly competitive marketplace.

For example, in the late 1970s, regulations were adopted, which required applicants for new types certification to install ozone-destroying "filters" in their aircraft. Nearly twenty years later, newly produced aircraft that are derivatives of some older designs still are not required by FAA's certification basis to have those filters installed. Competing new designs, however, are required to have those filters by the Part 25 requirements.

As another example, about fifteen years ago, the FAA modified the means by which minimum runway lengths were calculated to provide for high-speed rejected takeoffs. Just a couple of years ago, using an equivalent safety finding in anticipation of a final rule which has yet to be issued, the Agency adopted a practice of allowing aircraft manufacturers to employ a somewhat less restrictive method of calculating runway lengths. Unfortunately, aircraft certificated in the 1960s, still are legally permitted to have a certification basis that gives them a competitive advantage over even the newer method of calculation, since they may legally use the oldest acceleration-stop certification calculation and are not required by regulation to use the modern version of the rule despite the fact that not a single piece of hardware would require changing.

Finally, I cannot resist mentioning the most widely debated issue of this kind, the certification of a derivative model produced today to have ten more passengers than today's certification rules would allow, because at one point in the model's history, over twenty-two years ago, a ten-passenger capacity increase incentive was temporarily given to encourage manufacturers to employ then new rapidly deployed self-inflating escape slides. For over twenty two years, new type certificates have had the more conservative emergency evacuation safety rules applied. But new designs compete in the marketplace with this derivative design, and permitting a ten-passenger capacity difference to exist clearly unlevels the economic playing field.

It is time to rethink the application of derivative-type certification bases. Clearly, competition between manufacturers should not take place on the basis of safety. I am sure we would all agree that the general public would not knowingly accept a government policy by which new derivative aircraft, costing \$40 to \$150 million, are using loopholes in the FAA regulations to take

advantage of less costly thirty-year-old safety standards. Yet that is precisely the situation today. We need to work together to change these practices so that all new aircraft meet generally the same very high level of safety standard, and that they are modern standards using the best available safety knowledge. We simply cannot continue to have new airplanes being built to decades-old safety rules because loopholes allow them to circumvent newer, more stringent safety requirements.

II. OPENING NTSB ACTIONS TO PUBLIC DEBATE

Virtually all FAA actions—indeed most Executive Branch actions—provide the interested public with the opportunity to participate. Public participation is the rule, rather than the exception, in major decisions of government. The public is permitted to participate everywhere except at the National Transportation Safety Board (NTSB). Here, in an agency whose mission is tailored to reflect the public desire to obtain the highest possible levels of safety in all modes of transportation, we have perhaps the most secretive deliberations in all government. Secrecy is not a shortcut to technical excellence. Rather, I submit, a lack of public participation inevitably leads to decisions of lower quality than would otherwise be the case. In addition, such a lack of transparency in the decisionmaking process leads to a lack of accountability on the part of those recommending, or actually making, the decisions.

The International Civil Aviation Organization (ICAO) has an excellent practice, which the NTSB follows in accident investigations involving other nations. All nations, as parties to the investigation, are provided a draft copy of the accident report for comment. Any substantive comments made which are not agreed by the investigating agency are appended to the final copy of the accident report. NTSB did this in the Roselawn investigation, and a detailed report from the Bureau of Accident Investigation in France with which NTSB did not agree was appended to the NTSB report on the Roselawn tragedy.

Why cannot the NTSB adopt this standard international practice when conducting domestic investigations? It would seem to me that this small step, which needs no legislative authority, would open the door to more thoroughly researched accident reporting. This, in turn, cannot help but improve safety.

Similarly, the NTSB makes well over 100 recommendations to the FAA each year. These recommendations are taken very seriously by the agency, and the vast majority are adopted in a man-

ner deemed acceptable by the NTSB. But of late, I have become concerned that recommendations are being made with an apparent sense of advocacy, rather than practicality. Some degree of advocacy is, of course, acceptable. But the board's recommended retrofit requirements for flight data recorders a couple of years ago is an example of advocacy run amuck. Following their recommendations would have required expending many hundreds of millions of dollars and the grounding of hundreds of airline aircraft for many months, for essentially no safety benefit.

Another example of recommendations made apparently merely to be seen as "doing something" were those made last December in reaction to the TWA 800 tragedy—an accident for which the basic factual information has even today not been made public. On the basis of a mere theory—one of many possibilities selected for who knows what reason—the NTSB recommended major changes to fuel tank systems and procedures "to reduce the potential for aircraft fuel tank explosions." This is not serving the public well. NTSB staff apparently did not recognize that their information was incomplete, and the analysis they performed did not reflect, in the view of many, a reasonable interpretation of the available engineering data and the aircraft service history. Nevertheless, these recommendations have been issued, and the FAA is under great public, media, and congressional pressure to respond positively to them, as is always the case. I hope the FAA moves cautiously and follows the pattern it set in responding to the flight recorder recommendations by seeking public input before making final decisions on these recommendations.

I believe great value can be added to the NTSB accident report and safety recommendations processes if we eliminate secrecy and introduce the well-proven concept of public participation to the board's practices. Every accident report should be circulated, in draft form, to all parties' participants perhaps sixty days before being presented to the board for final adoption. Safety recommendations should also be published for public comment for a brief period before they are adopted by the board. I would, of course, provide for immediate issuance by the board of urgent safety recommendations provided that post issuance comments are sought and considered.

I do not mean to levy any responsibility on the board to adopt any of the public comments. I do believe, though, that making their thinking available for technical review and discussion

before adopting a final accident report or safety recommendation can only improve the NTSB product, and thereby enhance transportation safety. It works in every other agency of our government, why should it not also work here? What could possibly be the objection to having more public input to these important safety issues? I see none, but am open to your contrary views.

III. QUESTIONS

I appreciate the opportunity to be with you, and would welcome any questions you have.

Audience: Can you comment on the Vice President's official report?

Mr. Broderick: I have a few general comments on Vice President Gore's Safety and Security Commission Report. I think that when you look at what they had to do in the time allotted, they had a huge landscape and did a credible job. There were a number of things that I think were somewhat contradictory. For example, the Commission talks about the need to redo the mass plan, the modernization plan within a six-month period. And then in another part of the report, they talk about the lack of a finance commitment. Well, I do not know of anybody who would sit down to talk about multi-billion dollar—several tens of billions of dollars worth of expenses—without knowing exactly how many tens of billions of dollars you are going to have to work with. And those time frames do not quite come together. So I think there are some issues there.

Their goal to reduce accidents by eighty percent is apparently a rejoinder to Secretary Peña's goal of zero accidents, a 100% accident reduction. I see a twenty percent difference there. I would like to see what programs they think should not be done to give them that extra twenty percent. I mean, there are a number of general statements in there that you can hardly disagree with; write the FAA regulations in plain English and make performance standards. Well, I agree, but the FAA has gone through at least three humbling processes, by which it seeks comment from anybody in the country, anybody in the world, on what regulations ought to be changed and how they ought to be written. Frankly, not surprisingly, they did not get a lot of suggestions that are meaningful. So I think this is the kind of thing that happens.

One thing that I think that is really unfortunate is a recommendation they made about child restraints. The child restraints issue is one that is very emotional. Clearly, all infants

should be protected from accidents. But just mandating these child restraints can have a counter productive effect. You have essentially, for two people and an infant, raised the cost of the trip by fifty percent. As people that follow Southwest and other low-cost airlines know, that is going to reduce the amount of travel, diverting people in some cases to automobiles. You do not have to divert many people to automobiles before you will actually kill more people than you will save lives. And that is the case in every analysis I have ever seen.

There are alternatives. The alternatives are, for example, to cap the price for the seat that would be charged for the infant, at maybe, twenty percent of the adult ticket price. As it turns out, that is about the level at which the trade offs work out and the diversion does not adversely affect it. But the Department of Transportation lawyers say that deregulation says that you cannot regulate rates. They said the same thing when we sent a rule over there when I was in the FAA, that said "O.K., if you cannot regulate a rate, how about keeping a seat next to the parents as the last seat to be used, because most flights aren't 100% full." They said that was the same thing. Legislation along those lines could do an awful lot. That is all the detail.

In general, they made a number of good recommendations. I think the FAA has a high stack of things to do. The real question is: are we going to get a stable and predictable source of funding for the FAA? And a qualified leadership team, and I mean an aviation qualified leadership team, that is empowered to set aviation policy in the United States government. That is a decision that is yet to be made by the administration.

Audience: Would public accident report development add to the inefficiency of the process?

Mr. Broderick: Well, that raises a good point. Certainly it will take some time, but I point to two things. Number one, this is already the established international practice. It is done that way whenever multiple countries are involved in the accident. And I think that the international community believes that that is time well spent. Second, I personally believe that public input into a debate like an accident reporting discussion that is going to take at least a year is time well spent. I do not think the NTSB in executing its role, or the FAA in executing its, or the FDA in executing its, has all the knowledge. Opening up the process at a reasonable point, for a reasonable amount of time, to receive other expert comment, can only improve the final product, ad-

mittedly, at some cost of time. But we are not talking about a huge sacrifice in efficiency, I do not believe.

Audience: You mentioned the NTSB's requirement for an upgraded FDR. I wonder whether public comment is something that you want to obtain like that. Because it seems to me the NTSB is a force that stands up and says, "Rather than worry about the economics, we are saying this is what we need to find out why the 737 rolls over and crashes like that." And I do not understand how public comment could help in a decision that really needs to be evaporated.

Mr. Broderick: Well, I think the question that you have to ask yourself is: do you want to have an organization completely develop recommendations without the benefit of public comment, when public comment would make those recommendations better. In the FDR case, for the 737 in particular, they asked for a record schedule which was less than one year for the entire fleet. Everyone who looked at that said "this is absolutely crazy, it cannot be done." Then what we presented to the public was two government agencies arguing with each other about how quickly safety should be improved. I might remind you, the same thing occurred a couple of weeks ago, just very recently, with the 737 recommendations that were issued about the rudder power control unit changes. To me, you do not serve the public well by making recommendations that appear to be, from the get go, unachievable. I mean it is not a question of pushing, it is not a question of not considering crossing the line. It is just a question of practicality. I mean, why have an agency do that, if in fact you can get more public input and more explanations, a discussion of the technical issues involved. I think the recommendations that would come out would be a little bit more achievable, and, as a result, the public would see a government that is working together, rather than fighting each other. That is something I think that we need in the next few years to improve upon in the aviation sector.

Audience: You mentioned FBI problems and public safety—

Mr. Broderick: No, I am sorry I gave that impression. I do not disagree with the desirability of spending \$350 million, which is about the cost, to retrofit the entire fleet with current, state-of-the-art recorders. What I do question is saying that this ought to be done within a time frame that is absolutely unachievable without grounding airplanes. In other words, if we do not have it retrofitted by "X" date, put the airplane on the ground until it gets retrofitted. So, it is not a question of whether, but a question of how quickly. And that is really the

issue here, which became at one point, a fairly big debate. We do not mean to destroy the public's confidence in air transportation safety over matters which could be resolved with good, solid technical input at the staff level before the board comes upon a recommendation.

Thank you.