

**Keynote Remarks by  
Chairman Deborah A.P. Hersman  
National Transportation Safety Board  
To The RAA Convention  
Washington, DC  
May 26, 2010**

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Thank you, Chip [Childs], for your kind introduction. And thank you, Roger, (Cohen) for your leadership of the RAA and for inviting me to be here with you today. I see a number of familiar faces and I appreciate the warm welcome and hospitality.

I understand that in terms of planning for your annual conference, this site selection was Roger's first as President of RAA. I think it's fitting that you have chosen Milwaukee as the venue, not only because this is a hub for one of your member airlines, but because Mitchell is ranked as one of America's best airports – and that proves that you don't have to be big to be great.

The men and women of America's regional airlines prove, day in and day out, that the same principle applies to your industry. The challenges you face in your daily operations may be different – and in some ways more difficult – than those faced by your mainline counterparts. But I know that many of you are working tirelessly to continue to provide safe and reliable air transportation.

And that's not just anecdotal. The airline industry as a whole has never been safer. The rate of fatal accidents involving Part 121 air carriers today is half what it was just ten years ago. And these safety improvements come at an especially important time, because regional airlines have never been a more important part of the industry. As you know, regionals just recently eclipsed mainlines as the carrier of more than half of all departures in the United States.

In fact, I think it is significant, Chip, that when the Department of Transportation released their most recent rankings of airline traffic for the month of February 2010, SkyWest was in the top ten – number 7 to be exact – in terms of the number of scheduled enplanements for the month. Ahead of JetBlue, AirTran, and Alaska Air. That's quite an accomplishment for you Chip and SkyWest. But I also think it is very indicative of the position of regional airlines in today's commercial aviation industry.

Last week the Board hosted a three day forum on pilot and controller professionalism and while I'll speak more on that later, I do want to say that there were some comments from the forum that really stuck out for me: people said that the regionals serve as the farm team for the mainlines. And I responded – and I think you'll agree with me – that regional airlines are the major leagues. At any given moment, there are nearly 5,000 flights in the national airspace. If you're flying half of the scheduled passenger flights, you're not minor league!

It is remarkable how far this industry has come. Despite the post 9/11 challenges and the economic crisis of the last few years, the industry continues to demonstrate its resilience. And yet – despite the significant strides we have made in safety I know everyone here agrees that we need to do more. Despite all the improvements, we are still seeing system failures that can have tragic consequences.

Unfortunately, during my time on the Board, I have been involved in the NTSB's work on the last two fatal scheduled airline accidents which have involved regional carriers – the Lexington/Comair wrong runway takeoff accident, and the Colgan Air/Buffalo loss of control accident. These tragedies have turned the intense focus of media and Congressional attention on the safety of our commercial airlines and in particular, on regional carriers. We can debate whether that is fair or not, but what's not debatable is that some of the recent accidents were preventable.

As most of you know, Colgan Air Flight 3407 crashed five nautical miles short of the runway at Buffalo-Niagara International Airport, killing all 49 people on board and one person on the ground.

In some ways, the Colgan Air crash was a watershed event, in that it brought into the harsh spotlight a number of issues that have been quietly plaguing the industry for decades. NTSB's investigation into Flight 3407, which concluded earlier this year, determined that the crash was due to poor pilot performance. The tragic loss of life was only compounded by the fact that it was a recoverable accident.

And even while the NTSB was still gathering the facts, the media, the Congress, and the family members of victims, raised some questions about the industry. Questions about pilot performance, commuting, fatigue, training, and the relationship between mainline carriers and their regional partners have all been a part of the congressional and Safety Board investigations.

From the Safety Board's perspective, our investigation revealed a number of issues in this accident that have been of concern to the Board for a number of years. For example, the issues of fatigue and commuting were highlighted by the actions of this crew. The captain had spent the night before the accident in the crew room – against company policy. And the first officer had flown through the night prior to the accident in the jumpseat of a cargo flight from Seattle to Memphis and then another jumpseat flight from Memphis to Newark.

Our investigation revealed other significant factors that contributed to this accident, including:

- The captain's inappropriate response to the activation of the stick shaker;
- The flight crew's failure to monitor airspeed;
- The captain's failure to adhere to sterile cockpit procedures;
- The captain's failure to effectively manage the flight;

- And inadequate procedures for airspeed selection and management during approaches in icing.

We all have a responsibility to learn from these preventable mishaps. And I'm particularly pleased to see that the accident has refocused the industry and the FAA's attention on some of the issues that the Safety Board has been raising for several years, including flight crew monitoring, pilot performance, sterile cockpit violations, fatigue, training, record keeping, use of personal electronic devices, and safety alerts.

If we want pilots to be better at monitoring, we need to revise procedures.

If we want to address how much rest pilots get, we have to address commuting.

If we want pilots to be at the top of their game, we need to adequately train them.

And if we want to raise the bar, we can't simply require industry to meet a safety 'floor.'

When the Safety Board concluded our hearing on Colgan, I made a comment that it felt like the movie "Groundhog Day." What I meant was that the issues we discovered in our investigation were nothing new. We've long known about them, and in fact the NTSB has longstanding recommendations on many of them.

As some of you know, I took some heat for that comment – but I stand by it. I strongly believe that accident investigations are not the time for polite words. If we're going to take our responsibility for the safety of the travelling public seriously, we need to be honest and forthcoming about what went wrong – and how we can make it right. And though Colgan happened to be a regional airline, the lessons we learned from our investigation apply to all air carriers, regionals and main line carriers alike.

In fact, while the Colgan accident has generated significant interest and attention, we at the Board are seeing other accidents and incidents that lead us to question, Is there something larger going on in the flight deck environment that deserves more scrutiny? Why are things like the "sterile cockpit" rule being routinely violated? What is happening to the professionalism and judgment of flight crews?

At least three recent, non-fatal major carrier accidents, deserve as much as scrutiny as the Colgan Air crash. Take for example the runway excursion of a Continental Airlines Boeing 737 in Denver last December 2008. The Board will be considering the report of this accident next month, so we'll have more to say on that after the Board adopts its findings and recommendations. Or, as another example, take the December 2009 crash of the American Airlines 737 in Jamaica. This was an arriving aircraft into heavy weather with a significant tailwind, in which the aircraft landed long and ran off the end of the runway, stopping just short of the beachhead, breaking into several parts.

This is not to say that all things are going in the wrong direction. Earlier this month, the Board completed its report, findings and recommendations on the miracle on the Hudson.

You will recall that shortly after departing New York's LaGuardia Airport, US Airways Flight 1549 encountered a flock of Canada geese – and at least two geese each were ingested into both engines, resulting in the complete loss of thrust. Captain Sullenberger and First Officer Skiles brought that aircraft down, ditching it in the Hudson River, and all 150 passengers and five crew members evacuated safely. The media dubbed this the “miracle on the Hudson,” and indeed, our investigation revealed that the conditions that led to the ultimate success of this ditching were no less improbable than the conditions that caused the crash in the first place.

Once the birds and the airplane collided and the accident became inevitable, so many things went right. This is a great example of the professionalism of the crewmembers, air traffic controllers, and emergency responders who all played a role in preserving the safety of everyone on board that aircraft.

You know, much of our work at the Safety Board involves looking back on these accidents and incidents and asking what if. . . what if the crew had been properly trained to respond to approach to stall? What if the captain and first officer kept to task and monitored their situational awareness, would they have been able to identify that they were lined up on the wrong runway? What if they had been forced to land on the river at night time?

Our recommendations look back to help us look forward – so that we do not repeat these mistakes and avoid the tragic consequences.

But I also know that it's not enough to look back on what more could have been done in the past, so allow me to share some thoughts with you on what we can do going forward.

The NTSB realizes that a big part of the problem you face is the slowness and unpredictability of the regulatory process. The airline industry is constantly moving forward and adjusting to new technologies and evolving economic realities. You should be able to look to regulations for guidance on best practices, yet they fail time and time again to keep pace.

The intense media scrutiny over any incident and particularly on accidents, like the Colgan Air crash, tends to focus the attention of the Congress, and as you know, following the accident in Buffalo they responded with multiple legislative proposals in both the House and the Senate intended to bypass the slow regulatory process.

Both the House and Senate have moved legislation that requires the FAA to improve overall safety in the industry. Both bills call for the FAA to revise the flight and duty time rules; to revise training programs for flight crews; and even to require a minimum number of hours to qualify for a certificate. Last week at our forum, I was disappointed to hear that the flight and duty time NPRM is now scheduled to be published in September. Last summer we all had high hopes that the quick fuse ARC would result in new standards in record time. Now we are facing the third delay and what started out of

the blocks as a record-setting 200 meter dash, has now begun to look more like a steeplechase event.

The Safety Board has called on the FAA to adopt a number of these initiatives for years; in fact, we're pleased to see that many elements stem from board recommendations.

Many of you know that our "Most Wanted" list identifies what we view as our top safety priorities. Flight and duty time has been on our "Most Wanted" list; recommendations on fatigue have made the list every year since the list's inception in 1990 and this year we added pilot proficiency to the list, focusing on records and remedial training.

So while the focus of the legislation before Congress is not identical to the focus of NTSB, we are certainly glad to see a new sense of urgency to learn from and improve upon past mistakes.

But – and with the NTSB, there is almost always a "but" – even if Congress passes legislation, the reality is that we're unlikely to see all of the changes we envision or rapid regulatory action. Part 121 may set the regulatory framework for commercial, cargo, and passenger aviation, but I think we can all agree that it sets a bare minimum for safety standards. Each airline has a responsibility to go beyond the minimum. And the good news is that many of you do just that, but not every carrier addresses every area the same way.

Perhaps you need to utilize new methods to solve old problems, and pilot fatigue is at or near the top of that list. As you know, the problem of fatigue affects all modes of transportation, and I was particularly impressed to hear about an approach taken by a trucking company called Schneider National, based right here in Wisconsin.

Schneider operates more than 11,000 tractors, with its 14,000 drivers hauling 1.3 billion miles annually. Like aviation, trucking is a competitive industry. So that means that they are acutely aware of the costs of accidents and lost-time on their bottom line.

Schneider became concerned about fatigue among their drivers and launched a study into sleep apnea. They tracked 339 drivers who suffered from sleep apnea, evaluating their safety performance and health care costs. Testing for sleep apnea is not inexpensive. Although the test is simple, it involves a hospital stay. But Schneider discovered that by investing in sleep apnea screening, they:

- Reduced preventable crashes by 30%
- Reduced the median cost of crashes by 48%
- Improved fleet retention rate by 60% over fleet average
- And achieved health care savings of \$539 per driver per month.

And while our focus is, of course, on safety rather than economics, I think that last point is worth considering: when companies are willing to invest in new safety methods, they can actually reduce costs in the process. Safety doesn't have to be a drag on profits.

Although I used the example of a trucking company, we're seeing positive new initiatives in the airline industry as well. FedEx is a great example. They have created a group rest area at their Memphis hub that allows crew members to sleep, eat and relax between flights in a comfortable, well-appointed setting. And I know that many of the companies represented here today are also working to develop solutions to the challenges of fatigue and commuting.

I also think there's tremendous promise – and there's been considerable progress – in the implementation of Safety Management Systems. One good example can be found in a presentation by a corporate operator at a recent safety conference. The company in this example initiated an SMS program and the associated risk assessment of its operations.

As part of the assessment, they incorporated Flight Operations Quality Assurance – or FOQA data and found some unusual excursions in bank angle and takeoff rotation rate. Further research indicated the excursions took place on positioning flights. When this was brought to the attention of the flight operations managers, their follow up with the operating crews resulted in a reduction of these events by about 80%.

Why was SMS successful at identifying and resolving this safety risk? For one reason, most of us agree on the parameters of normal operations, and deviations are easy to detect whether through recorded flight data or voluntary reporting systems. Because it's relatively easy to identify problems like this one, they are similarly easy to solve.

The same can be said for improving air traffic control. San Francisco and Dallas-Fort Worth are historically congested airports, prone to runway delays and serious traffic flow conflicts. The FAA's analysis of multiple airline's aggregate Ground Proximity Warning Systems activations in San Francisco/Oakland led to major routing changes and significantly improved conditions. The same strategy was applied to Traffic Collision Avoidance System – TCAS warnings in the DFW area and led to changes that significantly reduced the warnings and, at the same time, improved the traffic flow. Here, again, the use of available data adeptly identified a clearly measurable set of red flags and allowed for a relatively simple and effective solution.

All of these solutions require open and honest communication. That is why it is so great to see the RAA and the ATA getting together to talk about safety issues here at this conference. Naturally, airlines are in competition with each other for passengers and profits. But the entire industry rises or falls together on the strength of its safety record. This fact could not have been clearer after the Colgan crash, when all regional airlines suffered in the court of public opinion.

So I urge you to view this as a team effort. I know the RAA is already showing that you are up to the challenge, and your Strategic Safety Initiative offers real promise for meaningful improvements.

We are doing our part at the Safety Board as well. For example, during the Colgan investigation we identified several factors that, while not necessarily causal to the crash, we viewed as major red flags deserving further consideration. Our report generated 25

recommendations to the FAA and two follow up activities – a professionalism forum and a code-sharing symposium. The recommendations apply to all carriers, not just regional carriers, and the forum and symposium are intended to have a balance of participants, because the issues don't apply just to Colgan or the regional carriers, they span the industry.

We just held a forum on professionalism, which has started a dialogue on issues that clearly impact safety, even if they haven't been shown as the primary cause of an accident. By pursuing these issues, we are fulfilling our obligation to not just examine accidents and their direct causes, but also to study industry trends.

The forum brought together nearly fifty experts from academia, airline management, airline flight crews, the FAA, and EASA to examine the overall concept of professionalism. Regional carriers were well represented on several panels and in the audience. I know that many of those chief pilots and line captains are here this week sharing their impressions of the forum with you.

I've often said that professionalism is not the job you do but how you do your job. And it was striking to all of us at the forum about just how difficult it is to really define professionalism. I made the comment, paraphrasing Justice Potter Stewart – in that we know professionalism when we see it. But I think what the forum was intended to do – and the challenge that remains – is that we need to be able to establish expectations about professionalism and begin to create an environment to hold crews accountable to the necessary high standards of their profession.

And let me say, that raising the bar on professionalism is not limited to the flight deck or to the control tower or radar room. It applies to everyone that is involved in the safe operation of every flight – flight attendants, ground crews, maintenance personnel, and executives in the Board room. We need improve the culture of professionalism across the industry.

At the forum, we heard how challenging it will become to recruit pilots over the next several years. In an industry as cyclical as the airline industry, it is a major challenge to have qualified professionals already in the pipeline to be able to take over. If the FAA forecast is correct, we only have a few more years before we see the resurgence in the industry. If we are going to be flying more than 1 billion passengers a year domestically by 2029, then we need to be looking now for new pilots.

Another Safety Board initiative that I know may be of interest to the regional airline community is the symposium we are holding on October 26th and 27th, on code sharing arrangements and their role in aviation safety. This symposium stems from the previous Board investigations and that once again came to the forefront in the investigation of Colgan Air accident. Again, a number of issues that were uncovered during our investigation were not found to be contributory factors to the accident. But they raised our concern and curiosity – is there something that is going on in the industry between these partners that needs further understanding?

NTSB's symposium will focus on oversight of code-sharing arrangements; examine best practices regarding the role of mainlines in ensuring the safety of regional partners, other mainline carriers, and foreign carriers; and clarify the role that a mainline would play in the post-accident investigation and the family assistance response to an accident involving a code-sharing partner.

We welcome your participation on these issues. The symposium is being organized by our deputy director in the Office of Aviation Safety, John DeLisi, who met with many of you yesterday. He is here again today, and I know that he has been soliciting and would welcome your input.

We could sit and mull over what happened that night in Buffalo endlessly. But we've concluded our investigation and issued our recommendations. Now is the time for us – at the Safety Board, and in the industry to be more forward thinking in our approach to making sure that we don't repeat the mistakes of the past.

At the Safety Board, we are working to bring all parties together to find solutions, and I know that the RAA is doing the same. It's particularly encouraging that for the first time, RAA member airlines and their mainline counterparts are meeting here at the RAA convention to discuss better coordination of safety. It really drives home the point that we're all in this together. President Kennedy once famously said that "a rising tide lifts all boats." Likewise, an airline industry that is safer tomorrow than it is today will lift all carriers to new heights.

Thank you very much.

Source: <http://ntsb.gov/speeches/hersman/daph100526.html>