

STATEMENT OF  
CAPTAIN JOHN PRATER, PRESIDENT  
AIR LINE PILOTS ASSOCIATION, INTERNATIONAL  
BEFORE  
SUBCOMMITTEE ON AVIATION  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
UNITED STATES HOUSE OF REPRESENTATIVES  
WASHINGTON, DC  
JUNE 6, 2007  
THE NATIONAL TRANSPORTATION SAFETY BOARD'S  
MOST WANTED AVIATION SAFETY IMPROVEMENTS

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Good morning. I am John Prater, President of the Air Line Pilots Association, International (ALPA). ALPA is the world's largest pilot union, representing more than 60,000 pilots who fly for 40 airlines in the U.S. and Canada. ALPA was founded in 1931 and our motto since its beginning is "Schedule with Safety." For more than 75 years, ALPA has had a tremendous impact on improving aviation safety. Today, ALPA continues to be the world's leading aviation safety advocate, protecting the safety interests of our passengers, fellow crewmembers, and cargo around the world. ALPA has lived up to its mandate to the extent that many in the industry, including a former FAA Administrator, have referred to us as the "conscience of the airline industry."

We applaud the Committee for holding this hearing and appreciate this opportunity to testify about aviation safety improvements on the NTSB's "most wanted" list. ALPA enjoys an excellent relationship with the Board and we have collaborated for many years on numerous aviation safety issues including several contained on that list:

1. Reducing dangers to aircraft flying in icing conditions – Since the inception of the NTSB's original safety recommendations regarding flying in icing conditions and the FAA's initial actions, ALPA has been involved in all industry discussions and ARAC working groups tasked with developing rulemaking language. While we share the NTSB's frustration that 12+ years is a long time to affect design and certification process changes, progress is being made and consensus language is being developed by the industry. Since the Roselawn accident which prompted the NTSB's recommendations, there have been procedural, charting, and operational changes implemented in the industry to make flightcrews more aware of the environment in which they are operating and to improve how they operate their anti-/de-icing equipment should icing conditions

be encountered in flight. ALPA continues to monitor and participate in any and all discussions regarding flight in icing conditions.

2. Eliminate flammable fuel/air vapors in fuel tanks on transport category aircraft – Following the crash of TWA Flight 800, ALPA participated in the NTSB’s accident investigation as an interested party. ALPA also became involved in the ARAC Fuel Tank Inerting Harmonization Working Group, which determined that although fuel tank inerting was a viable solution, the cost of its development and installation outweighed the safety benefit at that time. Since the issuance of the ARAC’s report, the FAA has issued a performance-based NPRM for reduction of fuel tank flammability. While a final rule has yet to be issued, guidance has been implemented to reduce fuel tank flammability limits and potential ignition sources within the fuel tanks. In addition, manufacturers have developed and installed less costly systems with what appears to be highly promising flight test and operational results. These systems may eventually be installed on a portion of the existing fleet of aircraft used in commercial service as well as future aircraft.
3. Stop runway incursions/ground collisions of aircraft – ALPA has a long history of advocating for aircraft, airport, and training improvements designed to mitigate the threat of potentially deadly runway incursions. ALPA’s Executive Central Air Safety Chairman, Capt. Terry McVenes, provided extensive testimony to this Committee in March regarding our recommendations for mitigating the risk of runway incursions.

Today, I would like to address three specific safety issues, the first of which is on the “most wanted” list, and the other two should be on the list, in our view:

1. The need for overhauling FAA’s fatigue-enabling flight and duty rules,
2. The current state of pilot hiring and training, and
3. The invaluable, non-punitive, safety reporting system called the Aviation Safety Action Program (ASAP).

### **Pilot Fatigue – Flight Duty and Rest Rules Must be Changed**

Fatigue is a present and growing problem within the airline industry. ALPA’s own internal research indicates that fatigue has reached an alarming level among airline pilots. ALPA and the NTSB have – thus far without success – encouraged the FAA to modernize the flight and duty time regulations for all U.S. licensed commercial airlines to address pilot fatigue and to comply with the findings and principles of modern scientific research.

The present FAA flight duty and rest rules applicable to airline pilots are a dated patchwork of regulations that have been developed over the past fifty or sixty years. For example, the rules usually applied to air carrier cargo operations – the supplemental rules – were developed over 50 years ago for unscheduled freight operations using piston-powered aircraft. Many of these post-WWII vintage aircraft had unpressurized cabins, cruise speeds in the 200-knot range, and flight crews consisted of at least two pilots and often a flight engineer. In today’s airliner fleet, manufacturers have used modern technology to decrease cockpit crew size and travel times and

to increase pilot and aircraft utilization. This increase in technology and reduction in staffing has put additional pressures on flight crews. As the overall system complexity continues to increase, the hazards associated with pilot fatigue in the industry also increase and are as great as they have ever been.

During the mid-1990's, a number of high-profile aircraft accidents attracted public and media attention to questions of aviation safety. In response to this public interest, the FAA Administrator helped direct the agency toward a regulatory system for commercial aviation based upon the principle of "One Level of Safety." In January 1995, former DOT Secretary Federico Peña convened an unprecedented aviation safety summit that brought together over 1,000 officials from government, airlines, airline labor, and other segments of the industry to establish joint priorities and strategies for enhancing aviation safety. These events led to the landmark FAA ruling on the "One Level of Safety" ("i.e., the Commuter Rule"). The Commuter Rule required all 14 CFR Part 135 operators to transition to 14 CFR Part 121 by March 20, 1997. This standard, which has been applied to large airlines and regional airlines (formerly known as "commuters") alike, has become one of the FAA's guiding regulatory principles during the last decade and has been a widely heralded success.

The FAA proposed to modernize the flight duty and rest regulations applicable to all airline pilots during the adoption process of the "Commuter Rule." The commuter airlines were permitted to continue to operate their turboprops under the existing FAA fatigue rules at that time pending the anticipated industry-wide reform. Industry, pilots, and the regulators were unable to reach a consensus and the industry-wide reform of the flight duty and rest regulations proposed in 1995 was never implemented. Because the anticipated rule changes never occurred, aircraft having 30 or fewer seats are still flying today under those less restrictive rules. Indeed, some airlines are currently forcing travelers back into these smaller aircraft to take advantage of the less restrictive pilot fatigue rules and lower cost. Over a decade later, the need for industry-wide reform in the FAA's flight duty and rest rules is still apparent. The NTSB's 2007 Most Wanted Transportation Safety Improvements includes "[s]et working hour limits for [pilots] based on fatigue research, circadian rhythms, and sleep and rest requirements." The current FAA rules do not adequately address fatigue research, circadian rhythms and realistic sleep and rest requirements as recommended by the NTSB. Reform of the FAA's outdated flight duty and rest rules is decades overdue and essential, given the desire by some to raise the mandatory retirement age to 65.

Domestic airline pilots – those that operate entirely within the continental United States – have a weekly flight time maximum of 30 hours. What is not widely understood is that the weekly flight time limitation for airline pilots does not include *any* of the considerable amounts of time pilots spend performing work on the ground for their employer. In reality, it is not unusual for airline pilots to work shifts approaching 15 hours per day to accomplish 7 to 8 hours, or less, of daily flight time. Moreover, the pilot's 7 or 8 hours of daily flight time may be spread out over 4 or 5 individual flight legs. Each of those flights has both pre- and post-flight duties, none of which count against the flight time limitations. *The domestic pilot's maximum working day limit, including flight time and ground based duty, is 16 hours under current FAA rules; that is simply too long.* Moreover, there is no limit to the number of times per month lengthy duty days may be

assigned – so long as the flight hour limits are not exceeded – increasing the potential for cumulative fatigue.

In the past, the negotiated work rules discussed above provided a significant measure of protection from such fatiguing schedules. Unfortunately, this layer of protection once provided to pilots and the flying public has been eroded as a result of the economic disruption in the airline industry during the past half-decade. Today's airline pilot is typically working substantially more hours for less money and spending more hours away from home than his or her predecessors.

Currently, airline pilots are routinely assigned a duty day up to 15 hours, followed by only an eight hour break, followed by another lengthy duty day. Unfortunately, this eight hour minimum break does not provide an adequate opportunity for recuperative sleep. *Let me be clear; the eight-hour break is not an opportunity for eight hours of sleep, but rather a period of time away from the aircraft. During the 8-hour break, it is not unusual for a pilot to be left with a maximum 4 or 5 hours per night sleep opportunity actually spent inside a hotel room.* This occurs because the FAA has determined that all time away from the airplane on a trip counts as "rest." Incredible as it may seem, the time a pilot spends waiting for a hotel shuttle and even the time spent going through airport security screening is defined as "rest" under the current FAA regulatory scheme. A pilot must also attend to all of his or her other non-work related daily physical needs and requirements during this 8-hour break away from the aircraft. It is not uncommon for a pilot to elect to forego a meal so as not to further reduce the maximum 4 or 5 hour actual sleep opportunity. This is unacceptable – pilots need a longer, and genuine, daily rest period.

Additionally, new aircraft types capable of long-haul operations in excess of 16 hours of continuous flight are being built, developed, and placed in service. This type of flying is done under the FAA international, or flag, rules across multiple time zones, with crossings of 12 to 14 time zones not uncommon. These flights result in pilots being on duty at a time when they would normally be asleep at home. Because of the length of these and many other international flights, additional pilots are required to be aboard the aircraft. It is critical that adequate onboard rest facilities are provided to pilots on these long-haul international routes. Traffic on existing international routes is increasing. The FAA flight duty rules applicable to international airline flying today are approaching 60 years old and were designed with the limited knowledge and vastly different operational needs of that bygone era. Scientifically based rules to address pilot fatigue in international long haul flying based on modern requirements and knowledge are urgently needed.

Fatigue is accumulating in our pilot work force. As such, ALPA agrees with the NTSB that there is a pressing need to provide rational, scientifically-based working hour limits for pilots engaged in all commercial airline operations. The weight of the scientific evidence over the last 20 or so years has firmly established that the vast majority of humans, including pilots, simply cannot be expected to reliably and safely perform operational tasks with the same degree of effectiveness as at the beginning of the shift, past a time on duty beyond 12 to 14 hours. *Recent aviation accident studies point to a statistically significant increase in the rate of accidents beyond 12 hours time on duty. Other studies show that 8 hours of time at the controls between*

*required rest periods is the maximum period that one should normally be able to expect a rested pilot to perform reliably and safely.* The NTSB and other accident investigation bodies are increasing the focus on fatigue as a factor in aviation accidents as well as in accidents in other modes of transportation. Additionally, scientific evidence continues to mount that the cumulative negative effects from disrupting a person's, circadian rhythm, *i.e.*, the sleep-rest-wake cycle, have been grossly underestimated in the past.

When addressing possible revisions to the current flight duty and rest regulations, airlines and their pilots are immediately at cross-purposes. Managements are looking for more availability and "productivity" from flight crews. For flight crews, safety advocates and scientists, the question is often not whether to change the current rules, but rather *how much* to reduce the current maximum flight and duty limitations to enhance safety, raise human performance to acceptable levels, and reduce risk. Hence, the past approach of creating proposed regulations without the assistance of scientists and technical advisors, or reference to the technical literature, but rather upon notions of operational necessity, has failed. Needed are rules grounded in the results of scientifically based fatigue studies and safety reports.

In conclusion, pilots performing commercial flying duties must have regulations that provide them with an opportunity to get an adequate sleep period before each duty day of flying. This, combined with a scientifically determined maximum length duty day, including provisions for the type of flying accomplished, whether it be traditional short-haul, multiple sector flying or flights across multiple time zones, is mandatory to ensure that the U.S. air transportation system continues its envied record of aviation safety. We believe it is fully possible to implement needed regulatory changes that will adequately address safety needs and the issues related to pilot fatigue without negatively impacting the ability of the nation's air transportation to serve the needs of the public. ALPA stands ready to work with regulators and the industry to develop rules that will adequately address the problem of pilot fatigue.

### **Airline Pilot Hiring and Training**

There have been extraordinary changes in the air transportation system during the past 10 years. We have seen the advent of advanced technology aircraft and flight decks, enhanced airport and aircraft security, and airspace and airport capacity enhancements such as Area Navigation (RNAV), Required Navigation Performance (RNP), Special Aircraft and Aircrew Authorization Required (SAAAR) approaches, Precision Radar Monitored approaches (PRM), Land and Hold Short Operations (LAHSO), and domestic Reduced Vertical Separation Minimum (RVSM).

Even today's most experienced airline pilots are challenged to maintain higher levels of situational awareness and cognitive abilities in a very crowded and complex operating environment. Given this circumstance, it would be logical to assume that airlines are raising the bar on hiring qualifications and employing seasoned aviators who are prepared to meet the challenge of airline flight in 2007. Ironically, just the opposite is true at numerous regional airlines which serve as the starting point for many pilots who later fly for the major airlines. Some regional carriers are actually lowering their experience requirements and are now hiring first officers to fly swept-wing jets who have as little as 200 hours of flight time. Even with such

miniscule experience requirements, one airline is offering a \$5,000 signing bonus just to entice these low-time pilots to join the company.

Although it is well known that pilot hiring and furloughing occurs in cycles, there is an unprecedented, more deeply entrenched reason for the difficulty that airlines are now having in finding qualified pilots to fill available seats. That reason, simply put, is that the airline pilot profession is no longer viewed by many aspiring pilots as a “dream job,” which rewards them with a satisfactory work environment and appropriate compensation. In some respects, airline jobs are now more of a “nightmare,” given the bankruptcies, lost pensions, longer hours, salary cuts, and lost benefits that have followed in the wake of September 11, 2001. These factors are having a detrimental impact on our airlines’ ability to attract qualified individuals to the piloting profession. As I noted previously, some airlines are recalling seven or more pilots on furlough for each pilot who actually returns to the airline.

The current pilot hiring difficulties translate into safety concerns, both here in the U.S. and abroad. Some of the problems that low-time pilots experience include:

- Difficulty communicating with ATC
- Poor aircraft handling skills
- Tendency to “fall behind” the aircraft making it difficult to keep the aircraft on the correct profile, at the correct speed, and configured appropriately
- Increased simulator time and increased operational evaluation time in the aircraft to serve as a required crewmember
- Below-average performance in learning to handle emergencies

It is disconcerting to put minimally qualified pilots with limited flight experience into the cockpit of commercial airliners. Traditional civilian and military training methods result in a pilot building several hundred hours of flight time in the process of obtaining their commercial, instrument and multi-engine pilot certificates. These pilots then acquire valuable flight hours and gain important flying experience while conducting military flights, flight instruction, or other general and corporate aviation jobs. It is not unusual today for the major airlines to require pilot applicants to have thousands of hours of flight experience.

In order to maintain our current level of safety, it is incumbent on our airlines and the FAA to ensure that U.S. airline pilots are the most qualified pilots in the world. New airline pilots who may not possess a great deal of actual aircraft experience must still be able to demonstrate the ability to fly safely in today’s complex operational environment. Airlines and regulators must provide more training, checking, and ongoing monitoring of low-time pilots now than was required with more experienced airline pilot new-hires in the past.

### High-Altitude Aircraft Performance Training

As a result of several NTSB recommendations contained in the Board’s report on the Pinnacle Airlines Flight 3701 accident in Jefferson City, Missouri on October 14, 2004, the FAA formed an industry working group to address pilot training deficiencies in the area of high-altitude aircraft performance. During that ill-fated flight, the aircraft stick shaker and pusher activated at high altitude. The aircraft was equipped with a stick pusher to assist in the stall recovery.

However, it was discovered that the airline training provided to the crew regarding the stick pusher was inadequate. Their aircraft entered uncontrolled flight in a series of pitch oscillations, during which it lost 7,000 feet of altitude before the pilots were able to regain control. However, both engines flamed out and, due to a condition known as core lock; they were unable to be restarted.

The FAA/industry working group will develop high-altitude pilot training guidance to be incorporated at each airline. The guidance will address the regional airline training in this area for regional jets, but will go beyond that to provide guidance for all air transport category aircraft types.

### The Multi-Crew Pilot License

Pilots in the United States have traditionally been trained through either the military or through various civil aviation training programs. For most of us, the seat in the airline cockpit was achieved by earning certificates, ratings, and then additional flight experience, either through the military or the civilian aviation arenas. It included acquiring hundreds, if not thousands, of hours of actual aircraft command experience before being hired by an airline and then successfully completing the initial aircraft qualification training that each airline requires of its new hire pilots before being allowed to serve as a member of the flight crew.

One program gaining in popularity is the *ab initio* program which accepts pilot candidates with little or no flying experience and trains them from the beginning to qualify for airline positions. Many of these *ab initio* programs are sponsored or supported by a particular airline, such as the Delta Connection Academy, and promise interviews and preferential hiring consideration to pilots successfully completing the course and acquiring the required flight experience. Though *ab initio* training represents only a small segment of flight training in the United States today, this may be changing. In Europe, where general aviation is much less prevalent, *ab initio* training programs are the norm, with airlines such as Lufthansa having successfully used them for decades to supply the qualified pilots needed to fly their airplanes.

Due to a forecast pilot shortage outside the U.S., notably in India and China, ICAO amended Annex 1 of the Convention on International Civil Aviation in November 2006 to give countries guidance on creating a new grade of pilot certificate called the Multi-crew Pilot License (MPL). The MPL training concept has its origins in *ab initio* training, but differs significantly by substituting extensive use of advanced simulation devices in the training program for most of the actual flight hours previously required to be obtained in an airplane. MPL is designed to shorten the time necessary to train a pilot to serve as a crewmember on a commercial airliner and put pilots onto flight decks more rapidly. While the FAA has not indicated that it plans to adopt this new licensing standard in the United States, Transport Canada and other civil aviation authorities around the world are in the process of preparing to certificate for the MPL.

MPL training programs will focus primarily on advanced turbo-jet aerodynamics, new aircraft technology, crew resource management (CRM) techniques and threat and error management

principles. In addition, candidates will be trained in aircraft-specific standard operating procedures, and irregular and emergency procedures.

The MPL will be a limited pilot certificate which will allow the holder to act as second-in command (SIC) in air transport operations of a turbine-powered, transport category aircraft which requires two or more pilots. The pilot will have instrument privileges as SIC and be type-rated as SIC in the aircraft for multi-crew operations only. The significant philosophical change with the MPL is that training is oriented toward creating a supporting pilot who will become an experienced aviator through on-the-job training, rather than a fully qualified and competent pilot who holds at least a commercial certificate with multi-engine and instrument ratings.

MPL pilots will receive a minimum of 240 hours of combined aircraft and simulator training experience. The MPL candidate must obtain only 35 hours in an actual airplane during the core-flying-skills phase of training, and 12 takeoffs and landings in the aircraft that the individual will be type-rated in during the final phase of the MPL course. These minimal hours can be further reduced if the program trains with a full-motion simulator. By comparison, a student pilot must have a minimum of 40 hours before applying for a private license. *Consider this – the MPL pilot will be licensed to fly as a first officer in a passenger-carrying jet, but will not be licensed to fly solo in a Cessna 172!*

There is not currently a pilot shortage in the U.S., but there is a shortage of experienced pilots willing to work in today's sub-optimal airline environment. ALPA has strong reservations about the MPL as a solution to any genuine pilot shortage which may arise here in the future. We urge Congress to monitor this situation closely, as we are. Regulatory oversight and a data-driven approach will be critical in ascertaining that those who graduate from MPL programs outside the U.S. do so with the knowledge and skills necessary to serve as safe and competent crewmembers of airline flight decks operating into the U.S.

### **Aviation Safety Action Programs Need Support**

The Aviation Safety Action Program (ASAP) functions to provide voluntarily supplied safety information to be risk assessed and reviewed in order to identify safety problems, and implement appropriate mitigations to them. Air carrier employees are encouraged to voluntarily report safety information that may be critical to identifying potential precursors to accidents and incidents. Airlines, FAA, ALPA and other employee associations have endorsed this concept as an essential means of continually reducing the already low U.S. accident rate. ASAP is a principal component of the FAA's Safety Management System, which uses information in a predictive and proactive fashion, rather than a reactive one, to make continual safety improvements.

Under ASAP, safety issues are resolved through corrective action rather than through punishment or disciplinary action against the erring person(s). The program is based on a safety partnership between three parties: the FAA, the certificate holder, and employees. These three partners recommend, develop and insure the completion of the corrective action, whether it applies to reporting individuals, a company, or the FAA. ASAP provides incentives to encourage

employees to participate in the program and to disclose information, which may include possible violations of Federal Aviation Regulations, without fear of punitive enforcement sanctions by the FAA or company disciplinary action.

Each airline with an ASAP maintains a safety database in which all of the reported safety information is archived. This information is routinely reviewed by all parties to identify safety trends and to monitor the effectiveness of implemented corrective actions. ASAP allows an airline to conduct quality assurance from a safety perspective on all departments with operational responsibilities. It significantly enhances the FAA's oversight activities by giving their certificate management offices a more comprehensive view of the carrier's safety compliance posture. And it enhances flight crew community safety awareness by providing real-time safety incident information with recommended corrective actions.

The key elements of an ASAP programs are:

- Proactive safety problem identification and resolution
- Strong reporting incentives
- Association with NASA ASRS
- Airline and employee commitment, response and accountability
- Flight safety benefits to the traveling public, airlines, and crews

ASAP has value to an airline because it:

- Builds mutual trust through a cooperative safety relationship between FAA, airlines and employees
- Encourages preventive, rather than reactive, responses to identified safety problems
- Promotes cooperation and accountability between airline departments
- Establishes direct-line communication for important real-time safety information to airline managers
- Reveals a clearer, more accurate view of the safety of an airline's operations
- Complements Advanced Qualification Program (AQP), Crew Resource Management (CRM), Internal Safety Audits, Flight Operations Quality Assurance (FOQA) and Air Carrier Voluntary Self-Disclosure Programs
- Facilitates sharing of accident- and incident-prevention strategies industry wide
- Can promote FAA enforcement by ensuring compliance through corrective action

What an ASAP program IS:

- A proactive, corrective-action-based safety program.
- A program that requires an equal commitment by FAA, company and employees.

What an ASAP program IS NOT:

- An immunity program
- One that applies to deliberate acts
- One that applies to criminal acts

ASAP maximizes the input of the pilot community as an airline's most valuable safety resource, and it offers verifiable corrective actions for safety problem resolution and the prevention of

incidents and accidents. Additionally, flight crew feedback of safety information is essential for program success. The monitoring of flight crew reporting confirms the success of the implementation of safety enhancements.

Personnel who contribute reports to an ASAP may work in many areas, including but not limited to:

- Ground and flight operations
- Air traffic controllers
- Dispatch, load planning and aircraft performance
- Charting and instrument procedures
- Maintenance and MEL
- Human factors
- Technology and aircraft equipment

ASAP permits real-time solutions to potential flight safety hazards identified by line pilots with natural applications to training, CRM and line-flying procedures. As an example, one report received by a carrier concerned an aircraft which flew dangerously low during an instrument approach. The crew submitted an ASAP report, and because of their participation in the program, new procedures were put in place to prevent a re-occurrence. ASAP is also cost effective. Previously required legal, representational and investigative expenses can now be applied to corrective and safety initiatives. As an example of the potential for reporting, one of the major carriers received 106 ASAP reports in a two-month period. Only nine (9) of those reports were known to the carrier and five (5) to the FAA. Without ASAP, the remaining 97 reports would never have been submitted for fear of retribution.

Since the concepts of ASAP were first discussed in 1990, airline personnel and ALPA have been key partners with the FAA in the development and implementation of ASAP programs. This partnership approach was founded on the concept of shared values and trust between all of the parties and the realization that success would only come through cooperation and continuous program improvement. For the future, FAA and its industry partners must continue to support the implementation of non-punitive safety reporting programs. They are important tools which will help us continue to lower our already low accident rate. As part of this effort, the industry, with FAA support, must develop a safety data-sharing process, whereby the impact of safety problems can be identified and mitigated industry wide.

*Some have criticized ASAP as being little more than an immunity program for pilots and other participating employees. Nothing could be further from the truth. In reality, ASAP works only when individuals demonstrate enough professionalism and accountability to admit having made a mistake and take responsibility for helping the industry learn from that mistake. It should be well understood by now that punishing individuals for making honest mistakes makes it much less likely that (1) the root cause of the problem will be discovered, and (2) employees will proactively report safety problems.*

#### ASAP for Air Traffic Controllers

The FAA has been very supportive during the establishment of ASAP programs for airline operators and their employee groups. However, they have yet to make progress in the area of non-punitive reporting for their own air traffic controllers. A significant portion of safety related events involve actions by controllers, so pilot-identification of safety problems is at best a 50% solution. We have encouraged FAA on several recent occasions to expeditiously implement ASAP for ATC controllers.

I am pleased to report, therefore, that the Air Traffic Organization recently defined new policy supporting the concept of the Safety Management System, which includes a non-punitive reporting program for controllers. This will be an important advancement when it is implemented, because controllers will be able to report their errors to the agency and those reports will be used to improve procedures, processes, training, and equipment to make air traffic control safer. It will take leadership from FAA executive offices to ensure that this commitment is realized. We offer our support and assistance in making this a reality.

Thank you, again, for the opportunity to testify today. I would be pleased to address any questions that you may have.

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