STATEMENT OF CAPTAIN SEAN CASSIDY FIRST VICE-PRESIDENT AIR LINE PILOTS ASSOCIATION, INTERNATIONAL BEFORE THE

SUBCOMMITTEE ON AVIATION COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE UNITED STATES HOUSE OF REPRESENTATIVES

ON

A REVIEW OF AVIATION SAFETY IN THE UNITED STATES APRIL 25, 2012

Good morning Chairman Petri, Ranking Member Costello, members of the Subcommittee. I am Captain Sean Cassidy and it's my privilege to serve as First Vice President of the Air Line Pilots Association, International (ALPA), and as ALPA's National Safety Coordinator. Thank you for offering us the opportunity to provide the Subcommittee our views on a variety of important safety topics here today.

ALPA represents more than 53,000 professional airline pilots flying for 37 airlines in the United States and Canada. We are the world's largest pilot union and the world's largest non-governmental aviation safety organization. We are proud to be the recognized voice of the airline piloting profession in the United States, with a history of safety advocacy that extends for over 80 years. As the sole US member of the International Federation of Airline Pilots Associations (IFALPA), ALPA has the unique ability to provide active airline pilot expertise to aviation safety issues worldwide, and to incorporate an international dimension to safety advocacy.

ALPA applauds the Subcommittee's diligence in monitoring progress toward implementation of the safety improvements outlined in PL 111-216, the "Airline Safety and Federal Aviation Administration Extension Act of 2010" as well as other critical safety issues facing our industry. We have been pleased to represent the voice of airline pilots nation-wide through our participation in all of the FAA Aviation Rulemaking Committees formed as result of the Act. We have commented extensively through that process and through the public comment process for FAA Notices of Proposed Rulemaking (NPRM) covering pilot fatigue and mitigations for it, pilot training and standards, pilot qualification requirements, and principles related to the initial and continuing professional development of an airline pilot. Our formal comments go into extensive detail on many of the topics under consideration by the subcommittee and we would be pleased to provide you with copies of those comments. ALPA has long said, and continues to maintain, that the single most effective safety feature of a modern airline aircraft is a well-trained, well-motivated, well-rested professional pilot.

Pilot Fatigue

ALPA believes that in general, our industry is making good progress in developing and implementing the safety enhancements set forth in the legislation under discussion here today. There are, however, notable areas where there remains critical work to be done. Foremost among these is the gap left in the safety net by the exclusion of pilots of all-cargo airlines from the provisions of the newly promulgated flight and duty time regulations. We continue to find it unconscionable that some airline pilots will not be afforded the safety margins that the new law provides as relates to fatigue risks. This inequity has been created despite the fact that airline pilots operate the same aircraft at the same time in the same airspace and to and from the same crowded airports, and that this discrepancy is based solely on the nature of the payload.

Just last month, the National Sleep Foundation's report on its 2012 'Sleep in America' poll vividly illustrated the risk posed by fatigue among transportation workers and the particular challenges that airline pilots face in delivering on their commitment to achieving the highest standards of safety. That poll is the latest evidence of the serious risk. ALPA respectfully urges the Administration to acknowledge that risk—and the compelling and conclusive science that preceded it—and bring cargo pilots under the new pilot fatigue rules. To that end, we ask this Committee to pursue an immediate legislative remedy to mandate that the new flight and duty regulations (FAR Part 117) apply to all-cargo operations. Your colleagues Representatives Chip Cravaack (R-MN) and Tim Bishop (D-NY) have introduced a bill to bring parity to cargo operations. The Safe Skies Act of 2012, HR 4350, simply directs DOT to ensure that flight/duty and rest requirements apply to all-cargo operations in the same manner as passenger carriers. This is a science-based, common-sense bill and we hope all members of this Committee will support it. Clearly, it was not Congress' intent when it passed the Aviation Safety and Federal Aviation Administration Extension Act to create different levels of safety. We urge this Committee to report out this bill expeditiously.

In spite of the shortcoming of cutting out cargo operations, the new pilot fatigue rule marks historic progress in what must be an unrelenting commitment to ensuring the highest safety standards throughout the airline industry. We commend the FAA for enacting the final rule. For decades, ALPA has fought for regulations that are based on modern science; apply equally to all types of airline operations, including domestic, international, and supplemental; and enable air carriers to establish Fatigue Risk Management Systems. ALPA is proud to have contributed to the effort to move forward on these critical safety provisions in our role as co-chair of the FAA's Aviation Rulemaking Committee, which made recommendations regarding this important rule, with the determined goal of advancing safety. While the new rule brings much-needed science-based improvements in flight and duty regulations, ALPA will continue to strongly advocate for One Level of Safety for all types of flight operations and across the airline industry.

Pilot Training and Development

Another key element of the Act is the recognition that the screening, selection, training, qualification and continued professional development of a pilot in air carrier service is a critical factor in maintaining the absolute highest levels of safety. The Act directed a number of activities, including the formation of several aviation rulemaking committees (ARCs). Those groups have done extensive work to identify industry best training practices and to develop recommendations for more rigorous selection and qualification criteria, improved training standards and means to ensure continuing professional development of airline pilots. ALPA's advocacy in these efforts has been consistent and universal across the activities specified in the Act. Almost all of the industry efforts directed by the Act have been completed, and FAA is in the process of evaluating the many recommendations made. To date, we note the publication of the aforementioned and long-awaited improvements to flight time, duty time and fatigue regulations, and rulemaking proposals for revisions of training standards and requirements for new first officers in airline service and for implementation of safety management systems at airlines. The remaining efforts identified in the legislation are not yet incorporated in proposed rulemaking. This means there remains a great deal of work yet to be done, and we urge the Administration to dedicate sufficient resources to ensure these vital efforts can continue without delay.

In particular, we note the potential, embodied in the Act, for significant improvements in the minimum qualifications necessary to become a professional airline pilot and in the standards to which pilots must be trained. As our industry has evolved, the complexity and sophistication of the aircraft, the airspace, and the operations have increased dramatically. Yet the pilot training and qualification regulations have failed to keep pace. The FAA has recently issued a Notice of Proposed Rulemaking that, when finalized, will represent a quantum leap in recognizing what ALPA has said for some time – that piloting an airline aircraft in revenue service is a demanding profession that requires the highest levels of training and certification.. In particular, those improvements include the following:

- Increasing the minimum flight experience necessary in order to be hired by a FAR 121 air carrier
- Establishing a restricted ATP that recognizes that quality of training is more important than total flight hours accumulated and gives appropriate level of credit to military trained pilots and graduates of aviation colleges and universities that have intense, structured, professional pilot-training programs
- Establishing ATP training programs tailored toward FAR 121 airline operations
- Establishing a requirement for SIC pilots to be type rated in the aircraft they operate to
 ensure that they demonstrate the same knowledge requirements and flying skills as the
 PIC for that aircraft.
- Establishing minimum experience requirements for pilots before they can move into the PIC position

New rules are needed because Federal Aviation Regulations (FAR) parts 61 and 121 have not kept pace with the dynamic airline industry. Many pilot training requirements currently in force were first published in an era in which common business practices, driven not by regulation but by the supply of pilots and equipment in use, dictated that low-time, commercial-certificated pilots could only get airline jobs flying small, slow, propeller-driven aircraft and as flight engineers on jet transports. Pilots would traditionally fly several years and thousands of hours before even being given an opportunity to upgrade to first officers on highperformance jet transports. Today, it is not uncommon for new-hire pilots to be employed as first officers of high-altitude, high-performance aircraft carrying 50 or more passengers in highly complex part 121 operations. This reality demands that airlines hire pilots with more knowledge and greater skills than the new-hire airline pilots of the past, but in fact, just the opposite is happening at some airlines. Due to economic pressures, some "regional" airlines actually seek out and hire the least experienced pilots meeting FAA minimum requirements because they are willing to accept the lowest compensation in order to build flight time and use that experience to progress to larger, more stable airlines. It must be noted that building this experience is done in unrestricted, revenue service.

It is also noteworthy that before code-sharing with regional partners began, all flying was done by the pilots of an airline on a single pilot-seniority list. This practice ensured that newly hired airline pilots — even those with thousands of hours of military or civilian flight time — had several years of airline operations experience before assuming the command responsibilities of an airline captain. However, as competitive cost concerns increased with the advent of post-deregulated start-up carriers, the "legacy" airlines began to outsource the flying to as many as a dozen new "regional" partners flying 30- to 50-seat propeller aircraft and 50- to 90-seat jets. The "legacy" airlines then began the practice of having their "partners" bid against each other to maintain these "fee for departure" outsourcing contracts. As the legacy airlines replaced more and more mainline flying by this outsourcing scheme to regional operators, they furloughed hundreds of highly experienced pilots, effectively replacing them with lower-paid and lower-experienced pilots.

The time has clearly come for these regulations to be updated to ensure that a high standard of aptitude, knowledge and training are met by anyone flying an aircraft in part 121 operations. One critical gap in this effort, however, needs to be addressed. New regulations—promulgated with the intent of ensuring relevant experience is obtained before pilots begin airline service—must not allow the unintended consequence of rendering an active airline pilot suddenly ineligible to continue his or her employment. Fairness and common sense dictate that attempts to ensure relevant experience should not inadvertently result in taking that experience out of the cockpit. New regulations must include a clear path for currently employed airline pilots to follow to continue to fly and be able to achieve full compliance with requirements imposed after their employment began.

As a result of PL 111-216, we have seen broader recognition of the value of professional development, command training and mentoring.

ALPA has long advocated these principles, and the ongoing industry activity to develop these programs, initiated as a result of the Act, must be supported in order to continue. As we have noted, our industry has changed dramatically since the era when many of today's training regulations were developed. That change has affected the training culture within airlines as well. The days of pilots being "seasoned" through years of experience under the tutelage of wise old Captains are gone. However, the need for the piloting skills developed in that manner remains, and the need for the pilot in command to in fact *be* in command has become more acute. The solution is to replace the mentoring, command training and professional development which once were a guaranteed by-product of business models and industry practices with formal mechanisms to address the means to develop these skills.

An airline captain must have skills far beyond simply being able to operate the aircraft from the captain's seat. The captain must be able to organize the efficient cooperative activity of all flight crew, cabin crew, and ground crew to ensure the safe planning and conduct of the flight from gate to gate. He or she must be able to maintain control of situations under adverse conditions and in the face of pressure to compromise standards in the interest of operational expediency. The need to maintain command authority has arguably increased due to the continuing decline in experience levels of other crewmembers.

PL 111-216 accurately identified the need for airlines to provide specific command training courses for new captains to instill in them the skills to lead on the flight deck. In addition to basic skills such as aeronautical decision making and crew resource management, new captains should receive training to reinforce effective communication, leadership, conflict resolution, and judgment necessary to properly lead a crew, exercise command authority, and maintain the highest levels of safety in the face of internal or external pressures.

The Act also points out the value of mentoring. Mentoring is a form of instructing in which seasoned pilots share their experiences to help newer pilots increase their proficiency. This activity does not take the place of any proficiency training, but supplements it. In many cases, this mentoring takes the form of captains mentoring first officers, but could also be an experienced first officer providing counsel to a new-hire on company policies, piloting technique, aircraft systems, etc. Much of this mentoring can be informal if an airline safety culture fosters the opportunity for pilots to interact away from the actual flight, but can and should also be formalized in the interest of transferring the maximum amount of knowledge across experience levels. This training must go beyond just written statements in the airline's manuals.

ALPA has long recognized the value of a formal Professional Standards function within an airline's pilot group, and in fact maintains such a formal organization at each ALPA-represented airline and as part of ALPA's Air Safety Organization at the national level. Such Professional Standards organizations, supported by both line pilots and airline management, are identified in the legislation as a critical component to enhancing safety.

The ARC that addressed mentoring, leadership and professional development has made its recommendations to the FAA that are aimed at strengthening this function, and that activity must not be allowed to stagnate. These are critical, cultural changes that will take time to fully implement and mature, so we must begin sooner rather than later to implement these enhancements.

Safety Management Systems and Hazard Identification

A safety management system (SMS), such as referred to in PL 111-216, has been described as "a comprehensive, process-oriented approach to managing safety throughout an organization." An SMS includes an organization-wide safety policy; formal methods for identifying hazards; controlling, and continually assessing risk; and promotion of a safety culture. SMS stresses not only compliance with technical standards but increased emphasis on the overall safety performance of the organization. ALPA has participated in numerous FAA activities related to developing and promoting SMS, including the SMS Pilot Project and the SMS Aviation Rulemaking Committee (ARC). We are encouraged that the FAA appears to be on schedule to comply with PL 111-216 and publish a final SMS rule this summer.

Use of SMS has been recognized by the International Civil Aviation Organization (ICAO) as an effective means to identify hazards and manage risk and to implement a non-punitive safety culture in an organization. SMS encourages all members of an organization to identify hazards and for that identification to be made without fear of retribution, even if the identified problem is that individuals' own error. This constant vigilance and the ability to capitalize on front-line employees to identify hazards and thus manage risk is a key element in attaining and maintaining the enviable safety record our industry enjoys today.

It is important to emphasize that this data collection extends to all employee groups in an organization, whether they are pilots, mechanics, flight attendants or any of the groups of professionals who ensure the safety of the airline. In the broader context of the aviation system, air traffic controllers have recently joined the partnership of employee groups with confidential, non-punitive safety reporting programs, the Air Traffic Safety Action Program (ATSAP). ATSAP has allowed the identification of a wide variety of safety issues in the air traffic control system, before these issues manifest themselves as significant safety concerns. In combination with the increased use of automated processes to analyze radar data and identify additional potential safety issues has led to a wealth of safety data never before available. From the pilot perspective, the air traffic control system remains incredibly safe, and we caution against drawing any particular conclusion from the numbers of events reported with these new processes in place. ALPA feels that it is important to analyze these new data in the updated context of increased reporting mechanisms and greater use of automation, establish baselines in this context, and evaluate the data for trends.

To continue that trend, and to preserve the ability to identify hazards that may be increasingly difficult to detect as we continue to improve the safety of our systems, a robust stream of high-

quality safety data must be maintained. Safeguarding the sources of those data, and preventing misuse of safety data from compromising the ability to identify hazards is vital.

Protection of Safety Data

Protection of safety data is an essential and critical element of any safety program, and especially of an SMS. Data must be gathered in sufficient depth and detail to support analysis of risk and implementation of corrective procedures, processes, etc. There are a variety of proven voluntary safety programs that can exist independently or be part of an SMS, such as the Aviation Safety Action Program (ASAP), Flight Operations Quality Assurance (FOQA), Advanced Qualification Program (AQP) and Line Oriented Safety Audits (LOSA). The emerging potential of a Fatigue Risk Management System (FRMS) would fall in this category as well. We must point out, however, that these programs rely to varying degrees on data provided by individuals that is provided voluntarily with an expectation that the reporter's forthrightness will be respected as an attempt to enhance safety. Thus the need to protect those data from being used for adverse action against such a reporter by airlines, regulators or the courts is critical to the survival of these safety programs. Processes in place to protect the data gathered through various need to be strengthened and expanded to provide proper protection for the data, both within and outside an organization. Legislation should be considered to further strengthen the protection of this vital source of safety information against misuse.

Information gathered through an anonymous, non-punitive employee reporting program must be protected against disclosure to anyone who is not authorized to view such safety reports. If sanctions are taken against an employee as a result of a safety report, that reporting program will lose participation. Much can be inferred about an organization's safety culture through their support for employee reporting programs. Failure to protect data in these programs will hinder future data-gathering efforts. ALPA has spoken often at a number of venues urging protection of this information to better assure data privacy and legal protections. Use of this information for any other than its intended purpose perverts an essential, much-needed safety system.

In conclusion, ALPA is proud to be part of the successful government-industry collaboration that has led us to the safest period in aviation history, but we reiterate that much remains to be done. ALPA stands ready to continue to assist in that effort, and we appreciate the opportunity to offer our views to the Subcommittee.