

STATEMENT OF  
CAPTAIN JOHN PRATER, PRESIDENT  
AIR LINE PILOTS ASSOCIATION, INTERNATIONAL  
BEFORE THE  
SUBCOMMITTEE ON AVIATION  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION  
UNITED STATES SENATE  
WASHINGTON, DC

June 17, 2009

“AVIATION SAFETY: THE ROLE AND RESPONSIBILITIES OF  
COMMERCIAL AIR CARRIERS AND EMPLOYEES”

Air Line Pilots Association, International  
1625 Massachusetts Avenue, NW  
Washington, DC 20036  
(202) 797-4033

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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 nearly 54,000 pilots who fly for 36 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 77 years, ALPA has had a tremendous impact on improving aviation safety. ALPA is a founding member of the International Federation of Air Line Pilots Associations (IFALPA) and the U.S. and Canada representative to the Federation which joins the pilots of over 100 nations together in safety and security harmonization efforts. Today, ALPA continues to be the world’s leading aviation safety advocate, protecting the safety and security 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: The Role and Responsibilities of Commercial Air Carriers and Employees.” We would like to begin our testimony by discussing crewmember fatigue.

**Crewmember Fatigue**

Fatigue may adversely affect every flight crewmember every time they fly. Due to airline economic conditions which require pilots to work longer days and more of them than ever before, fatigue has reached alarming levels within the industry. The FAA’s flight and duty time regulations are woefully inadequate to address today’s situation and have not significantly changed in over 60 years, since well before jet transports came into use in the late 1950s. The current U.S. flight and duty time rules are a patchwork of regulations that are intended to address disparate domestic, international flag, and supplemental operations. There have been a number of attempts to revise the regulations over the past 25 years, but those attempts have met with generally abysmal results

because of the contentious disagreement by the stakeholders as to which changes were appropriate or needed.

One fact about pilot fatigue that is not widely known is that airline pilots frequently spend much more time at work each day than the number of hours recorded actually flying an airplane. This is especially true in the regional industry although the work schedules at the so-called “legacy carriers” are by no means free of these same concerns. Currently, airline pilots are routinely assigned duty days of up to 15 hours. During a typical 14- to 15-hour duty day, a pilot can expect to be assigned fewer than 8 hours of flying but up to 8 individual take offs and landings, in various types of weather and across multiple time zones. The time not flying may be spent performing duties such as checking weather, dealing with routing, dispatch and flight paperwork, overseeing aircraft loading and unloading, dealing with mechanical issues, waiting on the ground between flights, and similar activities. Thus, although a pilot may have only flown 7 or fewer flight hours by the end of a duty day, he or she could easily have been on duty 14 or 15 hours. This work pattern may be repeated over a period of several days. The weight of the scientific evidence accumulated over the last 20 or so years has firmly established that the vast majority of humans simply cannot be expected to reliably and safely perform operational tasks beyond 12 to 14 hours on duty. It cannot be overstated that pilots are making their most critical decisions on landings at the very end of their duty day which, due to unplanned circumstances, can easily be 20 hours or more since their last rest period. It is worth noting in this context that most fatal accidents occur during the landing phase of flight.

The airlines are required to give pilots only an 8-hour break after any duty day, regardless of its length. Unfortunately, this 8-hour minimum break does not provide an adequate opportunity for recuperative sleep because the break is not an opportunity for 8 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 of sleep opportunity. This occurs because the FAA has defined all time away from the airplane (“release to report”) on a trip as “rest.” Incredible as it may seem, the time a pilot spends waiting for a hotel shuttle and 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 and nutritional needs and requirements during this 8-hour break away from the aircraft. It is not at all unusual for a pilot to elect to forego a meal so as not to further reduce their sleep opportunity. This situation is highly objectionable—sleep experts agree that most adults require 7 to 8 hours of sleep each night to meet their physiological needs and restore their alertness. Pilots need a longer, and genuine, daily rest period than is allowed under current regulations.

Another serious deficiency in current regulations is the failure to acknowledge circadian rhythms. Every human has an internal circadian cycle that determines sleep and wakefulness. Typical “circadian low” cycles (i.e., a period of reduced wakefulness and energy) will occur from approximately 3:00 to 5:00 a.m. and again from 3:00 to 5:00 p.m. Performance and alertness may be decreased during the nocturnal window, which is

from approximately 2 a.m. until 6 a.m., depending on individual variability. Flight and duty regulations need to acknowledge this cycle.

Because the FAA's present fatigue regulations are antiquated and outmoded, they have frequently been augmented by contractual work rules negotiated between pilots and their employers in the decades from 1960 to the mid 80's. Through the restructuring of pilot contracts in corporate bankruptcies (note: over 160 U.S. airlines have gone through bankruptcy since 1980) and the complete absence of negotiated work rule improvements at many carriers, there has been non-uniform treatment of flight duty and rest limitations at the various airlines, leaving only the antiquated Federal Aviation Regulations to govern maximum duty days and minimum rest periods for thousands of airline pilots. Further exacerbating the problem is the fact that pilot wage rates and pensions were slashed by more than 30% in corporate bankruptcies forcing pilots to accept even more flights or face their own financial crisis. Fatigue provisions are rarely found within any pilot contract, especially within a regional airline agreement. Of the regional contracts that do have such provisions, only one of which we are aware allows a pilot to recoup his or her lost pay. All contracts of which we are aware contain real threats of disciplinary action if the company determines that a pilot's claim of fatigue was fraudulent.

In recent times, there has been severe pressure on individual airlines to slash pilot staffing and reduce rest periods to minimum levels due to a belief that such actions would result in "productivity" increases necessary for economic survival. The demands for more monthly and yearly flight hours flown by fewer pilots has led to endemic fatigue levels, and with fewer pilots staffed on reserve or standby duty for weather disruptions, pilots are forced to fly more flights to the upper limits of the FARs or watch as scheduled flights are cancelled for lack of available rested crews. The fatigue cushion once provided by negotiated work rules has been virtually eliminated largely due to a single-minded focus by airline managements on minimizing the labor costs associated with flight operations. This elimination of the fatigue protections once provided by negotiated work rules that were developed over decades of experience at most established air carriers means that today, for more and more pilots, the bare minimum protections afforded by the FAA flight and rest regulations have become a daily way of life.

The current cumulative effects of reduced rest resulting from working to minimum FAA limits, combined with the effect of personal financial stress and uncertainty brought about by nearly eight years of severe economic downtimes in the industry, have taken a severe toll upon pilots. Many pilots feel that they are just hanging on to a barely tolerable job instead of pursuing a once-promising career. 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. In addition, regularly required training events are crammed on top of the monthly flight schedule often paying less than 3 hours of pay for 8 hours of training with none of that time counting towards the FAR flight time limits. The repeated attempts by airline managements in recent years to return U.S. airlines to an era of profitability by cutting labor costs continues to be paid for by the daily sacrifices and toil of airline pilots and other workers.

ALPA joins the National Transportation Safety Board (NTSB), which since 1990 has identified reducing accidents and incidents caused by human fatigue as one of its “Most Wanted Transportation Safety Improvements” in the United States, in calling for revisions to the current FAA regulations based on fatigue research, circadian rhythms, and sleep and rest requirements. The current FAA rules glaringly fail to adequately address any of these issues and reform is decades overdue. Other U.S. federal agencies have moved towards scientifically-based worker fatigue regulations; the FAA is simply lagging behind other agencies when it comes to the need to modernize its fatigue rules.

When addressing possible revisions to the current FAA flight duty and rest regulations applicable to pilots, 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 on notions of operational necessity without the assistance of scientists and technical advisors, or reference to the technical literature, has failed. Needed are rules which are grounded in the results of scientifically based fatigue studies and safety reports.

The International Civil Aviation Organization (ICAO) has enacted standards that will become effective in November 2009 which will require participating States to adopt rules limiting airline pilot duty periods that are based on science. The United States’ airline pilot fatigue rules currently do not meet this new international standard and the FAA will be under pressure to comply. In Europe, new regulations governing airline pilot flight time limitations were enacted in 2008. While implementation of these new regulations in individual European Union member States is an ongoing process, the design and implementation of scientifically-based airline pilot fatigue rules has been underway in Europe for some time. For example, the United Kingdom has for years had science-based airline pilot flight and duty time regulations. The U.K.’s rules, embodied in Civil Aviation Authority document CAP 371, account for human circadian rhythms and adjust maximum pilot duty periods based on time of day, number of flight legs, time zones crossed, acclimatization to local time and other factors. Under these scientifically-based rules, if a pilot who is normally awake during the day and asleep at night reports for duty during the middle of the night, he or she is simply not permitted to work as long as if he or she reported during normal daylight hours. The current FAA rules incorporate none of these modern, scientifically-justified fatigue protections.

Pilots performing commercial flying duties must have regulatory safeguards which provide them with an opportunity to get an adequate night of sleep before each duty day of flying. In some cases, pilots may lack access to adequate rest facilities to obtain needed recuperative sleep in order to prepare to safely operate the next flight or series of flights. Unfortunately, the combination of duty periods and personal or industry economic circumstances may in some cases operate to deny a pilot a realistic opportunity to obtain facilities for needed rest. Ensuring that a meaningful opportunity for rest is provided 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 essential to ensure that the U.S. air transportation system continues its envied record of safety. We believe it is 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 airlines to serve the needs of the public.

To that end, we were pleased the Commerce Committee included a provision in S. 1300 to arrange for a study by the National Academy of Sciences on pilot fatigue which will examine recommendations made by the NTSB and the National Aeronautics and Space Administration (NASA) on this subject, and provide recommendations concerning the FAA’s flight and duty regulations. ALPA stands ready to work with regulators and the industry to develop science-based rules that will adequately address the problem of fatigue.

### **Fatigue Risk Management Systems**

A fatigue risk management system (FRMS) is a science-based, data-driven process used to continuously monitor and manage fatigue risks. An FRMS is intended to be implemented within an airline’s safety management system (SMS) to allow operational efficiency for unique and specific operations when needed while also mitigating fatigue-inducing factors. An FRMS offers an effective, alternative means of evaluating and managing risk when compared to a purely prescriptive scheme but it is intended to be built upon – and create synergy with – defined, prescriptive flight and duty time regulations. I would invite the committee to review ALPA’s white paper on FRMS, published in June 2008, for additional information on this subject.

Revised regulations must provide guidance based on science that accounts for start and stop times related to crew circadian rhythms, the number of takeoffs and landings related to crew duty days, and any time zones that must be crossed. Science-based regulations, coupled with an FRMS, can allow some flexibility in unusual flight operational situations.

Since fatigue is such a critical factor in daily airline operations, ALPA published *The Airline Pilots’ Guide to Fighting Fatigue* in October 2008. This booklet may be carried by crews and provides guidance to understanding and dealing with fatigue.

Understanding and mitigating fatigue is extremely important and assists crews in flying in as rested a state as possible, given the inadequate regulations governing the tempo of operations. We are presently updating this document to give pilots guidance on “responsible commuting.”

### **Airline Training Programs**

Most airlines, which include many of the major or “legacy” carriers and the larger, “mature,” regional airlines, do an outstanding job of hiring and training pilots. They normally require significant flight experience including substantial amounts of multi-

engine and turbojet time. However, some smaller regional airlines which may have very thin profit margins due to the economics of the contract between them and their major airline, have traditionally not offered compensation packages which enable them to hire experienced pilots. As a result, they must often employ pilots with little experience and bare minimum qualifications who are willing to take these low-paying positions in exchange for an opportunity to build experience so that they can move to a career airline.

Some airline training programs, including those at mature regional airlines, are extensive and exceed the regulatory minimums. When pilot experience at the new-hire level dropped severely below 1,000 hours, or less than a year's worth of total flight experience, these airlines wisely extended their training process and doubled the initial operating experience (IOE) program requirement for these pilots. However, this cannot be said for all airlines.

Economic pressures push some airlines to train to the minimum requirements set by regulations. These minimums were established decades ago and were based on pilots coming into the airlines with much more experience than many pilots have today. Experience allows pilots to broaden their approach to problem solving and decision-making above the technical proficiency needed to fly the aircraft. It allows for the recognition of outside patterns and trends that develop during the course of routine flights and permits crewmembers to accomplish tasks specific to their cockpit position as well as be aware of the tasks being performed by other crewmembers. Experienced pilots tend to identify more pertinent clues and generate more alternatives in problem solving and decision making than inexperienced pilots

ALPA believes the licensing and training methodologies used successfully in the past may not work where airline pilots entering airline operations do not have the background or experience that previous generations of incoming airline pilots possessed. In meeting this challenge, the airlines and other training providers must develop methodologies to "train experience" that in the past was acquired in the traditional maturation and progression to becoming an airline pilot. This training should include extensive and detailed academic courses of learning taught in classrooms by well-qualified instructors.

### **Screening**

Few, if any, airlines tailor their training programs based on their new hires' past flying experience. The airline industry has seen significant changes – some of which involve pilot demographics – that have not been reflected in our training practices. For example, there are considerably fewer former military pilots in the airline ranks than in years past. The military services extensively screen their candidates, who are generally required to have a four-year college degree, before being accepted into pilot training. Once accepted, military training provides intense and rigorous classroom academic instruction as well as in-depth flight instruction that takes over one year. Additionally, pilots today coming from non-military backgrounds often do not have the challenging experience of their predecessors on which to build – e.g. flying corporate, night freight, or flight instructing - before being hired at entry-level, or regional air carriers. These demographic changes

require a new focus on standardization and professionalism training and even some fundamental flying skills. The previous training programs based on the assumption of more experienced pilot candidates will not be sufficient; “one-size-fits-all” training is ill suited to the task.

The financial commitment of training and the historical time commitment to build experience to qualify to be hired by an airline through the civilian route and the considerable time and sacrifices needed to serve in the military acted as a screening process to eliminate those only marginally interested in becoming an airline pilot. However, with new pilots being hired with as little as 200 hours total flight time (much of which could have been in a simulator) and fewer military pilots seeking airline jobs, this *de facto* screening process that helped ensure only the highest performing people make it to the airlines is no longer effective. Today, many regional airlines do nothing to discourage their experienced pilots from quitting so as to hire lower-paid replacements.

Flight experience and pilot capabilities cannot be measured by mere flight hours. Airlines used to have an extensive screening process that included psychological tests, academic knowledge tests, simulator flying skill evaluations and medical conditioning exams. As the number of pilot applicants declines and airlines become more desperate to fill the positions, these screening processes have been reduced and some elements completely eliminated.

Airlines need to reestablish thorough screening processes, or their equivalent, to ensure that the applicants they hire will be able to maintain an equivalent or better level of safety, professionalism and performance than their predecessors. Flight schools need to implement extensive screening processes for students pursuing a professional pilot career. Regulators need to provide the oversight to ensure that these screening tools are implemented effectively by the airlines and flight training organizations, as well as modify pilot qualification regulations to include much more rigorous education and testing requirements in order to provide a screening process that begins prior to initial pilot certification and continues at the airlines.

### **Command and Leadership Training**

The FAA does not currently require command training for pilots who upgrade to captain. The agency does require that an applicant for an airline transport pilot certificate have knowledge of aeronautical decision making and judgment, as well as crew resource management, to include crew communication and coordination. We do not consider these requirements to rise to the level of command training. The difference between the two approaches is a focus on knowing what to do versus knowing how to do it. Training in decision making, for example, might emphasize all the things that a pilot must investigate in order to make a sound decision, but might not provide strategies for how to stick to that good decision in the face of pressure from outside entities to compromise.

The role of captain includes far more than the ability to fly the aircraft from the left seat and perform the checklists. Some airlines have courses for teaching prospective captains

how to lead a crew, exercise command authority, take charge of a situation, and so forth, all of which are critical safety skills that must be learned. They are not simply inherent to being the one “in charge.” Specific training should include emphasis on setting the tone for compliance by adhering to standardized procedures. Other topics that should be trained include reinforcing the skills, aptitude, and character necessary to lead fellow crewmembers (informally or otherwise) in compliance with procedures.

### **Need for Stronger Academic Emphasis**

The Joint Aviation Authority (JAA), now the European Aviation Safety Agency (EASA), and FAA pilot licensing requirements are both ICAO-compliant. The single biggest difference between EASA and FAA is knowledge requirements. The FAA theoretical knowledge is simply not as demanding as EASA, which has 14 written exams versus one by the FAA, which is a multiple-choice exam. The EASA exams require the student to be tested for 30-40 hours. By stark contrast, the FAA publishes its exam questions with answers provided so a student can purchase them, study the questions, and pass its single exam. Examination questions are not available for EASA exams in such a manner.

The least demanding Federal Aviation Regulations which govern commercial pilot license requirements (i.e., §61.125 and §61.155) specify the aeronautical knowledge requirements for commercial and airline transport pilot ratings. These rules were written decades ago, when there was no expectation that they would be used as minimum standards to train pilots to take jobs as airline first officers. The requirements emphasize weather and navigation, including interaction with air traffic control. There is some mention of aircraft aerodynamics and human factors, including aeronautical decision making and judgment as well as crew resource management. The regulations allow self-study and many such training courses emphasize passing the test rather than learning the material. We do not feel these requirements are adequate to prepare a professional airline pilot. The ground instruction of these subjects needs to be strengthened with required formal classroom academic instruction and more extensive testing and examination.

The EASA-approved training course for a commercial airline pilot tends to be rather structured and rigorous. FAA should develop and implement a corollary ground school and testing process in FAR Part 121 for all pilots who seek commercial airline careers. Testing akin to the quality of the Certified Public Accountant (CPA) exams or bar exam for attorneys would benefit aviation by serving as a screening tool to ensure that, in the future, only the most knowledgeable and dedicated pilots join the ranks of airline pilots.

### **Airline Relationships**

The past several years have been very turbulent ones for the major, legacy airlines which have experienced numerous bankruptcies and changing operations. Rather than using their own pilots on the mainline seniority list to fly the 50- to 90-seat jet aircraft or modern 76-seat turboprop aircraft into midsize and smaller cities in the U.S., Canada and Mexico, they have established economic relationships with regional airlines to provide this service and feed the major carriers through their hub cities. The major carriers exert a

great deal of economic, and other pressures on the regional airlines to provide their service at the lowest possible price. The major carrier controls all aspects of ticket pricing and schedules and regularly moves flying between their regional partners, which forces major changes of pilot domiciles among the regional carriers. An operational and safety relationship providing surveillance and oversight of regional airline operations must be required and maintained by those major carriers who either own or contractually use regional airlines. Even with these relationships, there is no guarantee that “One Level of Safety” will be provided by the dependent carriers. Safety comes not just from oversight from an outside airline or organization but is an intrinsic value built into an airline from the highest levels of internal management. Given operational criteria and guidance, this value must be recognized and nurtured to realize true safety in operations. ALPA’s endeavors to establish One Level of Safety and contract standards have been rebuffed by the managements of some mainline and regional carriers.

Before the practice of codesharing with regional partners began, ALL flying was done by the pilots of an airline on one, single pilot seniority list. This practice ensured that several years of airline operations experience for newly hired airline pilots -- even those with military or thousands of hours of previous civilian flight time -- was earned before assuming the command responsibilities of an airline captain. The pilots of the name brand airline were trained and met the same high standards, whether they flew 70-seat DC-9’s or 400-seat B-747’s, or they were not promoted to be an airline captain. The pilots that once flew for such regional airlines (which were in the 70’s and 80’s referred to as “national carriers”) as Ozark, Southern, North Central, Hughes AirWest, AirCal, Allegheny, Piedmont, PSA, and Frontier, held career jobs at those carriers. They flew 40-50 seat propeller-powered aircraft and 70- to 100-seat jet aircraft. They had good jobs with pensions, work rules, and wages that made them career destinations. Those pilots were not just trying to gain experience to get a job with a major airline. Their pilot seniority list operated to guarantee stability and years of cockpit experience before assuming command. The merger mania of the 80’s saw those carriers swept into the major or legacy airlines.

Then, as competitive cost concerns increased with the post-deregulated upstart carriers, the legacy airlines began to outsource the flying to as many as a dozen new “regional” partners flying 30- to 50-seat props and 50- to 90-seat jets. The name brand airline 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, and refused to allow these experienced pilots to fly for the contractor carrier, effectively replacing them with lower paid and lower experienced pilots.

With this overriding concern on lowering costs by the legacy carrier, the stable and experienced regional partners were whipsawed against each other and forced to continually lower their costs to today’s substandard levels or be replaced by another newly created contractor. This system of replacing one regional with another has created unprecedented, rapid growth at a few low-cost regionals where newly hired pilots are

upgraded to Captain with less than one year of air line flying experience. A copilot seeking to upgrade to captain with the minimum of 1,500 total hours has not been through several years of thunderstorms and winter storms despite the fact that they meet the FAA minimums. He or she has not flown with hundreds of other Captains nor been through several years of annual training and checking events. Before this unconscionable focus on outsourcing mania began, most airline pilots would have 10 or more years of airline experience as a co-pilot before qualifying for command.

The legacy airlines grant these outsourcing contracts to the regional carriers for short periods from 2 to 7 years so that higher costs and their experienced pilots can once again be replaced by new airlines with new pilots. Today, even though the “regional” carriers are flying up to 40% of the US airline domestic system, few of the regional airline pilot jobs created by the outsourcing schemes are worthy of an experienced aviator career. The duties and responsibility of a captain and a co-pilot flying 30 to 100 passengers for a regional partner airline is just as important to their passengers as a Captain flying a B-777 or Airbus 330 for a legacy carrier. In a further example of this safety compromising business practice, the legacy airline, will oftentimes during growth periods refuse to hire the experienced “regional” pilot from one of their fully owned or contract partners to become a co-pilot on a 100-120 seat mainline airplane. However, that same pilot may be a captain flying a complex jet aircraft with 70 passengers on 5 or 6 flights per day in the service of the codeshare, mainline airline which sold the ticket to the passengers. This cycle of outsourcing with very little oversight by the ticket-selling carrier has created a very unstable environment which has broken the One Level of Safety mandate.

The NTSB has performed several safety studies of the regional, air taxi, and air carrier industry. As a result of those studies, the Board called upon major airlines and their code-sharing partners to establish a program of operational oversight that would include periodic safety audits of flight operations, training programs, and maintenance and inspection as well as emphasize the exchange of information and resources that will enhance the safety of flight operations. The Board believes that there may be large differences between code-sharing partners in terms of the knowledge, expertise, and other resources for assuring safe operations. They noted that this is particularly true when a code-sharing carrier uses the brand identity name and paint scheme of the larger carrier. Passengers have no choice but to fly on the code-share carriers even though they purchased their ticket from the major carrier and deserve the same level of operational oversight, control and service, which the code-share partner may not be able to deliver.

The regional airlines, in their own cost-saving measures, have gone to extraordinary lengths to provide their product at the lowest possible price. As an example, Trans States Holdings, which operates Trans States Airlines, established a second subsidiary airline, GoJet Airlines, which operates United Express flights from United Airlines hubs at Chicago O’Hare, Denver, and Washington Dulles airports flying Bombardier CRJ700 Regional Jets. A passenger buying a ticket on United Airlines may very well, unwittingly, end up on a GoJet flight. As a new airline, GoJet can abrogate prior relationships their parent airline may have with service providers to provide cheap airline seats for their code share partner.

Another example of this type of cost pressure can be seen at Midwest Airlines which has outsourced over 75% of its flying to regional partners. They have laid off 75% of their experienced pilots and replaced them by contracting with Republic and Skywest Airlines. Midwest Airlines refuses to train their long-time pilots in the new smaller jet aircraft. This has the effect of the Midwest pilots with over 15 years of airline experience being replaced by pilots with less than three years experience in a blatant disregard for the value of its own employees. Economics of outsourcing to cheaper contractors has clearly trumped the safety value of maintaining experience in the cockpit.

Pilots flying for airlines like GoJet, Gulfstream, Colgan and others are at the bottom of the economic scale with starting salaries below \$20,000 per year. In many cases, pilots have accumulated extraordinary costs just to earn the basic FAA licenses of commercial, instrument and multi-engine ratings. A 4-year flight education at a college or university can cost from \$120,000 to \$180,000, or more. It is difficult to repay these expenses and maintain any sort of reasonable lifestyle on the starting pay of a regional pilot. So these jobs frequently end up as a stepping stone to a major carrier, an opportunity to build valuable flight time before moving on to a more lucrative job with a major carrier. In fact, some airlines publicly call themselves “stepping stones” without reservation, as could be heard in a recent NTSB public hearing. This type of relationship effectively represents a disincentive to provide more than the bare minimum training or to provide any motivation for experienced employees to remain. Typical wage differences between major and regional carriers can be as much as \$70,000 for a Captain and \$50,000 for a first officer at 5 years of service. The differentials increase dramatically the longer the pilot is employed.

When an economic downturn comes, operations contract, major airlines park their airplanes, and employees are furloughed. These furloughed employees will generally not take the jobs in the regional industry; they have other skills to market. It is a telling factor that as pilots were called back from furloughs following the 9-11 downturn, a majority chose not to return even to the major airlines; they found other jobs, many times in an entirely different industry, or returned to full-time military service. In today’s economic and outsourcing business practices, pilots with decades of experience are laid off from the legacy airlines and cannot afford to work for one of the regional partner airlines as a newly hired first officer. Their experience is not given any value for employment at the legacy carrier’s code share partners and they are faced with starting over as a first officer for less than \$20,000 per year.

In today’s airline industry, the legacy major airlines have farmed out the flying to the lowest regional bidder while rejecting any attempts to retain their experienced pilots within their extended airline systems.

Retirement benefits have also been reduced within the regional industry. Managements have refused to grant sufficient improvements for retirement benefits due to, among other reasons, the (assumed) belief that the pilot will not be there long anyway. However, as we have seen, the overall longevity of pilots staying at the regional level has increased as

the economic outlook has changed. Major carriers have reduced their overall capacity steadily in recent years, and at the same time reduced their pilot headcount. When combined with the increase in retirement age to 65, the regional pilot may have little choice but to maintain employment at a carrier that offers lower wages, with lower health and retirement benefits and far less in quality of life.

### **Commuting Pilots**

Aviation is a turbulent industry; numerous cost and operational pressures occur daily. Airlines frequently make adjustments to their fleets' size and geographical distribution. Crew bases open, close, or change, sometimes with little or no notice to employees stationed there. An airline that services a city or town with a Bombardier CRJ700 jet today may serve it with an ATR-42 turboprop tomorrow and next week, service may cease entirely. As these operational decisions are made, crew bases move, change, or close. A CRJ base may become an ATR-42 base and the CRJ base may move to a different part of the country. When companies make such changes, the pilots involved may have several alternatives. They can move to the new base where CRJs are being flown, they can remain where they live and commute to the new base, or, if permitted by their employer, they can be trained in the new airplane now being flown out of their old base, which may require a large pay cut. Any of these can be very disruptive for the pilots and in turn, their families.

A pilot may want to stay on the CRJ, for example, but cannot or does not want to move to the new base. Any number of factors can influence that decision, including children in school, relationships with friends, or housing costs. For instance, the cost of living in Des Moines, Iowa is considerably less than the cost of living near JFK in New York. Thus, the pilot is more likely to maintain his home in Des Moines and commute to work, reducing his days off, his free time and his overall lifestyle. That decision to stay on the CRJ will necessitate commuting to the new base. The pilot may share or lease an apartment, plan to stay with friends, or use a hotel for accommodations in the new base. Generally, economic factors determine the course of action, but the basic problem of a relocated crew base is out of the pilot's control; it is forced by the industry and pilots cope as best they can. Most regional carriers, while they offer some expenses towards the moving of displaced crewmembers, offer little if anything to voluntary moves. The difference between voluntary and displaced movement is often a blurred line between having a job and losing a job. However in today's circumstances, even the limited monetary help a regional carrier may provide does not cover the costs of moving a family many times over a pilot's career.

Commuting has a number of complicating factors, which include:

- employer's sick leave and attendance-reliability policies
- very few seats are available for pilots forced to commute on today's full airplanes,
- airline policies which prohibit positive-space transportation,
- inadequate or non-existent relocation provisions, and
- commuting policies which require pilots to depart home base with several backup flights.

This difficult reality adds to the creation of stress and further increases pilot fatigue factors. ALPA encourages airline managements to work with their pilots to establish new or improved commuting policies and scheduling practices that take into account these lifestyle issues.

### **Safety Data and Reporting Programs**

What should be done to make improvements now while we are implementing the previously discussed changes in training and qualifications? There are programs available to the aviation industry today, such as Flight Operations Quality Assurance (FOQA) and Aviation Safety Action Program (ASAP), that can provide important and needed oversight information, not only internally within air carriers, but also for the overall air transportation system. The safety data provided by these programs are making differences in safety and efficiency of air carrier operations. Approximately 90 percent of the data provided through ASAP is sole-source data. This is safety data that will not and cannot be gathered by other means and it can be critical and essential to improve the safety performance of our industry.

Safety Management Systems (SMS) are mandated by ICAO standards. SMS programs are being developed for use by U.S. aviation entities. Safety reporting and safety data are intrinsic in SMS programs and ASAP and FOQA should be an integral part of any SMS.

In order to make the data more readily obtained and available for safety improvements only, protections need to be put in place that will limit the data use in civil liability cases. Restraints also need to be strengthened for the use of the data for safety purposes only. The data has an important safety benefit and it must not be compromised. Unless there are improved protections that will limit the use of the data to solely safety purposes, the flow of reports will cease. These programs are a critical safety benefit for the industry that need to be nurtured, protected, and promoted at all levels of the air carrier industry.

### **Promoting Professionalism in the Industry**

The best safety device on any airplane is a well trained, well rested, highly motivated pilot. A safety culture at an airline must be instilled and consistently reinforced from the highest levels within the organization. An organizational safety culture will encourage the highest levels of performance among professional pilots.

This high level emphasis must go hand-in-hand with appropriate training. Standard operating procedures must be just that; they should be the operating norm for all flight crewmembers and deviations should not be allowed except for extraordinary circumstances. Pilots-in-command should be encouraged to mentor their first officers and instill in them the desire to maintain the highest standards of operational safety.

ALPA offers professional standards programs and structure which reinforce professional conduct in the cockpit. Similarly, airlines need to provide special command training

courses for new captains to instill in them the necessary traits to be a real leader on the flight deck. In addition to basic required skills such as aeronautical decision making and crew resource management, new captains should receive training to reinforce the skills, aptitudes, and character necessary to properly lead a crew, exercise command authority, and maintain the highest levels of safety in the face of internal or external pressures that may tend to lower operational safety margins.

In the case of the Colgan Air accident, the pilot group was new to ALPA, and unfortunately the professional standards structure was just being established.

### **Mentoring Programs**

In addition to promoting professional conduct among crewmembers, at least one airline whose pilots ALPA represents has a detailed, structured, pilot-mentoring program. This program provides a wide variety of resources and benefits to new-hire crewmembers as they become acquainted with their airline and becoming an airline pilot. The program pairs experienced line pilots with new hire pilots in an effort to answer many of the frequently asked questions, such as bidding, jump seat travel, vacation, etc., from new hires. Pilot mentors also assist new hires as they transition from the training environment to flying the line, and throughout their first, probationary year. There is also another aspect of the program that assigns a senior captain or check airman to newly upgraded captains once they are online and out on their own. This greatly assists new captains as they become accustomed to requirements for command.

### **Call to Action**

On Monday, June 15, 2009, the FAA held a meeting, a “Call to Action”, for industry and FAA to identify a few key initiatives that can be incorporated voluntarily by operators. The subjects discussed included many of the very issues we are discussing here; crew education, professional standards and flight discipline, training standards, and mentoring. This was an important first step toward recognizing and acknowledging problems and developing and implementing solutions. We stand ready and look forward to future meetings so we can truly and thoroughly address airline safety issues and make real progress toward realizing One Level of Safety.

### **Conclusions and Recommendations**

In conclusion, ALPA believes that it is essential, and long overdue, that the flight and duty time rules for commercial aviation operations be revised based on readily available science. Issues that must be addressed include providing crewmembers a minimum rest period that will allow an opportunity for 8 hours of sleep, and there should be provisions for operations on the back side of a pilot’s circadian rhythms. Additionally, a pilot’s duty day length should be based on when the day begins and how many flight segments are scheduled.

In regard to training, we feel there should be more stringent academic requirements in FAR Part 121 to obtain both commercial and airline transport pilot ratings. Airlines should provide specific command training courses for new captains to instill in them the necessary skills and traits to be a real leader on the flight deck. Airlines should also implement mentoring programs for both captains and first officers as they first enter operations in their crew position to help them become comfortable and reinforce the knowledge and skills learned in training and apply them to line operations.

Airline training needs to account for the source of their pilots and assume the minimum experience level. There should be structured, in-depth oversight of code-share partners by the major carriers to include periodic safety audits of flight operations, training programs, and maintenance and inspection. The best practices in use by major carriers need to be mentored into their smaller code share partners.

Safety data provided through important data sharing programs such as FOQA and ASAP needs to be vigorously protected from inappropriate use and preserved for the sole purpose of improving safety and operational efficiency. Further, these programs need to be promoted at all levels of the industry.

Finally, airline managements and their pilots should work closely together to promote policies and practices that instill a strong safety culture throughout the organization; reinforce the importance of professionalism in all aspects of operations; and recognize the value of well trained, well rested, and highly motivated employees.

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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