

THE STATUS OF THE AIR TRAFFIC CONTROLLER WORKFORCE

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BEFORE THE
SUBCOMMITTEE ON
AVIATION
OF THE
COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES
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THE STATUS OF THE AIR TRAFFIC CONTROLLER WORKFORCE

Tuesday, June 15, 2004

HOUSE OF REPRESENTATIVES, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON AVIATION, WASHINGTON, D.C.

The subcommittee met, pursuant to notice, at 10:30 a.m. in room 2167, Rayburn House Office Building, Hon. John L. Mica [chairman of the subcommittee] presiding.

Mr. MICA. I would like to call the Aviation Subcommittee to order.

Good morning and welcome to this morning's hearing relating to the status of our Nation's air traffic control workforce. We will go ahead and get started. I expect the Ranking Member to join us.

The order of business for today's hearing will be opening statements first by members and I will recognize those who have comments to begin the hearing. The second part of the hearing after that will deal with two panels of witnesses. We have some from the Administration and some from the private sector, an association and a university.

We are expecting votes shortly and we want to go ahead and get started. I will start with this opening comment.

The world's safest and most reliable air traffic control system is in great danger. However, that looming threat is not terrorists or rogue actions but rather, the mass retirement of its aging workforce. President Reagan, who we mourned last week, fired some 12,000 striking air traffic controllers 23 years ago and now their replacements are retiring in great numbers. Not since the 1981 PATCO strike has the Federal Aviation Administration been faced with such a formidable task and that task today is in hiring large numbers of air traffic controllers.

By the FAA's own estimates, nearly half of its 15,000 air traffic controllers, some 7,100, could retire over the next nine years. By comparison, over the past eight years, we lost only 2,100 air traffic controllers. The Federal Aviation Administration clearly has a significant challenge in addressing this so-called bubble of retirements that are expected to increase sharply beginning just a few years from now.

In June 2002, the General Accounting Office and as recently as a few weeks ago, the Department of Transportation, Office of Inspector General, conducted reviews and audits regarding the FAA's air traffic control workforce. Both of these agencies have made recommendations to improve upon the FAA's process for better determining the skill sets and numbers of controllers retiring and the

facilities that are impacted. We look forward to hearing these two agencies' observations and recommendations.

Let me also acknowledge and thank Administrator Marion Blakey for being with us today. I know from previous conversations with the Administrator that she is diligently working to address this issue. We also will hear from Ruth Marlin with the National Air Traffic Controllers Association; Dr. George Ebbs, President, Embry-Riddle Aeronautical University from Daytona Beach, Florida.

Because it takes years to train and gain the experience and skills needed to be a proficient air traffic controller, we must act now to keep our system from being crippled in the near future. We must also establish a seamless hiring and training process for our air traffic controllers and use the most efficient and cost effective methods available to achieve that goal. Under today's ever tightening budget constraints, we must explore ways of doing things that not only bring efficiencies and cost savings to this process, but also ensures that safety is never compromised.

This matter is of serious interest not only to the entire subcommittee but certainly has the attention and support of the full Transportation and Infrastructure Committee Chairman, Mr. Young. It is also important to the Professional Air Waves Systems Specialists, the National Association of Air Traffic Control Specialists, the National Air Traffic Controllers Association and members of various groups that represent some of our air traffic controllers and all of us here today and the traveling public as well.

With those opening statements, I am pleased to recognize the Ranking Member of the subcommittee, Mr. DeFazio.

Mr. DEFazio. Thank you, Mr. Chairman, for calling this hearing to track the progress of the FAA in implementing the mandate of Congress in Vision 100 that they develop a plan to fill the projected vacancies that will become a hemorrhage of air traffic controllers in 2007. This is a legacy of the firing of the PATCO controllers by Ronald Reagan. What we did was scramble around for some time and finally managed to train a new group of controllers but they are all going to be reaching retirement age in 2005 since so many were hired at once because of the mass firing.

I am hoping to hear today from the Administrator about concrete plans and proposals. There is going to have to be a strong push by the Administration because our colleagues here, for instance, have arbitrarily capped the number of screening personnel available to TSA causing catastrophic lines at certain airports with the full support of the Administration. I fear they are headed down the same path with air traffic controllers and I am not quite certain what they think they are going to do three or five years from now.

There was a \$14 million request last year which did recognize at least some effort on the part of the Administration but the Appropriations Committee zeroed out that request and now this year there is no additional request by the Administration. So I am not certain how it is we are going to resolve the issue of a shortfall of up to half of our workforce five years from today or even three to four years from today when it takes three to five years to train them, if we aren't hiring replacements now and training them especially since a good deal of it is on the job training.

I approach this hearing with a good deal of interest and hope the mystery of how this is all going to be resolved will be resolved and laid out for us today by the Administrator.

Thank you, Mr. Chairman.

Mr. MICA. Additional opening statements? Mr. Hayes?

Mr. HAYES. Thank you, Mr. Chairman.

I appreciate everyone being here today.

I have a couple thoughts. I am a particular advocate for, fan of and supporter of our air traffic control system and appreciate what the folks do. I want to make sure we have an environment that will attract the best and brightest and encourage the FAA and this committee and the Congress to hire the necessary folks so that we don't have the shortfall.

I do have a slightly different view from my friend, Mr. DeFazio, on what happened. As I recall, there as an illegal strike that resulted in a mass firing, the point being not which of us is right or wrong but we want to be sure that we avoid the kind of situation, and I don't have that much memory, that resulted in both of those actions. Safety, safety, safety. These controllers do a great job. I talked to them as recently as yesterday afternoon.

Ms. Blakey, I have found you to be extremely attentive, very helpful and most gracious in your willingness to listen to us and others, so I am very optimistic that the professionals we have in the system will help us find ways to attract the folks we need.

Again, Mr. Chairman, I thank you for holding this hearing and look forward to working through this and coming out with safety on the other end of the tunnel.

Mr. MICA. Thank the gentleman.

Ms. Johnson.

Ms. JOHNSON. Thank you very much, Mr. Chairman and our ranking leadership. Your leadership in this important matter is to be commended and I welcome our witnesses this morning.

Our Nation's aviation system is vital to our economy and way of life and we cannot afford to short change either one. The future success of our Nation's aviation industry is greatly dependent upon our investment today. Adequate investment in equipment modernization in addition to recruitment and retention of capable aviation personnel and critical components in ensuring our air safety and efficiency for many years to come.

Success in the aviation equation will only be as good as the sum of the parts. Our Nation's 15,000 air traffic control specialists serve as a vital component to this equation. However, based on estimates from the FAA as well as DOT Inspector General, over half of the controller workforce could retire over the next nine years. FAA further estimates that 25.5 percent of controllers eligible to retire will leave in the first year of eligibility resulting in increased workload for the remaining personnel.

I have heard firsthand from air traffic controllers that service the multiple airports within my congressional district and one of their primary concerns next to keeping air traffic control out of the hands of privatization centers on the possible vacuum created by the retirement crunch. Further, as evidenced by the 2002 GAO report, FAA regional officials who are responsible for ensuring that FAA's air traffic facilities are adequately staffed are equally con-

cerned about FAA's replacement hiring policies. According to the report, eight of nine regional officials would like FAA to allow them to hire new controller staff so that experienced, fully qualified controllers will be ready when current controllers retire.

The report also cites that several regions stated they had made formal or informal requests to FAA headquarters to obtain additional controllers who could be hired and trained in advance of future requirements. In May 2001, officials from the Southwest region of FAA, the region which encompasses my congressional district, formally requested 48 additional staff members to ensure that quality customer service is maintained, budgetary concerns are addressed and controller attrition is dealt with.

Unfortunately, in April 2002, FAA denied the region's request citing operational constraints. Passenger travel on commercial airlines is expected to reach 1 billion by 2014 and a lack of experienced controllers is going to have many negative consequences. Reactionary policies regarding this matter are not an option. We must begin to address this issue head on. America's flying public expects and deserves nothing less.

Again, I welcome our witnesses and look forward to hearing from them on this very important subject matter.

Thank you, Mr. Chairman.

Mr. MICA. Thank the gentlelady.

Mr. Porter.

Mr. PORTER. Thank you, Mr. Chairman, and I appreciate your calling the hearing today, and my fellow colleagues who have also urged this hearing on a very important and urgent situation facing our air traffic control workforce.

Ms. Blakey, I also would commend you for being willing to find solutions to problems and appreciate your help this year and look forward to working with you on this problem that we are addressing today.

There is a lot of dedicated professional controllers at McCarran Tower in Las Vegas. The TRACON and those folks in the tower are the local experts and we depend upon them in the community to provide that safe traveling experience through McCarran with over 30 million visitors a year in the Las Vegas area.

I personally had the opportunity to tour the tower and TRACON folks and must commend them for the hard work they perform and also their expertise. I would urge my colleagues to also visit their local towers if at all possible.

As mentioned earlier this morning, America is facing a crisis in the supply of new controllers with the retirement of generations of controllers hired after the strike of 1981. The FAA needs to take action now to begin hiring the trainees to become professional controllers because it takes up to three years to train as you know better than I. They also need to fix the problem as soon as possible so that this does not become apparent nationwide.

I question the methodology that is being used in estimating that only 25 percent of controllers will leave in the first year of their eligibility for retirement. I think that is something we have to look closely at. In my conversations with the controllers, they are unanimous in their desire to retire as soon as possible, if at all possible. This is not because of a lack of concern for our aviation system, or

a dislike for their careers. Rather, it is a response to the already inadequate staffing that has left them overworked in many cases and to a flawed management system that has strained relations between the controllers and executives at the FAA.

I urge the Administrator to take concrete steps now to adjust planning based on the maximum possible retirement from the ATC force and to create real incentives for controllers to continue to work if they choose and to change the culture at FAA in the new air traffic control PBO to make our air traffic control system a real partnership between the Government and our air traffic controllers to benefit all aviation customers.

Thank you, Mr. Chairman.

Mr. MICA. I thank the gentleman.

Ms. Norton.

Ms. NORTON. Thank you very much, Mr. Chairman.

I very much appreciate this hearing. I think it is an important act of responsibility for you to call this hearing now to focus on this important issue. I don't like to throw around the word crisis. This is the age in which that word is used to describe virtually every situation in Government, but when the GAO and the Department of Transportation have used crises language, I do think it is time to pay attention. There are parts of the country where controllers are already on a six day work week. The crisis is not supposed to be even here yet.

I will tell you a figure that caught my eye that in about six years, three-quarters of the controllers at the ten busiest airports can retire. That caught my attention because these include the airports in this region, the airports used by every member of Congress. I agree with the gentleman who preceded me, that the notion that only 25 percent would get out of Dodge when they could. This is a high pressure job. These men and women have skills that are transferable in many other ways and it is wishful thinking that with the pressures on them and with the marketability of their skills, they will hang around to earn what often is less money than they can make elsewhere.

By the way, in my other committees, there have been joint hearings of the House and the Senate because this is the same problem that we find for Federal employees in general. That is to say, we are reaching a point where huge numbers will be able to retire and we don't have a strategy in place to replace them. You might be able to do without some people in some other agencies, but I am very concerned about a staffing crisis of controllers. Already there has been over the last two decades, a 50 percent increase in workload but only a 12 percent increase in staffing. One of the things I want to hear is whether technology somehow has made up for that but that already, it seems to me, raises a question, leave alone an ordinary staffing crisis on top of it.

I think it is time for a strategy to be spelled out in detail and indeed given the need for overlap, the long time it takes for training, I think it is time to have a written plan and time frame for ameliorating this crisis.

Thank you, Mr. Chairman.

Mr. MICA. Thank the gentlelady.

Mr. Moran?

Mr. MORAN. Thank you.

I appreciate you and the Ranking Member of this subcommittee holding this hearing. I think it is an important topic. I wanted to put into the record and use this opportunity of my opening statement to put into the record an e-mail, a constituent letter, which I think raises some awfully important points and hits home. My constituent writes that she is writing to express concern over the looming air traffic controller shortage. Her husband was hired by the FAA in February 2003 and still does not have the funding to start his training, although she says they spend billions in mandatory overtime. The six day work week many centers use will result in accidents sooner or later. It is more a sure thing than another terrorist attack, she points out. She indicates that Europe's JAA just released a finding that a plane crash in 2002 that killed 71 people was due to controller error. If overworked, understaffed people working in what is known as one of the most stressful jobs does not seem like a recipe for disaster to you, she is asking what do I think is a recipe for disaster.

I have a couple of points about this. Congress has spent a lot of time looking at terrorist activities, certainly a high priority for us in the aviation world. I think my constituent raises an awfully important point about airline safety as it relates to traffic control pressure and stress. I also think an awfully interesting point is the idea that this individual was hired in February 2003 and has yet to receive training based upon lack of funding.

I look forward to hearing the testimony today and appreciate the FAA's interest in this topic. I look forward to working with them and the Administration to see that these kinds of issues are addressed and we can assure the flying public of as safe as possible airways.

Thank you very much.

Mr. MICA. Thank the gentleman.

Ms. Berkley.

Ms. BERKLEY. Thank you, Mr. Chairman, for holding this very important hearing.

The air traffic controller workforce is made up of some of the best professional workers this country has. Every day these men and women hold the safety of the flying public in their hands and judging from the air traffic controllers in southern Nevada, who I know well, they perform their jobs with professionalism, devotion and precision. Having spent a considerable amount of time in the air traffic control towers at McCarran Airport in north Las Vegas, it takes an extraordinary human being to be able to handle this very important, necessary and specialized job.

Passenger traffic at McCarran Airport is up nearly 15 percent this year. New airlines have added service and established airlines continue to expand their existing networks to include more flights to Las Vegas. In addition, within the next decade, the Clark County Department of Aviation is expected to begin construction of a new airport in the Valley south of Las Vegas. To accommodate for the growth in the Valley's aviation system, adding more controllers will become a necessity.

The number of controllers eligible for retirement in the next nine years coupled with the length of time it takes to hire and train new

controllers will have a dramatic impact on our workforce. I am concerned that busy airports such as McCarran and new airports like Ivanpaw will be greatly and adversely affected. We must work now to avert a crisis in the future.

Mr. Chairman, this hearing is very timely and gives us a chance to review the situation and work together for solutions. As you can tell from the comments of my colleague from southern Nevada who sits on the other side of the aisle, this is not a bipartisan issue. It affects all of us and is very important to all of us. I want to thank all of you for being here. I am most anxious to hear your testimony.

Mr. MICA. Thank the gentlelady.

Additional opening statements? Mr. Costello.

Mr. COSTELLO. Mr. Chairman, I thank you and Mr. DeFazio for calling this hearing on this important subject today.

We all, I think, have heard over the past few years concerns about the problems we are about to face with the number of air traffic controllers that will be retiring over the next nine years. I think the FAA has estimated that about one-half of the controllers will be eligible to retire and may retire over the next nine years.

I would associate myself with the remarks by my colleague, Ms. Marlin. I think it is naive to believe that only 25 percent of the workforce who will be eligible to retire will in fact leave. I think the number will be much greater than that. I have recently met with and over the last two years had several meetings with my controllers in both southwestern Illinois and the St. Louis metropolitan area. They have expressed concerns to me that we are really headed down the path to major problems unless action is taken now.

Let me, again, thank you for calling the hearing today on this important topic and I look forward to hearing from the Administrator and our witnesses about the plan, how we are going to address this issue, how we are going to recruit, train and have qualified air traffic controllers in the future to meet the demand as our controllers through attrition leave the agency.

Thank you.

Mr. MICA. Thank the gentleman.

Mr. Menendez.

Mr. MENENDEZ. Thank you, Mr. Menendez.

I appreciate you and the Ranking Member pursuing this because this is an opportunity where we can hopefully intercede before we have a real crisis. The reality is that when we look at the Administration's fiscal year 2005 budget request, it does not provide any funds to hire additional air traffic controllers. Yet, both the General Accounting Office and the DOT's Inspector General are forecasting major staffing shortages. The FAA estimates that over 50 percent of the controller workforce will require over the next ten years.

As someone who represents Newark International Airport, I can tell you that the staffing shortage at Newark right now is of great concern to me. We are supposed to have 40 and we have 31. Despite the funny math that I am told often it doesn't add up to where we need to be. Clearly, that is the immediate issue. In the next three to four years, Newark's controller staffing will likely plummet unless the FAA begins to budget and hire a replacement

workforce. I would almost want to believe maybe the Administration is ignoring the issue in the hopes the air traffic control system will be privatized and the problem would no longer be the Federal Government's but rather the entity that assumes private control.

Newark International is an airport that is amongst the busiest in the Nation. It also has probably one of the tightest air spaces in the Nation. It is like a straightjacket sandwiched in between Kennedy and LaGuardia, so you have three major airports all sharing the air space, all having military issues as well in terms of air space. It is incredibly tough. I know we are in the midst of trying to have a redesign but in the interim, this is about safety, about security as well and if we don't have the staffing, God forbid that we have to land aircraft as we did on that fateful day, September 11, that is not only at staffing levels but in terms of experience, then we have a major problem.

It seems to me, Mr. Chairman, having spent hundreds of millions of dollars to make sure this industry can survive September 11th, that we are being pennywise and pound foolish in this regard.

I read the Administrator's comments before the Senate Commerce Committee. I believe she recognizes the problem but the Administration does not reflect that by virtue of their budget request. I hope she will shed some light on that and I would also like to hear some light on Newark specifically.

Thank you, Mr. Chairman.

Mr. MICA. Thank the gentleman.

Additional opening statements? If not, we will proceed with our first panel of witnesses. I would like to welcome the Honorable Marion Blakey, Administrator, Federal Aviation Administration; JayEtta S. Hecker, Director, Physical Infrastructure Team, U.S. General Accounting Office; and Alexis Stefani, Deputy Assistant Inspector General, U.S. Department of Transportation. Welcome to all of you.

We will hear from all witnesses and then go to questions. We will welcome again, Administrator Blakey. Welcome and you are recognized

TESTIMONY OF HON. MARION BLAKEY, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION; JAY ETTA S. HECKER, DIRECTOR, PHYSICAL INFRASTRUCTURE TEAM, U.S. GENERAL ACCOUNTING OFFICE; AND ALEXIS STEFANI, DEPUTY ASSISTANT INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION

Ms. BLAKEY. Good morning, Mr. Chairman.

I want to thank you and Mr. DeFazio for the opportunity to address the subcommittee today. I also want to thank all of you for the votes of confidence and our air traffic controllers and our managers for running literally the safest system of air traffic control in the world.

The issue of controller staffing is an important one for us to address today and so I welcome the opportunity because it is critical to the FAA's ability to operate and maintain the safest and most efficient transportation system in the world. Right now, we have unparalleled safety levels, the lowest fatal accident record in history and we do intend to keep it that way.

Hiring and placing an appropriate number of controllers at our facilities is a key element in maintaining the safety of the system. I know you agree that we must pay particular attention to staffing levels. Approximately 350 controllers will no longer be certified to control traffic under age restrictions within the next three years. We are addressing your concerns and are working to ensure that we have an adequate number of controllers on position and in the pipeline to make sure the system is operating smoothly.

From surveying the situation over the years, we know that controllers typically do not retire when they first become eligible. As you can see from the chart in front of us, our experience to date indicates that only one-quarter of our controllers typically retire in their first year of eligibility. This has proven to be the case over many years. At year seven when retirements again spike as you will see on the chart, a vast majority of those retiring have reached the age of 56. This type of information helps us project our future retirements.

As you can see from the next chart, our projections of controller retirements have been accurate. The blue bar represents our projections while the yellow bar represents actual retirements. As you know, we compare our projections to our staffing standards to determine what our hiring in any one year should be.

With that as a backdrop, we were asked by the Congress to explore several alternatives to address controller hiring and staffing. So I am here to report today that we are preparing regulations permitting controllers under certain conditions to remain in the workforce beyond their mandatory separation age of 56. However, we believe that less than 20 percent of controllers will exercise this option and there may be increased operating costs that have to be considered as well.

In addition, we have implemented a pilot program in the southern region to reduce the number of workers comp recipients through disability retirements. We have already resolved 6 percent of our outstanding cases and since last July, we have resolved 12 individual claims and extended 26 new job offers.

We are looking at increasing the number of hours that employees work operational positions and perform non-operational duties. We have an initiative underway in the Eastern Region and will provide results to you in December on this.

Likewise, we are going to better manage sick leave usage. The controller workforce used more than 100 percent of its sick leave allowed last year, roughly the same totals as this year. We have set a goal of 8 percent reduction in sick leave which should result in significant productivity gains.

Lastly, we will be looking at the question of reducing training time. We have established a work group to review the training process with input from NATCA and we look forward to designing a more efficient and more effective training system. In addition, I would like to provide the highlights from a report on controller staffing and training that we are preparing at the request of this committee as a part of Vision 100. The report will be our action plan and as you directed, it will be complete in December.

Our preliminary findings indicate that we must intensify our focus on training, ensure appropriate distribution of developmental

controllers throughout our facilities, and make greater use of simulation in training. With safety being our paramount concern, the fundamental principle for training is that it cannot add risk. We know that training is unique to each controller option and facility, as well as the individual experience that a student brings to the job. Depending on the experience of the controller and the facility complexity, the training required to meet full certification we believe can vary from 18 months to 3.8 years. Of course we have to be careful not to move controllers in training to the floor of our towers, TRACONS and so forth too quickly. When they reach the floor, we must also balance the number of certified controllers with trainees.

As you can see from the next chart, the last ten years we have historically maintained a ratio of 85 percent certified professional controllers to 15 percent developmental which has served us very well. Attempting to train too many developmental controllers at once may reduce the efficiency of the entire operation and we have to manage the flow of developmentals to ensure there is not an excessive number of trainees in any one location. Adequate time on position, controlling live traffic with an instructor, is key to successful training for each developmental.

With respect to simulation, the FAA is looking at increasing the use of high fidelity training simulators so that we can decrease the time and overall cost of controller training. The increased use of more sophisticated simulators will produce the same kind of cost efficiency we have been seeing for many years in the training of airline pilots. MIDA recently completed a worldwide survey that has led to successful development of a training prototype that we believe will be of value to our understanding of the opportunities in this area.

In closing, I would like to emphasize our commitment to safety. The Federal Aviation Administration's effort to address concerns in training and staffing will never diminish that fundamental principle.

That concludes my statement, Mr. Chairman, and I look forward to your questions.

Mr. MICA. Thank you.

We will now hear from JayEtta Hecker, Director, Physical Infrastructure Team, U.S. General Accounting Office. Welcome and you are recognized.

Ms. HECKER. Thank you, Mr. Chairman. Good morning to you and members of the subcommittee. I am very honored to be here to address this important issue about the challenges FAA is facing in effectively managing the air traffic control workforce.

I think all of us remember the summer of 2000 when capacity limitations of the overall system produced near gridlock conditions and while a combination of factors temporarily reduced traffic significantly and the pressure on air traffic control system, air traffic is now back to pre-9/11 levels in many areas and once again the urgency for focusing on this problem is here.

We applaud the subcommittee's focus on this and will try to contribute with three key areas. First, the magnitude and timing of the pending wave of controller retirements; second, the challenges FAA faces in assuring a well qualified air traffic control workforce

is in place to step into the gap; and finally, the broader institutional or environmental problems that also affect the ability of the system to meet future demands.

On the magnitude and timing of the pending wave, clearly as all of you have recognized, it is substantial, it is inevitable and it is imminent. FAA really faces a bow wave of thousands of air traffic controller retirements over the coming decade. As several of you alluded to, our 2002 report pointed out that that over half of the controller workforce would retire, not be eligible, but would retire over the next ten years; about 93 percent of supervisors would be eligible to retire; and the retirement eligibility would be most severe in the facilities experiencing the most traffic. FAA estimated that they would experience retirements at a level three times higher than those experienced in the past five years or so.

While our review is somewhat dated, I think all of you have recognized that both FAA and the Inspector General are continuing to report this bow wave of retirements. The question is will FAA be ready for it?

That leads me to the second question about the fundamental challenges that are rather significant that FAA faces in both hiring and training the number of well qualified controllers and the adequacy of a strategy to really achieve that end. Basically, as you know, because it takes two to four years and sometimes even longer to train controllers, hiring and training decisions have to be made with a longer term perspective. However, we found that FAA has been following a process of generally hiring replacements only after an experienced controller leaves. This clearly doesn't take into account the time it takes to train a replacement to become a fully qualified controller.

The hiring challenges are clearly to have effective screening so that we reduce the high washout rate or failure rate of trainees which wastes time and money and importantly the time of controllers to train those new hires. The training challenges include limits in the capacity of the training center in Oklahoma City where in the past there were bulges of new hires, and I think this was alluded to by one of the members, new trainees in some cases have been idle for extended periods due to the absence of timely, available training at the training center.

The more significant training bottleneck is really the limited capacity of the air traffic control facilities. Because there is this need for an essential overlap period, we believe there will be a requirement for a temporary increase in the numbers and total cost of the controller workforce but eventually these more senior, higher salary controllers will retire and be replaced by new controllers at lower salaries. Our report recommended that FAA develop a comprehensive workforce plan to deal with these challenges. Unfortunately, FAA has not yet finalized that plan although our recommendation was put into law in Vision 100 and as you know, that plan is now due in December of this year.

The second is adapting to and recognizing the policies that are actually creating incentives for the use of smaller aircraft. Just last week when we had the hearing on the state of the aviation industry, we heard specifically about the concern that there is a rapid growth in the use of regional jets and other small aircraft, air taxis

and fractional ownership. This substantially increases the controller workload while simultaneously moving fewer passengers and generating fewer ticket taxes for ATC operations.

The final context is really assuring that the future training, the placement, and the contract with controllers in the future is sufficiently nimble so that there can be timely and efficient adjustments to address the very dynamic shifts that are occurring in traffic patterns. Examples include downsizing of St. Louis, the USAirways pulling out of Pittsburgh, and the significant growth that we have seen at Dulles with the introduction of Independence Air there. So there is a need for a nimble quality to the workforce in the future that really has to be a part of that plan.

Quickly, would like to emphasize that I think there is some good news. We think there is important progress in FAA recognizing that the bubble is a serious problem, that it has to be addressed on a facility basis, and that training needs to be improved. Again, one of the most important things that not much mention has been made about today is the importance of the focus on cost accounting, on performance, and efficiency as this important challenge is addressed.

That concludes my statement and we very much appreciate the opportunity and would be happy to answer any questions.

Mr. MICA. Thank you.

We will now hear from Alexis Stefani, Deputy Assistant Inspector General, U.S. Department of Transportation. Welcome and you are recognized.

Ms. STEFANI. Mr. Chairman, members of the subcommittee, we appreciate the opportunity to testify today.

Two weeks ago, we issued a report on placing and training of air traffic controllers in light of the expected increase in attrition. FAA currently estimates that over 7,000 controllers will leave the agency during the next decade. To put that number into perspective, over the past eight years, total attrition was about 2,000 controllers. It is clear that as a result of the anticipated increase in attrition, FAA will need to begin hiring and training controllers at levels the agency has not experienced since the early 1980's.

Mr. Chairman, I would like to discuss three issues that we see as key to FAA successfully managing this challenge. First, developing better attrition estimates by location. FAA annually prepares national estimates of expected attrition within the controller workforce that are based on attrition rates for the prior three years. We found this to be a reasonable method for estimating attrition at the national level but those estimates are not built from the bottom up. FAA needs better information on exactly how many are leaving, when and where.

Most locations we visited during our audit had estimates of attrition over the next two years but each location used different information to develop their estimates. For example, one facility only projected mandatory retirements while another projected attrition for transfers but not retirements and a third included all types of attrition, retirements, transfers, resignations and removals. Because of these differences in the way the estimates were made, there were wide variances in the numbers projected from facility to facility. We recommended that FAA establish a system to uni-

formly estimate controller attrition by location and adjust their nationwide estimates as needed. FAA has agreed with our recommendation and is examining ways to better refine its estimating process.

However, an important point is that if FAA simply replaces retiring controllers one for one at each location, it will only perpetuate existing staffing imbalances. Various groups have repeatedly expressed concerns that some FAA air traffic facilities are either overstaffed or understaffed but determining the extent of those imbalances is problematic because the FAA staffing standards are not precise.

Again, while the staffing numbers are reasonable at the national level, the National Academy of Sciences found they could not be used to provide highly accurate estimates of staffing requirements at individual facilities. More accurate staffing standards are an absolute necessity if FAA is to place controllers where they are needed most.

In our opinion, key for developing better standards is an accurate labor distribution system. The system FAA has chosen to track its controller workforce is called CRU-X. The controllers have raised valid concerns about the pending retirements and getting an accurate labor distribution system in place is an area where their help is needed. CRU-X deployment has been on hold for almost two years while FAA and NATCA continue negotiations over its implementation. Considering the retirement numbers facing FAA, in our opinion FAA and NATCA need to make implementing CRU-X a priority.

The second issue I would like to discuss is that FAA does not assess newly hired controllers' abilities before they are placed at facilities. As you know, FAA facilities are categorized by levels, the higher the level, the more the demand is placed on the controller's judgment skills and decision-making abilities. However, new controllers are placed without assessing their abilities to successfully complete training at the facility. Currently the placement process is primarily driven by simply where the vacancies occur.

At the locations we visited, we found multiple instances where developmental of controllers spent years in training without being able to certify only to be transferred to a less complex area or to a lower level facility where on-the-job training started again. We recommended and FAA agreed to develop an assessment process for identifying new controllers' potential to certify at a facility and to use this information in the placement process.

The final issue I would like to address today is the most challenging one for FAA. That is reducing the time and cost associated with training new controllers on the job while still achieving results. The on-the-job training process is the longest part of the training a controller receives. At the locations we visited, the overall average time for a newly hired controller to become certified averaged 3.1 years but in some cases, it took as long as seven years to certify. We found that the on-the-job training process was very decentralized. Since the mid-1990's, the FAA has provided minimal nationwide oversight of this portion of the training. For example, FAA does not have nationwide statistics on key measures such as

the time it takes a controller to certify, where and when training failures occur or the total cost to provide on the job training.

At the 17 facilities we visited, we had to compile the data on the various aspects of on the job training and we found wide variances. For example, during fiscal year 2002 and 2003, although both facilities had about the 70 developmentals, New York Center had 15 training failures while the Washington Center had 4. At the New York Center, however, it took an average of 3.8 years to certify but we compared it to Minneapolis Center where developmentals took an average of 1.3 years. We were unable to determine the specific reasons for the variances. However, we found many factors affect on-the-job training including the hiring source of the controllers, the facility level, local training policies and local operational needs.

For example, the Minneapolis Center with an average of 1.3 years primarily gets their replacements from controllers that have transferred from other facilities while the New York Center which took 3.8 years, took new controllers from either DOD work or graduates from FAA-approved colleges. To prepare for the hiring and training of new controllers over the next eight years, it is imperative that FAA determine better ways for reducing the time and cost associated with on the job training. This would include exploring options such as an improved placement process, better prepared candidates, increased educational requirements and enhanced simulation training at larger facilities. But to do this, they need the basic data to manage the program. We have recommended and FAA has agreed to coordinate a study to establish nationwide baseline statistics and develop a tracking system to better analyze, monitor and manage its on-the-job training process. Clearly these actions are a step in the right direction and the key will be follow through.

That concludes my statement, Mr. Chairman. I will be happy to answer any questions.

Mr. MICA. Thank you.

We will start a round of questions. I have some to begin.

The GAO testified that only one controller was hired in 2004 so far, is that what you said, Ms. Hecker?

Ms. HECKER. That is what we have been told.

Mr. MICA. Ms. Blakey, did you want to respond?

Ms. BLAKEY. That is correct.

Mr. MICA. Why?

Ms. BLAKEY. Because we are currently above our staffing standard in terms of number of controllers. In other words, we have more controllers in the system currently than the staffing standard calls for.

Mr. MICA. One of the problems we have is it takes from 3.1 to 7 years to certify these folks on average. Is that a correct statistic I heard, Ms. Stefani?

Ms. STEFANI. The data was from 17 locations. We don't have them nationwide, but it took on average 3.1 years.

Mr. MICA. But some even longer. One of you had testified to that. Unless we have these folks in place, they are not getting the on the job experience and at some point the numbers of retirements are going to kick in. You say this is all factored in and the hiring of one is adequate?

Ms. BLAKEY. We probably should drop back a moment because I would point out that this Congress was the one that chose not to fund the additional positions that we asked for this year. As you recall, the Administration in the President's budget asked for an additional 302 positions to address the hiring bubble. The Congress chose to not fund those and in fact asked us to address a number of other measures which in my testimony I pointed out. They range from the issue of trying to right size our facilities and move people to where they are needed to realigning with the staffing standard to looking at training to determine if there are not greater efficiencies to issues of reducing our sick leave for greater productivity, reducing workers comp again on the productivity issue. So there were a number of things that we were asked to tackle by this Congress and that is what we are doing this year. We take those instructions very seriously.

Mr. MICA. I just wanted to make certain we had that clear for the record.

Also you mentioned a host of things Congress asked you to look at. One that wasn't mentioned as are there any efficiencies gained from better technologies being implemented? Obviously a great deal of the work that is done relies on technologies. Are you also looking at the issue of technology as a factor in replacing workforce numbers?

Ms. BLAKEY. We certainly are. I will tell you that historically the technologies that have been implemented in the FAA facilities have largely gone to efficiencies for the airlines and for our customer base, if you will, not so much from the standpoint of manpower and productivity gains for the FAA itself.

However, there are several technologies that we are currently implementing that do address that and begin to give us greater ability to provide a more efficient system, if you will, in terms of the technologies helping us to keep our costs down and that is also a function of manpower. Eighty percent of our operating costs is manpower.

Mr. MICA. I was also interested in the cost of the program of training, the Government cost, at the Oklahoma Center. I am told it can range from \$15,000 for terminal operator en route \$27,000 and we have some other costs but if you took the \$23.645 million we spent at Oklahoma and divide it by the number of graduates that we run through there, we are looking at a cost close to \$38,000 per individual. I am told not only do we pay for their education and expenses, but we also pay them a salary during their period at the center. Is that correct?

Ms. BLAKEY. That is correct.

Mr. MICA. We have 13 institutions now that are providing certified programs to produce air traffic controllers and also train for other ATC positions. Has anyone ever looked at turning some of this over to the private sector where in most cases, I know the individual pays for their own education and training and isn't paid when they are going to school. Has any thought been given to looking at shifting some of this to the private sector, Ms. Blakey?

Ms. BLAKEY. Certainly it is true that in this country most people going into those professions pay for their initial training themselves. This is a question that has been raised and it is one that

we are looking at as part of the plan that we are preparing to address the larger number of retirements that are coming up because there is obviously greater cost efficiency in this and if we do find it is possible to construct a way that individual students at least for initial training could pay some of those costs, perhaps even on the basis that would allow them to reimburse once they are certified controllers and making very good income, we will look at that as well. We are certainly seeing good results out of the private sector schools, the CTI schools that are training controllers who obviously paying their own way in those schools.

Mr. MICA. That was my next question. I believe either GAO or the IG looked at the ability to have these folks certified. Have there been any studies or did either of you review the performance of those who come from these schools versus those who are trained solely from an FAA program?

Ms. STEFANI. We did collect data at the 17 facilities to look at where the developmental was from and compared that to how long it took them to certify. We found that basically the MARC graduates, those that are coming into the en route environment, took about 3.3 years which was similar to the average we saw. The CTI, which are those 13 schools that have predominantly the terminal environment, they took a shorter time, 2.5 years, but nationwide, the data is not available to make any conclusions about these schools. We were impressed with what we saw but we don't know, there is just not enough information available.

Mr. MICA. I am not sure if you would call it wash out rates or rates of those leaving the program. Is there any information about success based on the background of these individuals and their previous training?

Ms. STEFANI. Not that I am aware of. We have information from the 17 locations that I could get you but I don't have anything nationwide.

Mr. MICA. Ms. Blakey, are you aware of any information on that point?

Ms. BLAKEY. The FAA used to collect that kind of information up through about 1993. When the major wave of hiring stopped and really leveled off, for whatever reason, the agency then ceased to collect the wash out rates vis a vis various institutions. We are going to begin that again. In fact, we have already started.

Mr. MICA. I think that is important to look at.

A final point. It may have been GAO again who testified that we are going to lose 93 percent of the management level supervisors?

Ms. HECKER. Yes. We reported that about 93 percent of the current supervisors would become eligible to retire.

Mr. MICA. In what period of time?

Ms. HECKER. That was our estimate two years ago that by 2011, 93 percent. I think the base was that 28 percent were already eligible. We have a chart on that in our statement and they are all at higher levels, both the base and in the first few years, you get many more becoming eligible each year. So there is going to be tremendous turnover at that level.

Mr. MICA. FAA, did you want to respond to how you are going to deal with that particular vacuum?

Ms. BLAKEY. We will be promoting from our controller ranks into the supervisory ranks. That is a time honored approach that has served us very well. Obviously that means we will be putting more in the pipeline for trainees and bringing more people into the system. We certainly can address the need for operational supervisors that way and we will be.

Mr. MICA. Mr. DeFazio?

Mr. DEFAZIO. Thank you, Mr. Chairman.

Ms. Blakey, it is sort of a strain that runs through a lot of hearings and I understand you are physically, verbally or mentally constrained by your political minders downtown but what I always say to the administrators and others who come before me whether it is the Chief of the Forest Service, the TSA or you is that you also have a job as a professional running a vital agency to give us your best opinion and you did frankly say it was the fault of Congress, which I agree with and which I did not support, that you didn't get the 302 people you asked for last year.

That kind of then begs the question of if you needed 302 people last year with 800 becoming eligible for retirement and you didn't get them, and another 800 become eligible for retirement this year, why didn't you ask for any? It sounds like suddenly the OMB or whoever it was down there who encouraged or worked with the appropriators up here to arbitrarily cut your numbers have suddenly come to a meeting of the minds and you didn't ask for the people this year. How is it if we needed 302 last year and you didn't get them, a number retired, another 800 become eligible, we don't need any this year? I don't understand what the plan is.

If I look over the future, if you don't ask in this fiscal year and you don't get any, since you asked in the last one and you didn't, it is probably not likely you will get them if you don't ask for them. We go up to the next fiscal year and if we start with the next fiscal year and just use the optimistic assumption that we could hire as many people as we needed and train them in three years, there would be during that time period another 4,400 people becoming eligible for retirement. In reaction to 800 becoming eligible for retirement this year, you asked for 300, so if one extrapolates, it looks like you are going to be asking for some awful big numbers just after the election.

Ms. BLAKEY. What I would say is simply this. The Congress in choosing not to support the Administration's request for additional controllers.

Mr. DEFAZIO. A subset of the Congress, present company excluded.

Ms. BLAKEY. I am willing to exclude present company. I appreciate that fact. The fact is that obviously we do have built into our budget last year, this year replacements for the current one on one replacement of the folks who are retiring. Let us always bear that in mind that there is certainly a pipe that we are going to be continuing to address those.

The question is the overlap, if you will, doing more than one on one hiring and when does that need to begin. As I say, we took very seriously the Congress' instructions that we had not addressed a number of things, that the feeling of members was that we should. In determining exactly when we do need to begin that over-

lap and when we do really need to step up the pace on putting people into the pipeline.

Issues such as waiving age 56, obviously if you do not have effectively a mandatory retirement age of 56, that does change the equation. The issues of productivity, the issues of how fast you can train, so we are working very hard on all that this year. We are going to be issuing regulations that provide the opportunity to waive age 56 within what we think are appropriate guidelines. All of this changes these equations. This is not a static system.

On top of that, of course, you have the dynamic in aviation itself in terms of traffic. We have been going through a period where it was totally unpredicted, obviously the slump in traffic after 9/11 and now the build up, but as noted by several members here, that build-up has changed a lot. It was not where we expected and the same nature that we expected.

I mention those things because this is a calibration that we are working very hard on this year to get right. When we do submit a plan to you in December, it is my expectation that we will also be addressing the flow rate, if you will, and when we do need to begin overlapping control.

Mr. DEFAZIO. So the plan, per the congressional request, would be made available in December. I have already seen some leaked documents that purport to show domestic budgetary requests post election but I would hope that your work on this plan is going to coincide and/or be supported by the Administration in terms of a request for the next fiscal year. Is there any discussion of that ongoing because I assume it is going to ask for more positions?

Ms. BLAKEY. This is certainly a plan that we are working on concert with OMB and others in the Administration and I feel confident it will be one that is factored into our budget request as well.

Mr. DEFAZIO. I think it was Ms. Hecker who talked about hiring one. As I understand what Ms. Blakey is saying they are regularly replacing people who retire but we have this other hiring need. Your hiring of one is over and above the replacement of the retirees, is that correct?

Ms. HECKER. No, sir. In fiscal 2004 to date, FAA has lost over 400 controllers. Those controllers have not been replaced. Basically the actual number of onboard controllers has been reduced by the 400 and the 1 is a net of 399 reductions.

Mr. DEFAZIO. Ms. Blakey, I thought in response to my question, you were talking about the regular replacement of people and needs beyond that. She is saying we are down 399 on the year.

Ms. BLAKEY. We did hire in September just before the fiscal year that Ms. Hecker is referring to several hundred controllers who have been trained this year and been going into those positions. At the same time, again I would point out that we have been above the staffing standard. Even currently as of a couple days ago, we were 89 people, 89 controllers above the numbers we need overall through the system. So one has to recognize that and how careful work has been to try to move people to facilities where we can address the issues of understaffing and at the same time try to address those that are overstaffed. The pattern essentially is that you find we have somewhere around 160 of our towers and TRACONS that are currently overstaffed against the staffing standards, you

have about 10 of the en routes that are understaffed. So we are looking at those things and as Ms. Hecker is referring to the issue of losing controllers, remember one of the things we are doing is promoting controllers from the controller workforce into the supervisory workforce. Another requirement the Congress placed on us for this year was to increase the overall number of supervisors. By the end of this year we intend to hit 1,726 which is the number we were instructed to hit. There is a phenomenon going on there of promoting people up and again, as we reach the end of the year, we will undoubtedly make sure that we have the right number for our staffing standard.

Mr. DEFAZIO. Ms. Hecker, they didn't lose as many, some of them were promoted. Did you see where they went, whether they retired or were promoted?

Ms. HECKER. It is definitely true, these aren't all people who left FAA but they are not working the scopes.

Mr. DEFAZIO. Right. OK. I am puzzled about the beyond age 56 assumption. I think Ms. Blakey said less than 20 percent would probably choose to stay if they were fully eligible, correct?

Ms. BLAKEY. Congressman DeFazio, that is our estimate. This is one of those things that we will only know once we issue the guidelines and then see. That is our best estimate based on some information surveying of managers and discussions with those who have seen parallels in other industries.

Mr. DEFAZIO. One last question. I did have one other great question, which I will think of later, Mr. Chairman, but it is gone right now.

Mr. MICA. While you are regaining your composure.

Mr. DEFAZIO. If I could, our colleague read from a letter where he talked about a constituent whose husband had been hired in February 2003 but was not yet able to be trained. That seems like a real problem, and I know you can't comment on the specific circumstance, but is that a normal wait time for someone who has been hired to get into the training program?

Ms. BLAKEY. I frankly can't comment on that one. I did note a number of assertions on that letter which like most things that are anecdotal coming from someone who is well intentioned but not a part of the system, were wildly off base. For example, the person asserted that we were spending billions in overtime. A figure like that sort of boggles the mind. I am actually very pleased with our overtime picture because I think what you see right now is we are very judiciously using overtime. I am proud of our controllers and managers on this because right now we are running at only 1.88 percent of our overall personnel costs in overtime which is well within industry standards. You never want to have no overtime usage because that indicates you probably are not using the workforce as well as possible, but that is a very good figure. The overall totals for last year were \$54.8 million, again a very appropriate figure.

Mr. MICA. Mr. Duncan?

Mr. DUNCAN. I was interested in the Chairman's questions about these 13 institutions that are training air traffic controllers or people in related fields. Can any of you give me a rough guess or do you have the figures as to how many people get that type of train-

ing or how people graduate from those programs each year? Do we have any idea? None of you seem to know that it looks like.

Ms. BLAKEY. It depends on which facility and of course which year. Let me give you a little bit of information on that. Basically as I see it right now, the number of people we have put through, this year MARK had 48 students go through it, they also have another class coming up with 24 students. That is the number there. The number for the academy, I am going to get you those figures because what I have is overall costs rather than numbers of people.

Mr. DUNCAN. I think today what you have all across this country is thousand and thousands of maybe hundreds of thousands of college graduates who can't find good jobs with just Bachelor's degrees like they used to years ago, so all of them are going to graduate school and you have many thousands who are getting degrees in fields in which there are almost no jobs. I think if the word got out there was going to be a need in this field, there would be many, many, almost untold numbers who would be interested in going into this if they knew the job prospects were good.

Also, I think at one time I was told we got quite a few air traffic controllers from the military. Do we have any figures on that? How many military air traffic controllers are there and how many are shifting over each year?

Ms. BLAKEY. The actual figures on those I would love to get you after the hearing. Just as an example, on this group of collegiate trainings, CTI schools that we have used, we are going to have a total of 1,591 graduates to pull from. You can see we really do have a good base there of well trained young people.

Mr. DUNCAN. So you are getting roughly 1,600 graduates from these programs each year. Is that what you are saying?

Ms. BLAKEY. That is what it looks like to me on this chart. Again, I would have to look at it year over year.

Mr. DUNCAN. Let me ask also, how many applications for air traffic controller positions does the FAA have if we looked right now in the FAA computers, how many applications are pending, rough guess?

Ms. BLAKEY. We have several different pools. We have the former military and they divide into two groups. We have an entry age of 31, you are supposed to be 31 or younger coming into air traffic control so all this training and experience will pay off over a period of time. We do have an exception for the military so they can come in on two tracks that way and we have a good healthy pool there. We also have, as I say, the collegiate training program and I gave you figures on that, the MARK Program which can take more students. They would like to graduate more students. That is one that can respond with more. Then we have a little less than 300 right now that are on the rolls that are sort of off the street. We gave an exam and allowed people to apply and they are also available to us. There is a certain number still from the old PATCO rolls that could be reemployed. So you have quite a few different pools there you could draw from.

Mr. DUNCAN. Do you ever advertise for air traffic controllers or do you have so many people who have already applied that you feel there is no need to advertise? I don't know, I am just asking.

Ms. BLAKEY. We have not so far really needed to advertise. It is a highly sought after profession and there has never been a problem with recruiting. I think I heard an ad that NATCA ran on the radio just the other day helping us out in terms of making people aware of the fact there is an upcoming wave of retirements and people should apply. I think we do have some help on that front.

Mr. DUNCAN. The attrition rate, there were 2,100 over the past eight years. Percentagewise, is that about the same, lower, higher than a comparable big business in the private sector? I think that is something we surely should know also. I would appreciate it if somebody could submit some information about that as well.

Mr. MICA. Will the gentleman yield?

Mr. DUNCAN. Yes.

Mr. MICA. I am going to ask if you would chair for a few minutes but one question before I leave. I have votes right next door I have to run for and come back. The figures I have been given are that in 2004 we trained a total of en route and terminal 116 to date and in 2003, we trained 249 en route, 168 which is a total of 417. I talked about the cost before of being able \$27,000. That was based on full capacity. In fact, the cost for 2003 was \$56,834 per student. I would like you to check these figures. So far to date, we have only trained 116. The 116 is \$230,172 per student trained. Of course we are only halfway through 2004. This contract is based with the Washington Consulting Group for \$23.7 million in 2003 and an estimate for 2000 for \$26.04 million. It seems that contract should be based on number of people produced versus the amount of money, a set amount of money for the contract. Do you want to respond?

Ms. BLAKEY. Yes. In fact, your figures are quite accurate but I want to separate a couple things out if I might. The Washington Consulting Group does a great deal of training in the field and a good bit of this is for ongoing training as well as particular graduates. So you have to separate that out I think probably against the figures that Chairman Mica cited for the 116 this year at the Academy, 417 last year at the Academy. You really should divided that against the cost of the Academy and then separate out on the job training and training that is done in the field because they are separate things. Obviously we do continue to provide training to our controller workforce on an ongoing basis.

Mr. DUNCAN. [Presiding] Let me finish up by saying this. Mr. DeFazio got into this and maybe you got into it but it seems ridiculous to me that it takes apparently in some places up to 7 years to certify an air traffic controller after they have had their training. Seven years for on the job training seems awfully strange to me after somebody has received all the training but also I think we need to get information about how long on average it is taking a person from the time they are hired until the time they are actually placed on the job. If that is taking some unusually long period of time, then that seems to me to need to be worked on.

This is the first time I have heard these figures about 160 air traffic control centers being overstaffed and 10 being understaffed. That is the first time I have heard that but that is something we need to check out as well. Thank you very much for being with us today.

Ms. BLAKEY. Congressman Duncan, let me be sure I didn't misspeak. The centers are the ones that are understaffed on the whole. Those are the ten. Our towers and TRACONS are 164 was the last figure.

Mr. DUNCAN. I probably misspoke too, I meant 160 air traffic control operations or towers or TRACONS and all the variations.

Ms. BLAKEY. I will say this. We too are concerned about the idea of anyone staying in the system for as long as seven years without becoming certified. Obviously that is a function of setting standards for our managers, having expectations of how on the job training should proceed and we are certainly going to have a much more focused system where everyone understands what are reasonable parameters and then we begin to train against those and work against those and make the system work.

Mr. BEAUPREZ. [Presiding] Thank you.

Ms. JOHNSON, you are recognized.

Ms. JOHNSON. Thank you very much.

I have a question for Ms. Hecker. According to the GAO's report in 2002, the southwest region has the third largest apportionment of air traffic controller specialists at 2,008. Could you elaborate a bit on the implications projected retirements would have on this particular region?

Ms. HECKER. I am not familiar with that. There are different classes of groups and each one is critical. Anywhere there is a disproportionate share of retirements is going to create special problems. I would have to look into that and add it to the record or provide that information for you.

Ms. JOHNSON. OK. Ms. Blakey, Section 221 of Vision 100 required the FAA to develop a comprehensive human capital workforce strategy to determine the need for more air traffic controllers as identified in the GAO report. I know you have commented some on this but could you comment further on what your findings revealed and the status so far?

Ms. BLAKEY. I appreciate the opportunity to talk about this, Congresswoman, because we are very enthusiastic about this plan that we are developing and we will be reporting to you in December. I think what we see there is there are tremendous opportunities to enhance the training process we are using, making it more efficient, looking at how we can take best advantage of the terrific kinds of training that does occur out in the private sector from the CTI schools, from MARK, from the military workforce which obviously already has been engaged in controlling traffic, as well as how we best have our Academy make sure when they go to the field, when they step up to the scopes, they have the best possible background.

The other part of this is there is a new study that Mitre has done that we are going to look at very closely on the use of high fidelity simulators. Simulators are coming more and more into the workforce in a variety of places. I have had the good opportunity to go to Embry-Riddle, for example, who I know you will hear from later, and see their simulators which are very impressive. I have also had the opportunity to look at several University of Alaska, et cetera and the ones we use at the Academy. I think this is going to give us more and more ability to do what is done in the field of training

airline pilots. That is to bring people up to speed on the actual traffic they will be seeing but have it in a no risk environment where many more scenarios can be played out.

Those are some of the kinds of things in training that we are going to be addressing in this, as well a surveying to determine on a much more granular basis, the actual needs going to be out there, which facilities, which years, therefore what the actual needs are we are going to have. That obviously varies because facilities, the en route environment is different from the tower and the TRACON environment and the amount of time to train is different.

All of that, if we can calibrate this correctly, I think we will have a much more precise human capital strategy in this regard that will pay off for all of us. That is our intent.

Ms. JOHNSON. Thank you very much and I yield back.

Mr. BEAUPREZ. Thank the gentlelady.

Mr. Pearce, you are recognized.

Mr. PEARCE. Thank you, Mr. Chairman.

Ms. Blakey, you mentioned that maybe the training costs might be overstated and could be made more clear if we looked at the broader numbers. Could you make those available to us?

Ms. BLAKEY. I would be happy to.

Mr. PEARCE. Appreciate that.

Ms. Hecker, you mentioned on page three of your report that just before you were talking about the 400 controllers that were lost and 1 that was replaced, that last year we hired 762 new controllers. Can you tell me the number of losses we suffered out of the system in the year we hired the 762?

Ms. HECKER. I don't have that number. Perhaps you do.

Ms. STEFANI. I have it. It is 405 controllers.

Mr. PEARCE. So when it says it was last year, last year was 2003 or 2002?

Ms. STEFANI. 2003.

Mr. PEARCE. So in 2003, we lost 405 and we hired 762, so that gives about 300 and something going into this year, correct? We have actually hired more people than we lost in the one year so those kind of stack up as an inventory of controllers available to offset the losses of this year, correct?

Ms. HECKER. It was the target that was in the contract at that time.

Mr. PEARCE. Ms. Hecker, you made a big point that we hired 400 and replaced 1. In fact, I see that on page 1, I see it on page 4 and I see it on page 12, a recurring theme and yet never do you say it is offset by the fact that we actually hired a 200-300 more in a previous year than what our losses were. I don't see the balance in there to give a real assessment to me as I am reading your report. Am I doing the logic wrong on that?

Ms. HECKER. I think we were looking at each year. So in 2003, there was a rate of hiring, part of it was driven by contract target. Because of the cost of that, a lot of hiring was done in 2003 in the very last month of the year, about a third of the hiring was done in that period. Those are all the people in the Academy this year that were hired at the end of 2003 and 2004 was the year FAA asked for 302 positions, made a case it was important. They had already gotten to the increase from 2003.

Mr. PEARCE. I understand that but my question is isn't it a fact you have about 300 extra people in the system before you get to this year? You are raising the alarm and sitting on this side of the table, I try to separate the alarms from the false alarms from the false, false alarms and no where in here do you admit or say we have 89 extra people that were overstaffed right now. You have raised an alarm without saying, we should worry about it but you have to offset your concern with this and you have to offset your concern with the fact that we hired 762 and only lost 405, so we actually have a little push coming into the year and instead you concentrate on the 400 to 1 factor, page 3, page 9, page 12 and I think at some point it would have been nice for me to see that balance rather than having to kind of root it out of the figures.

Ms. HECKER. Our focus is really on the plan. That is what our report focused on. We did not conclude that we knew what the number was, or that there ought to be hiring at any given level. It is the absence of the plan and the importance of a strategy that integrates all of the factors, where they are needed, moving people from where they are overstaffed to understaffed, the ability to train them and train them efficiently.

Mr. PEARCE. If we could then take your comment here, Ms. Blakey presented to me a fairly consistent look at the retirement figures, that we are going to get 24 percent this year and it is going to drop way down the next year and year seven is going to pop back up. Is that just a false assumption? In other words, did you look at their projections and conclude that to be a very faulty assumption or did you not look at it?

Ms. HECKER. We did look at their projections and did several other things. We did a representative survey of all the controllers and basically found that over one-third of them said if they were forced to work overtime or six day weeks, it would increase their likelihood of retiring. So if we are in an environment where as the numbers go down that workload and stress level increases, that number which was for a 2001–2002 period, the number of 25 percent the first year is a factual number.

Mr. PEARCE. That is very compelling but then the offsetting factor, we had to get not from your report but from Ms. Blakey is that we are at 1.88 percent over time which is not nearly at the threshold that pushes the retirement rate to the extremes that your report seems to want to suggest. For myself, I found your report to need much more external input to really evaluate your report correctly.

Ms. Blakey, if you would convey my appreciation to the system, I will tell you that I have flown for 30 years, I have 11,000 hours flying in the system and I have the highest regard for the professionalism of the people we run into. I sat last year in the tower at Roswell and worked with the controllers, watched what they are doing and always am amazed at the way they can handle the traffic. If you would just convey that.

If we consider the great thresholds to be the problem that Ms. Hecker mentioned, what do you anticipate in the 2008–2011 range where it appears the great surge will happen? How do you visualize getting ahead of it? I don't think you need to hire five and ten years ahead. How do you see getting ahead of that?

Ms. BLAKEY. I think we believe we need to have a plan that addresses this surge in retirements on a number of levels. As you heard, I outlined a number of things we are trying to do to have the most efficient system possible and to address ways of having the most productivity engineered into this.

All of that said, I think there is no question that at some point, we should cease the one for one replacement hiring and begin to overlap the controller workforce. What we are trying to do this year with this plan is calibrate this correctly, get this right so that as we move forward, we have a good system and everyone knows what to expect in this. I think that is also important because as you see there are a lot of students in these schools who are willing to step up, willing to put in their own money and be trained. There are others out there that form good pools as well and we want everyone to have an idea about how this is going to progress and what they can expect. That is our commitment.

Mr. PEARCE. I would also add that the simulation I think is very effective, having used simulators in almost all the aircraft I fly. I think it saved me making mistakes in the air and a great savings to my employer or myself. I think there is a great future and you can simulate just about the exact thing you will see in front of a scope. I would encourage that but thanks to the FAA and the controllers.

Mr. BEAUPREZ. Thank the gentleman.

Mr. Menendez.

Mr. MENENDEZ. Thank you.

Madam Administrator, am I to understand from your answer to Ms. Johnson's question on Vision 100 that the FAA has national estimates on how many controllers will retire but you don't at this point know exactly if they are at the busiest facilities? Is that part of what you are going to achieve in your report in December?

Ms. BLAKEY. That is our intent. One of the things that has been the case, as you know, is that for a number of years, we have not had pressure on the system to try to drill down to that degree. When you look at the question of retirement, you have to be very careful about not in anyway implying there is coercion of individuals about their plans, age discrimination, those kinds of concerns are ones which are there for surveying employees and having our managers be highly exacting about all of that has been something we have tried to be careful about.

We do know this. The staffing standard that we have been using as certainly proven the test of time. The National Academy of Sciences evaluated it and we see that standard as being accurate plus or minus 10 percent at the facility level. The staffing standard doesn't project retirement but it does give us the benchmark about where we are trying to hit in terms of numbers of people in those facilities.

The issue of the busiest facilities, I certainly echo the concern that I think we should begin addressing those facilities first where we have shortages, where we see the busiest facilities, certainly in terms of where we are going to be placing a priority, you can count on that and that will be a part of our calculations.

Mr. MENENDEZ. To the extent that you can within the context of either constraints you just spoke of, you are going to try to ascer-

tain what are some of the staffing shortages at the busiest facilities and you are going to prioritize those?

Ms. BLAKEY. Correct.

Mr. MENENDEZ. Let me be provincial in my next question. For several years, my colleagues in New Jersey and I have worked to try to get the FAA to staff Newark with its full contingent of air traffic controllers. In 2002 alone, the agency saved between \$900,000 and \$1.2 million in pay compensation and benefits for the five to seven controller positions that were not filled while spending only about \$131,000 for overtime to cover understaffed shifts. Over the past five years, the savings from understaffing Newark tower approaches the \$5 million mark.

By comparison, other Eastern Region facilities such as the ARTCCs and the New York TRACON spent as much on overtime in a single two week period as Newark did in all of last year. Currently the tower is staffed with only 29 fully certified professional controllers, along with 7 trainees instead of its full, allocated contingent of 40. Several of these controllers now need intense training over the next few years in order to become certified at Newark which has a historical failure rate of about 70 percent.

If they are to improve this dismal training record at Newark, we have to ensure that the daily training regimen is not jeopardized by staffing shortages due to the unwillingness to call in controllers on overtime to cover understaffed shifts. Otherwise, in a worse case scenario, Newark tower would be in a position as early as the end of this year where it is under staffed by up to 10 controllers and that much closer to the pending wave of controller retirements we have been discussing.

In addition, the heightened security zone requires each of the towers in the area identify each and every plane within the Air Defense Identification Zone which is a 30 mile radius around Kennedy, LaGuardia and Newark. Thus, controllers have to identify an extra 100–200 flights a day because of that unique set of circumstances.

While the tower is still understaffed, and they are also trying to train the new hires with the 70 percent failure rate, and they have the extra requirements of the Air Defense Identification Zone, how does the FAA anticipate the current workforce will be able to do all this with an overtime budget of less than \$25,000 to the end of this year.

Ms. BLAKEY. Certainly a number of things factor into the issues of overtime but let me just touch on the issue of the figures we are using because I would point out that our data in terms of Newark basically call for staffing standards of 29. The contract we are operating under there calls for 40, we have 37 actually on board but again the staffing standard is 29. I think the fact, as you point out, they are operating with a relatively low call on overtime indicates we are not running into major problems from the standpoint of understaffing. Overtime is a key indicator from that standpoint.

Mr. MENENDEZ. They are low on overtime not because of the staffing issue, they are low on overtime because there is a prohibition within the budget for them to do so. That is not because they don't have the wherewithal. You have 29 certified, 7 trainees, 2 controllers out due to medical reasons, 1 controller leaving to go to

the Potomac TRACON in June, 1 controller leaving in about a year, there is a bid out for a staff specialist and that funding comes in October and will probably come from the controller workforce, so it highly likely that facility will have only 32 controllers by the fall because the net gain of 3 is offset by the 2 departures. So we can play numbers games. The reality is we are understaffed at Newark, the reality is the overtime does not allow us to be able to deal with the challenges of training at a facility that has a 70 percent failure rate. I don't think we dispute that and we have a 70 percent failure rate there.

The way I see it, in one of the busiest airports in the Nation, in an airport that has a straightjacket in terms of air space, an airport that has the extra requirement of the Air Defense System, and an airport that had one of the flights of September 11, the last thing we need is not to be fully complemented and not to have the wherewithal and that doesn't even deal with the retirement issues we have talked about. I hope we can have a better response to Newark than we have had today.

Ms. BLAKEY. Again, we have to rely on what we believe are the actual numbers that are needed in the facility. The actual number, the staffing standard calls for in Newark is 29. Again, currently we have 37 actually on board. I am sure you will be pleased to know that in addition to that, we expect to bring on 5 more there by the first of October. So we certainly are addressing the concerns you are speaking to, although again I don't think we see indications this is truly a case of understaffing.

One of the things I will do is go back and look at the overtime, look also at the question of time on the boards. Another indication of how a facility is doing is the amount of actual time spent on the scopes working traffic. I would be happy to take a look at that as well.

Mr. MENENDEZ. I appreciate that. I don't know about the five coming on board but I will be happy to call you in October if they are not there.

Ms. BLAKEY. It is good to hear your oversight. Thank you very much.

Mr. MICA. [Presiding] Thank the gentleman.

Mr. Beauprez.

Mr. BEAUPREZ. Thanks for the panel. I think this has been a very good hearing. I appreciate the candor with which you have answered all the questions. I have a couple and I will be very brief because obviously we are getting called to vote.

Ms. Blakey, in her testimony Ms. Hecker said the FAA has a policy of only hiring after an experienced employee leaves. I ran businesses before and I could never function quite that way successfully, especially in the context of trying to put myself in your position of making sure our air is safe, air traffic is safe. Is that really your policy?

Ms. BLAKEY. In recent years, what we have done is when we know a controller intends to retire, be promoted up, transfer or whatever it is, we then draw from the pools of trainees we have coming through the Academy and the schools and put them into those facilities roughly simultaneous with that individual leaving. Remember that the responsibilities that controllers have are within

that facility somewhat interchangeable, so it is not quite like a business where you have a unique employee and you really do have to have them sit side by side and do that same thing for the one that is actually leaving. We also have experienced controllers there and supervisors who will be working with them when they come into the facility. The main thing is to have your numbers correct and not have too many trainees in a facility at a given time. If you see that may happen, then you may have to adjust that facility by facility but it is correct nationally, we are replacing as we go.

Mr. BEAUPREZ. Let me stay on that point. I wrote down a ratio of roughly 15 I think you called them developmentals to 85 percent certified. How do you manage that within a facility where you have relatively small numbers on the floor at one time?

Ms. BLAKEY. You try to get it right. As I have looked at it, facility by facility it has ranged from 14 to 17 percent at times. In other words, we are trying to hit it right but obviously in a given month, you may have it off slightly but that is something we watch very carefully.

Mr. BEAUPREZ. You really do that facility by facility and not systemwide where you might have a facility that is dominated by a very high percentage of developmentals.

Ms. BLAKEY. That is correct. I am certain someone could step up and cite in x facility you have more developmentals than that and that may be the case, but it is a fluid situation as you can appreciate. In some cases, people are already working several sectors.

Mr. BEAUPREZ. You are trying very hard not to get too far away from that 15 percent of developmentals in a facility at one time?

Ms. BLAKEY. That is right. Remember, you are developmental until you are certified in all sectors of the facility. So you can still be useful in working traffic for quite a while and not be fully certified.

Mr. BEAUPREZ. Last question. I wrote down also on my notes that in several of the opening statements there was not very subtle illusion claimed that what the FAA really wants is the system of air traffic controllers to collapse in a crisis situation and the real scheme here is to let the system fail and thus force it to become privatized. Is that what is going on?

Ms. BLAKEY. The whole issue of privatization is an absolute red herring. I have testified, as have others in this Administration, to that time and again. No, we are running and very proud to be running a Federal system of air traffic control. In my estimation, that is the way it will stay. Certainly this Administration has no intention to privatize air traffic control or to change the status of our controller workforce overall and the way we approach the system.

We are also very proud of the fact that we do have a group of towers that are run by contractors. They do a great job in our smaller communities. I think many of you know that and actually have seen the benefit of that. That has been true for many years. In fact, that program was enlarged during the last Administration. This Administration has not made any changes there except as a few have been added because these communities need them and that is the most cost efficient way to provide it. No, we are not moving to privatizing.

Mr. BEAUPREZ. I found that to be a pretty outrageous claim because obviously we are playing with peoples' careers but also playing with the public's safety. I can't imagine any Administration under any circumstances playing with the public safety.

Ms. BLAKEY. Certainly not this one.

Mr. MICA. Thank the gentleman.

We have about five minutes and I have two requests for time on this side. Mr. Oberstar?

Mr. OBERSTAR. Thank you. I will be brief.

This crescendo of retirements in the air traffic control system is no surprise to me. This was evident like a freight train coming down the track since the firing of air traffic controllers in 1981 and the subsequent rebuilding of the air traffic control workforce and every one of your predecessors has had to look that issue square in the eye and prepare for the obvious, 20 years down the road there are going to be retirements. It is a problem dumped in your lap, not a problem of your creation, but it is a problem for the FAA. I think it is fortunate that this committee with the foresight of our chairman and participation of all the members, directed the FAA to develop a plan for the replacement of those controllers.

I have been at this issue for 20-plus years. At various times, FAA has counted people as controllers who weren't controlling traffic and not counted people who were talking to traffic, that is first line supervisors who are doing at least ten percent of their time controlling traffic and then counting air traffic assistance as they were once called and now developmentals .

I just want for the record, of that 15,000 plus workforce, I want to know the exact number of controllers who are developmentals and an exact number who are FPLs. I don't expect you to give that number now and we don't have time to go into it. You have an anticipated 7,100 retirement eligible by 2012, you have another 2,000 needed controllers to sustain growth as growth returns to the aviation system. Where is the plan? You are supposed to develop it by December and it really should not be a plan newly developed but one that is on going and revised year by year. I want to know how you are going to get to that 2,000 controllers that are going to be needed and why has there been no flag raised about the cutback in funding for the Minneapolis Training Center, the MARK Program, Minneapolis Community College system? I know Chairman Mica has raised the issue of using such facilities as Embry-Riddle and the others, University of North Dakota as a tower simulator, Alaska has a tower simulator program, Miami Dade has a tower simulator program. Those are very tough positions to fill and takes a great deal of intensive training. It also takes a lot of training for route controllers and TRACON controllers. I don't understand why the flag wasn't raised when last year the Appropriations Committee just chopped the funds out for the private center.

Ms. BLAKEY. As you know that did happen, that was an action of the Congress. Even without the funding for MARK this year, we proceeded and have in fact funded several classes of MARK students out of our base. MARK has certainly delivered very well qualified students over the years and I can't speculate on the Congress' intent there but as I say, we did step up and we have supported several classes.

Mr. OBERSTAR. I hope that as we get into this appropriations process, FAA will raise its very considerable powerful and compelling voice to say don't cut the funding from these facilities, they are doing the training for half the cost of Oklahoma City, Embry Riddle is doing it for about the same value and for less cost. We ought not to be cutting back at the very time we need to build up this workforce.

I remember what happened when the air traffic control workforce went to zero. It was an extremely safe system. There were very few airplanes flying.

Mr. MICA. Thank the gentleman.

Mr. HONDA, you have about one minute.

Mr. HONDA. I will be very brief. It is basically the same question asked another way. I was really concerned about your assertion about the FAA's ATCs being overstaffed.

I understand there is 1,250 developmentals in the system and I guess the real question is do you consider and do you count them as part of your overall controller staffing?

Ms. BLAKEY. We do count developmentals. Remember that they do control traffic. In fact, in some cases, they are well qualified and checked out on a number of sectors in the facility.

Mr. HONDA. Are these certified?

Ms. BLAKEY. They will not be certified until they are checked out on all sectors.

Mr. HONDA. So they are not certified and you count them as the certified staffing as far as air traffic controllers?

Ms. BLAKEY. No, we don't count them as certified staffing but we do count them in the overall numbers of controllers.

Mr. HONDA. But they are not quite qualified as of yet?

Ms. BLAKEY. They are not qualified in all sectors.

Mr. HONDA. Don't you think that is a problem?

Ms. BLAKEY. I think it actually has stood us very well in terms of the efficiency of the system. As I say, we look at a lot of measures and to this point the question of are they providing support in those towers and TRACONS, the answer is yes, they are.

Mr. HONDA. I have been in air traffic control areas and I have been in the simulation place also at NASA and I also landed a 747 without any mishap. Would you trust me to be in there? I don't think so because I am not certified. I think that is a real problem in terms of giving out our numbers and leaving an impression that we are well staffed. I think that is the wrong way to give us information.

Ms. BLAKEY. Certainly I think it would dramatically change the equation if we suddenly declared all the work being done by developmental controllers in our facilities cannot be counted and should not be considered a part of the workforce. It has been for many, many years and they are doing a very good job.

Mr. HONDA. Maybe it should be stated clearly in print that is what they are being used for although they are not certified and are trainees.

Ms. BLAKEY. We do have those figures and I would be happy to get you the break out on it.

Mr. MICA. Thank the gentleman. We have less than three minutes remaining in this vote. We will stand in recess until 1:00 p.m. I will excuse this panel and thank you for your participation.

[Recess.]

Mr. MICA. The subcommittee will come back to order.

I appreciate the patience of the two members of our second panel during those recorded votes.

I would like to welcome to our subcommittee our second panel which is composed of Ruth E. Marlin, Executive Vice President of the National Air Traffic Controllers Association and Dr. George H. Ebbs, Jr., President, Embry-Riddle Aeronautical University. I know these two individuals represent others. It is impossible to have every one of those who are serving our air traffic control system and their various organizations, managers and other employee representative groups with interest. The same holds true for some of the universities that are involved in training our air traffic control personnel from an academic standpoint, but we welcome statements from others and will leave the record open without objection for a period of two weeks and we invite others who are interested from those groups to add testimony and comments to the official record of this subcommittee hearing.

With those comments, I am pleased to recognize, first, Ruth Marlin, Executive Vice President, National Air Traffic Controllers Association. Welcome and you are recognized for your testimony.

TESTIMONY OF RUTH E. MARLIN, EXECUTIVE VICE PRESIDENT OF THE NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION; AND GEORGE H. EBBS, JR., PRESIDENT, EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

Ms. MARLIN. Good afternoon, Chairman Mica, Mr. DeFazio and members of the subcommittee.

I am Ruth Marlin, Executive Vice President of the National Air Traffic Controllers Association. I want to thank you for the opportunity to speak today about the staffing shortage facing our Nation's air traffic control system.

We are here today because we recognize the system is confronting a staffing shortage of crisis proportions. In the immediate future and without adequate numbers of certified controllers, we cannot safely meet the needs of our Nation's air travelers. The controller shortage affects more than just the day to day operation of the air traffic control system. Without adequate staffing, we simply do not have the resources to increase capacity, modernize equipment and redesign air space.

There has been a great deal of discussion about the need to plan more precisely in hiring, training and placement of new controllers and we agree that this is very important but we cannot delay the hiring while these plans are being developed. We need to move forward to bring more controllers into the system to fill known vacancies while we improve our systems of predicting future vacancies. NATCA is eager to assist the agency and this Congress with refining that process.

The bottom line is that Congress must provide the resources to allow the FAA to increase controller staffing to accommodate the training needs in the system and the FAA must be permitted to get

ahead of the retirements so that we can stay ahead of the problem. This is not simply a problem we can put off until another year because delaying the solution makes the problem worse. We can no longer wait and at many locations, we have waited far too long already.

I don't want to use this time to restate what the previous panel has said. I believe we all agree it is a problem that must be addressed but the statistics don't tell the whole story. We need to look at the operation and what the real life environment is across the country with just two examples. In Los Angeles, the center is authorized 309 controllers but has only 276 on board. Of those, only 219 are certified professional controllers and they expect that number to drop to 206 this year. That number will further be depleted if we fill supervisor vacancies with onboard controllers.

In Chicago's TRACON, we face a steadily declining number of certified professional controllers. The facility is authorized 101 controllers and currently only has 73 who are certified professional controllers and of those, 20 are eligible to retire today. I talked to the representative from Chicago this morning and one has already announced his retirement; 17 more will become eligible in the next three years. The managers in Chicago have relied heavily on overtime just to keep the traffic moving through one of our Nation's busiest hubs.

Operational errors are up, morale is down and the controllers are leaving faster than expected but this problem is not sudden or unexpected. We have known about it and we have a choice. Whether or not we allow our Nation's aviation transportation infrastructure to collapse under its own weight is a choice. Either we will continue to be a world leader in aviation or we will not. Either we will meet the needs of the Nation's traveling public or we will not, but it is a choice.

My members are doing everything they possibly can to keep their collective heads above water but only Congress and the Administration can throw them a life boat. NATCA is prepared to work with the FAA and Congress to address this crisis before it becomes insurmountable. We have identified some real solutions, some things we can do now to make a real difference. Most important is to start addressing the known vacancies today. The Inspector General's report identified that transferring controllers, certify in half the time as a new hire. We need to allow those controllers to move up through the system now to fill those known vacancies and create new vacancies at lower activity facilities where new hires have the greatest chance of success.

Allowing these certified professional controllers to move into these positions will reduce the training time needed and at the same time improve our success rate. This is an important corollary step and it is not a new idea. We have seen it work in the past.

Finally, we need to make sure that existing resources are used as they are expected. Congress has mandated that we increase the number of supervisors. We need to ensure that we do not further cause controller staffing shortages by depleting the ranks in filling these positions and then remove those supervisors from the operational watch backfilling with controllers in charge.

The CIC Program has been very successful but if we use that program to allow more supervisors to move into administrative positions, we further shorten the operational workforce. We need to take advantage of the programs that work while we prepare for the future.

Mr. Chairman and members of the committee, we cannot and must not take the fact that our Nation has the safest and most efficient air traffic control system for granted. The reality is we are facing a very serious staffing crisis and we need to start training now. In fact, we needed to start training yesterday to make sure we have enough controllers to do the job right. Our training program is difficult and it should be difficult because we are asking people to be responsible for thousands of lives at any moment. If we do not address this problem and make sure we have enough controllers and provide quality training, we will see delays, congestion and even worse and that is not a solution any of us want to see.

Thank you for the opportunity to appear before this committee and I welcome any questions you may have.

Mr. MICA. Thank you.

We will hear from our other witness before we have questions. That witness is Dr. George Ebbs, President, Embry-Riddle Aeronautical University. Welcome and you are recognized.

Mr. EBBS. Thank you, Mr. Chairman. Good afternoon.

I am honored to appear before your subcommittee representing Embry-Riddle Aeronautical University.

With your indulgence I would like to take must a moment to introduce Embry-Riddle to those present. We were founded in 1926 as a training school for aviators and aviation mechanics. We remain true to our calling as an institution specializing in teaching the theory and practice of professional disciplines directly related to the fields of aviation and aerospace.

In 1968, Embry-Riddle became the world's first fully accredited university devoted exclusively to education and research in the aviation and aerospace industry. As these industries have grown, so have we. Today, Embry-Riddle has two residential campuses, one in Daytona Beach, Florida and one in Prescott, Arizona. In addition to the 5,000 students in Daytona and the 2,000 enrolled in Prescott, Embry-Riddle also provides course offerings and degrees to more than 20,000 military and civilian professionals throughout our extended campus network in 130 locations worldwide.

Embry-Riddle offers a number of Bachelor's and Master's degrees in aviation and aerospace-related fields ranging from aeronautical science which is our under graduate professional pilot program, air traffic management, aviation safety and security, meteorology and aerospace engineering, as well as human factor psychology, airport/airline management and space physics.

Embry-Riddle works on a daily basis with Federal agencies such as the FAA, NASA, the National Science Foundation, the National Weather Service and the Department of Defense providing expertise in undertaking research, education and training projects. Our instructors teach the Air Force Academy cadets how to fly and Embry-Riddle faculty provide safety training for over 600 Air Force safety officers each year in Albuquerque, New Mexico.

All in all, Embry-Riddle is actively engaged in the education, training, growth and development of almost every area of aviation and aerospace here in the United States and throughout the world.

Who we are and what we do applies with special force to the topic before your committee today, the status of the air traffic controller workforce. At Embry-Riddle Aeronautical University, almost 500 students are currently enrolled in our air traffic management program. To accommodate the popularity and the growth of this program initiated in the fall of 2000, we have just hired our sixth full-time faculty member dedicated specifically to this program.

Our air traffic control training program is not only the Nation's largest among the 13 collegiate training initiative institutions, but our students on average I would suggest are the best prepared of any with skills and training at least equal to those who graduate from the ATC Academy in Oklahoma City. All of our graduates have consistently qualified for entry into the air traffic control OJT environment and the feedback we receive from the FAA underscores our assessment of their capabilities and their superior performance.

There are two reasons for this success. First, our faculty have outstanding credentials. We are the only school where every ATC faculty member has at least 20 years of experience as an air traffic controller and has an earned Doctorate or Master's degree. Second, our instructional environment is unrivaled. Our simulation equipment is industry standard and state of the art. Embry-Riddle was among the first to install the Adacel tower simulator. NASA, the FAA and the Air Force have since followed suit and now have identical equipment.

The Nation faces a significant need for new controllers in the next ten years as our ATC system modernizes and expands and importantly, as we have heard today, many current, long service controllers retire. With Embry-Riddle's programs, faculty and facilities designed specifically to educate quality air traffic controllers, Embry-Riddle stands ready to play a significant role in helping meet this growing need in a timely manner and at no additional cost to the Government.

There are two impediments to directly increasing controller supply that I would urge you and your committee to consider. First, today, every member of Embry-Riddle's ATC graduating class must attend an additional two month training program in Oklahoma City before they move into the ATC OJT environment. We believe this is an unnecessary and costly step. Were Embry-Riddle granted the same status as the FAA Academy and Minneapolis Community Technical College, and were we permitted to send our graduates directly to the OJT environment, the FAA could realize significant savings in both time and expense.

What is contained in our four year, ATC curriculum meets and exceeds the training program currently required at Oklahoma City. Consequently, our graduates currently experience unnecessary delays entering the OJT program, a program for which they are already well qualified. The FAA is spending scarce resources training already qualified personnel who don't require it.

I would also like to add and emphasize that Embry-Riddle students pay for their own education. Therefore, from an FAA perspec-

tive, training costs are zero. The motivation for our students entering this program at their own expense is the reasonable prospect of FAA employment at graduation.

Second, I would urge you and your committee to consider an accelerated ATC program housed at Embry-Riddle. The program would target aspiring air traffic controllers who already have a college degree. With a program such as this, we could deliver an additional 600 trained air traffic controllers to the FAA annually. This figure is about 60 percent of what some of the projections are estimated for the national requirement but current Federal rules limit Embry-Riddle to training only degree seeking students. From our perspective, this restriction serves no educational or public policy purpose. We would urge its elimination.

To prepare for this accelerated program, Embry-Riddle can acquire the necessary equipment and the necessary faculty without cost to the FAA. Once the equipment and faculty are in place, we can train a degreed controller, utilizing an intense and demanding curriculum, in about six months. Assuming entering classes of about 100 students every two months, we feel confident that Embry-Riddle can graduate 600 new controllers annually. These graduates would be trained to the same exacting standards to be fully qualified for immediate OJT entry into the FAA ATC system. Equally important, they will have paid for the education themselves.

We believe these two reforms can be easily implemented, significantly increasing the number of highly qualified, new ATC controllers, a significant savings for the FAA and to the Nation. The FAA incurs approximately \$6,000 in per diem costs and \$12,000 in salary for each student who attends the Academy. If Embry-Riddle graduates were allowed direct entry into the OJT workforce, those savings to the FAA alone could approach as much as \$18 million annually, not to mention the embedded FAA personnel and facilities costs.

As you and your colleagues address the air traffic controller issue, I would urge you to consider private sector alternatives that can provide qualified controllers at minimal cost to the Government. We at Embry-Riddle Aeronautical University are up to this challenge.

Thank you for this opportunity and I would be happy to answer any questions.

Mr. MICA. Thank you.

I might ask our first witness, Ms. Marlin, you have just heard Mr. Ebbs describe private sector training that would eliminate the attendance by their graduates at the Oklahoma City Academy. What would be your position on such a move?

Ms. MARLIN. The fundamental role of the Academy, while they do provide training, is a screening program and the job of the Academy there is to screen out those people that have a low chance of success in the field. When the screen has been used as a screening process, we have had much higher success rates in the field which saves a lot of money. In order for us to determine that someone is not going to be successful, we might have employed that individual for years, so I think we need to take a hard look. The data is available, the Academy has been used as a screening process and has

also been used as pure training. We need to look at the differential success rates before we make that sort of a decision and see if in the long run, it is more cost effective for the Government to screen out these employees earlier and provide them with an opportunity to pursue a different career course rather than spending several years with the FAA only to find they are not successful.

Mr. MICA. It appears also that there seems to be a screening process or review process. None of these folks are brought on as certified air traffic controllers, that is earned over their actual in-service functioning. You don't feel that is adequate in sorting out folks, that we need this I thought it was more of an academic or training program and you say it is a filtering program?

Ms. MARLIN. The program at the Academy is the Air Traffic Control Screen Program. That is the name of the course that was given when I went through it. While they do provide training, they train you to a certain level to see if you have met certain standards. I think there is an opportunity to look at the available data and the success rates because we have used the Academy in both ways and make some good sound decisions rather than jump into it without doing that evaluation.

Mr. MICA. The Minneapolis operation is certified to have people go through that operation and then directly to work sites, is that correct?

Ms. MARLIN. That is correct.

Mr. MICA. That is a private sector operation with public support, correct?

Ms. MARLIN. That is correct.

Mr. MICA. So there wouldn't be much difference if we had similar programs of certification. We do already certify all of the 13 universities, correct, Mr. Ebbs?

Mr. EBBS. That is correct.

Mr. MICA. Is there something missing in those programs that needs to be done at a higher level? You have been through the system and have maybe seen those individuals who have gone through, I think there is the term, off street hires versus those who have previous training. I think most of the off street hires have had some other aviation experience, is that correct?

Ms. MARLIN. It is not required.

Mr. MICA. It is not required?

Ms. MARLIN. No.

Mr. MICA. But I think most of them do have some, I was told.

Ms. MARLIN. Currently, I believe most do. At the time we were doing the mass hiring up through 1992, some did and some did not. I can tell you that I did not.

Mr. MICA. You did not. You were off street, as they say, into the program?

Ms. MARLIN. That is correct.

Mr. MICA. Mr. Ebbs, you would say you could save about \$18,000 on average in per diem costs. These students are also paid while they go through that?

Mr. EBBS. That is correct.

Mr. MICA. I think it is something we need to look at, particularly if we get into a situation where we have a need to ramp up the hiring and training.

I am not familiar with the Washington group. That is a private contractor who does provide this service at the Oklahoma Center, correct. Are you familiar with them at all, Ms. Marlin?

Ms. MARLIN. Yes. The Washington Consulting Group provides contract training to the FAA. I believe most of their contract is provided for simulation instruction and classroom instruction at field facilities, primarily centers, but they are also at some large TRACONS.

Mr. MICA. Do they also have the contract to do the training at the FAA center or are there FAA personnel that do the training or both?

Ms. MARLIN. I can tell you it used to be by FAA personnel. I don't know how that has changed over the years.

Mr. MICA. I just wondered if there is some magic to this Washington Group to perform some of those services versus degree certified universities that have programs that are also certified by FAA for this type of training. Are there any differences that you know of Mr. Ebbs?

Mr. EBBS. Not that I know of. I am not actually familiar with the Washington Consulting Group but if they are doing the work of the training and development for the FAA, I should think there are other options as well.

Mr. MICA. It has been described as more of a screening process I guess prior to actually beginning to learn more of the operational side of air traffic control.

There have been some impasses between labor and air traffic controller representational groups and FAA. I think some of it also revolves or evolves around the staffing levels and some of the sort of the bottom line requirements. Some of that has delayed the process of hiring. Ms. Marlin, where is the problem?

Ms. MARLIN. Sir, we are not at a labor impasse with staffing, nor have we ever been. We had a staffing agreement, it was the first staffing agreement we had ever come to with the FAA in 1998. That expired in 2000. By mutual agreement of the parties, it expired, so we do not have a current staffing agreement. We are working collectively to try and refine the staffing standard and the process but we are not in active negotiations on the issue.

Mr. MICA. We heard this CRU-X which is the labor distribution system FAA has chosen to track hours worked by air traffic controllers. There is also an impasse or we have problems with getting an agreement on what should be contained in that. Are you familiar with the problems with CRU-X?

Ms. MARLIN. Yes, I am. It was characterized this morning as negotiations over implementation. We are actually working to make the software work properly. Our difficulties with the agency have not been on the implementation but whether or not the program will work. It is my understanding that if fielded tomorrow, it would crash. So last weekend, in fact, Sunday, I received a message that we had made a significant step forward and agreed to port the functions of CRU-X onto a more stable software program. So in terms of the functions, we have not had a problem. It was a technical problem with the software.

Mr. MICA. How long do you think it would be before that system would be operational?

Ms. MARLIN. Since they just decided to move it, I haven't had any of our technical experts really evaluate how long it would take. We are hoping to move very quickly because we would like to see some accurate information not only on controller eligibilities but on actual work productivity. The measures we have today only measure a portion of the controller's work.

Mr. MICA. Mr. DeFazio?

Mr. DEFAZIO. Thank you, Mr. Chairman.

Ms. Marlin, earlier we had some discussion of the time it takes someone to become fully certified taking between three and seven years. Can you give us some insight into what the discrepancies result from or what the differences result from?

Ms. MARLIN. The fundamental reason why it takes longer at some facilities to certify than others is staffing. At the New York Center, for example, where we have seen controllers take seven years to certify, it is because their training is interrupted for long periods of time in order to use them as operational controllers on their sectors where they are certified. So their training program is delayed because they are needed to be used as an active resource and they are unable to continue on the training. That is why it takes seven years. It is not that person is in continual training. It is that we lack the staffing to provide them with that training to get them to certification which is why we are so very concerned about this issue today. If we allow the system to become shorter staffed, training times will be longer, not shorter.

Mr. DEFAZIO. Didn't Ms. Blakey tell us that you are in fact over staffed?

Ms. MARLIN. I believe she stated that and said that 160 towers are overstaffed. We are looking to get the information on which 160 towers. That leaves 135 that are understaffed as well as the centers. The problem with going on a facility number, saying we have 160 that are overstaffed is those could be 160 facilities where the staffing complement is 12 or 14, so one person approaches 10 percent over staff versus an en route center that is 35 controllers short. When we look at facilities to say this number of facilities is overstaffed, we don't get a good picture about the system's needs.

The problem we see is the most likely facilities to have an overstaffing situation are the low level facilities because they have a continual turn. As people come in, other people are waiting to leave. So while there are those two people there, the person waiting to move up, you have an extra person in facility. This has been exacerbated in the last year and a half when the FAA put a freeze on promotions. So we have people who have bid on available vacancies at facilities where the FAA identified a need, at those short staffed facilities across the country that have the most impact and those controllers have been unable to go there. So we created an artificial staffing overage at a lower level facility while we continue to see the shortages at the higher level ones.

Mr. DEFAZIO. The freeze was put in place while they are assessing the needs of the system?

Ms. MARLIN. No, it was purely for budgetary reasons because as a controller moves to a higher level facility, they will eventually get a pay raise and it has a stronger effect on the budget.

Mr. DEFAZIO. Was that generated by the Administration or was that mandated by Congress?

Ms. MARLIN. No, the freeze was a unilateral decision of the agency.

Mr. DEFAZIO. So, we have an Appropriations Committee which was short-sighted in terms of authorizing additional controllers, we have an Administration that won't allow people to be promoted, and overstaffed lower level facilities because they don't want to carry the burden of that person's promotional costs?

Ms. MARLIN. That is correct. A lot has been made when we talked about moving people of the cost of a permanent change of station move. I would like to point out in the GAO report to this committee in 2002, it showed 80 percent of controller moves receive no permanent change of station funding whatsoever.

Mr. DEFAZIO. If either of you could respond, I am curious if there are any longevity studies on the retention levels or any other performance statistics on people who were trained outside of the Academy and people trained through the Academy?

Ms. MARLIN. I don't believe the FAA has aggregated that data. Certainly it is available because they have personnel records on every employee but I have not seen any studies where they looked at the success rates, that looked at level of facility, hiring source, time to train but certainly the data is available. It just needs to be analyzed.

Mr. DEFAZIO. Mr. Ebbs?

Mr. EBBS. I have been told nothing.

Mr. DEFAZIO. It probably would be a wise thing for the FAA to be looking at, it would seem

Mr. EBBS. I would think so.

Mr. DEFAZIO. The other question, Mr. Ebbs, you talked about an accelerated program for people with degrees?

Mr. EBBS. The technicality today of moving into the program requires you are a degree seeking student as opposed to a student already having a degree.

Mr. DEFAZIO. Who sets that standard?

Mr. EBBS. I believe that is part of the agreement with the 13 schools the FAA has established. That means if someone wishes to change careers, they would like to become a professional pilot, they can go back and become certified by getting all the FAA ratings and move on through their training and become a commercial aviator.

On the other hand, if you wish to become an air traffic controller, that is not open to you because the degree seeking aspect of it is not fully met. That is how the statute has been interpreted. So none of the 13 schools, including ourselves, are able to provide additional training and certification for someone in this particular line of work because they would not be accepted into the Academy.

Mr. DEFAZIO. Just on the issue of the additional two months required of your students, would that be part of the curriculum for someone like Ms. Marlin who went through the entire 15 week course? Is the two months specially designed for people who come from other institutions or is that the last two months of your 15 week course or is it some part of the regular course? I don't quite understand that.

Ms. MARLIN. I believe it is the same program regardless of your hiring source. They could probably look at eliminating a portion of the training element for those students coming from CTI schools and simply focus on the testing portion.

Mr. EBBS. I think she is quite right. This is were we basically have some concerns. A student going through a four year degree program at Embry-Riddle today ends up with almost 1,500 hours in directly and indirectly related air traffic control, environmental meteorology and the like. About 210 of those hours are very similar. Having been through that, a graduate has also had another 1,300 hours of we think very important training and development in their education which makes them a very, very solid professional hire. To go back to Oklahoma City, at the conclusion of the four year degree program to have the 200 hours repeated seems unnecessary, seems to keep people from the system who could move in quicker and importantly, expending funds that could probably be better spent elsewhere.

Mr. DEFAZIO. I think we have some grounds for agreement there. Ms. Marlin stated that. There is a screening function and a training function and perhaps the training part could be waived and we could look at the screening.

Mr. MICA. Do either of you know if there is a legislative prohibition or a legislative requirement that mandates they must go through Oklahoma City? Is it law or just a rule of FAA, an FAA edict?

Ms. MARLIN. I believe it is just an FAA policy at this point. I don't think it is even an administrative rule. Is it?

Mr. EBBS. I think it has been standard operating procedure. That is the way they have always done it.

Ms. MARLIN. It is just agency policy.

Mr. MICA. It is not by law?

Mr. EBBS. It is an FAA order apparently.

Ms. MARLIN. That makes it agency policy.

Mr. MICA. It is not a law. So it could be changed.

I think this has been enlightening. I want to find out, Ms. Marlin, you said the Washington group not only trains and participates with FAA employees in Oklahoma City but they also do training in the towers?

Ms. MARLIN. They do classroom and simulation training at some large TRACONS and the en route centers.

Mr. MICA. Do you know whether that is part of the \$27 million contract this year?

Ms. MARLIN. That is.

Mr. MICA. It is?

Ms. MARLIN. Yes.

Mr. MICA. There is not additional payment for those services?

Ms. MARLIN. Not that I am aware of.

Mr. MICA. We will check that.

Mr. EBBS. Mr. Chairman, also we understand that this consulting group, it is all recurrent training, they are not involved in the OJT training at all. So we would not find them in Oklahoma City from what I understand. Is that correct?

Ms. MARLIN. No, that is incorrect. In the controller training phase, particularly in the honor environment, each phase is pre-

ceded by a classroom period, a simulation period and then the OJT. It is interspersed into the program. That will be at the radar associate position and then at the radar position. The Washington Consulting Group provides support for the labs, writing the problems and instructors. Most of those functions, if we had a fully staffed air traffic controller complement, could be taken over by existing FAA employees utilizing available time but because we are short staffed, the Washington Consulting Group was brought in I believe just after the strike to assist with that.

Mr. MICA. We are trying to sort through this issue of making certain we have available qualified air traffic control personnel, both at the terminal level, at the en route level, supervisors, others and it is obvious it does take a substantial amount of time, even with training whether it is through someone being employed off the street or through an extensive university course to also be certified as an air traffic controller. That is a correct statement, I would imagine.

We don't have statistics as to how these individuals perform who have come from the various background and training but I think that would be helpful. Maybe we could request FAA staff if we can get them to do an analysis or possibly GAO from an independent standpoint or IG, one or the other so we can have some hard data on that.

I do appreciate you both providing testimony today as we sort through making certain we have a ready, trained and also experienced workforce on hand to meet the needs of the air traffic control system.

Any final comments, Ms. Marlin?

Ms. MARLIN. No. Just to thank the committee for their focus on this very important issue. We need to get some progress sooner rather than later.

Mr. MICA. Mr. Ebbs?

Mr. EBBS. Thank you as well for inviting me. The only point I would like to emphasize is some things made earlier this morning regarding simulation and the quality of training might also go to reduce the cycle we heard is averaging about 3.1 years. There are both technological solutions and I think also preparatory solutions, meaning a better trained, incoming recruit, preferably a college graduate who has had the kind of training I think we and some of the other schools deliver may aid us in reducing that average time and have basically a better professional.

Mr. MICA. Again, we appreciate you both providing testimony today. As I mentioned, we picked two individuals who represent one private university and the other one of our air traffic control representative groups. We welcome additional testimony from other universities and other employee and professional groups and others interested in providing their input to the subcommittee. For that purpose, we are going to leave the record for a period of two additional weeks.

There being no additional business to come before the Aviation Subcommittee at this time, this hearing is adjourned. Thank you.

[Whereupon, 1:41 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

STATEMENT OF MARION C. BLAKEY, ADMINISTRATOR
FEDERAL AVIATION ADMINISTRATION BEFORE THE
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON AVIATION
ON THE STATUS OF THE AIR TRAFFIC CONTROL WORKFORCE
JUNE 15, 2004

Good morning Chairman Mica, Congressman DeFazio, Members of the Subcommittee:

I am pleased to appear before you today to discuss the status of the Federal Aviation Administration's air traffic controller workforce and our plans to ensure that we have a sufficient number of qualified controllers to safely meet the capacity and air traffic needs of the future. As I have stated many times, FAA has an extraordinarily dedicated and talented workforce, but we must face the reality that our workforce is aging. We are facing a unique situation as the large number of air traffic controllers who were hired in the early 1980's in the aftermath of the Professional Air Traffic Controllers Organization (PATCO) strike becomes eligible to retire. Our challenge is knowing when and where controllers will be needed in order to ensure that the right controllers are in the right facilities at the right time. And we have to do this in the most cost efficient and effective way possible. As I said to you last month when I discussed the newly created Air Traffic Organization, decision-making will be data-driven and must be based on safety and cost considerations.

Historically, FAA has been extremely accurate in predicting the rate at which controllers will leave the agency. The complication we are facing, and one I know all of us testifying today agree upon, is that the number of controllers who will either become eligible to retire or required to retire will increase dramatically in the coming years.

Again, I think we can all agree that there must be no disruption to safety and the efficient movement of aircraft as we work through the anticipated retirements.

We are in the process of obtaining facility-specific information that will help improve our planning process. Deciding when to retire is an extremely personal decision that varies from individual to individual. The decision can be affected by the economy, or any number of personal factors such as children, tuition, mortgages, or what the individual wants to do after retirement; countless intangibles that are unique to each retirement decision. We know through historical data that the majority of controllers, more than 75% of them, do not choose to retire the first year that they are eligible, but the extent to which that statistic will continue to be accurate in the future is unclear and is why we are working to obtain better information – or information that will enable us to analyze our needs at a more granular level. All government agencies will face the challenges of an aging workforce and increasing retirements, but FAA's situation is further complicated by the fact that most air traffic controllers are required to retire at age 56.

Today, we staff the controller workforce to a standard that is the result of a formula that considers a range of factors, such as type of facility, shift length, number of sectors, hours of operation, traffic mix and aviation forecasts to name a few. Under the provisions of the 1998 National Air Traffic Controllers Association (NATCA) contract, we negotiated a specific number of controllers at the national level. We further negotiated that number to the regional level and then again at the facility level. Although the national staffing agreement expired on September 30, 2003, our agreement to work with NATCA to

distribute positions to regions and priority locations continues. The number of controllers determined by the staffing standard is calculated each year and is based on the FAA's aviation forecast data projecting traffic volume. Obviously, the number of controllers in the workforce is not static, so the number determined by the staffing standard is one we target to achieve during the course of the year. This fiscal year, the number we are working with is 15,136. We expect to continue to use updated output from our staffing standards to make future hiring decisions. I do not believe the increased retirement numbers we are facing invalidate the use of our staffing standards. I believe that continued use of the staffing standard process will address both the need to replace retiring controllers and the need for more controllers to meet future traffic demands.

But the right number of controllers is only part of the puzzle. They have to be placed in the appropriate facility and trained to meet the challenges of that facility. This is extremely important because not every controller has to be trained to the same level and it does not require four to five years to train every single controller. Certainly, working in a complex facility with a challenging mix and amount of air traffic will require a different kind and amount of training than a controller working at a less complex facility. Similarly, the ratio of fully certified controllers to developmental controllers that is operationally acceptable differs from facility to facility. And because traffic throughout the country is dynamic, constant adjustments must be made. For example, just a few years ago St. Louis, as a hub for TWA and then American Airlines, was a more demanding aviation environment than it is today now that American has severely reduced its operations out of St. Louis. Likewise, a few years ago Ft. Lauderdale was a far less

demanding air traffic-operating environment than it is today. These are examples of why constant adjustments must continue to be made as to where and how we staff individual facilities.

We are working with NATCA to identify staffing requirements and potential shortages at each facility. We need to take advantage of the talent pool that can most readily meet our needs. Certain candidates have a demonstrated ability to perform these duties, such as former military controllers, or candidates from training programs such as the Collegiate Training Initiative (CTI) school(s) or the Minneapolis Community and Technical College (MCTC) Air Traffic Control Training Program.

It is well documented that the ability to perform the duties of an air traffic controller can be done only through effective training. We are, therefore, looking at ways to improve our training and shorten the time it takes to train our controller workforce. This may require a greater investment in simulator training that will achieve both those goals. But such an investment will mean reevaluating our priorities in order to maximize the impact of our investment dollars. As I stated at the outset, our investment decisions must be justified by either cost savings or increased safety and efficiency, and that holds true for how we invest in training. Clearly, our future controller needs will require an additional investment in training, and, cooperating with input from NATCA, we look forward to designing the most effective training system that will allow us to efficiently train new controllers.

Mr. Chairman, we are well aware of the challenges we face over our future controller staffing requirements, and the fact that the agency must prepare for those challenges. We will have to streamline our hiring practices, train our new controllers efficiently and manage our workforce productively. Since the early 1990's, because our turnover rate has been relatively low, our hiring practice has been to hire in the same year in which we lose a controller. This has allowed us to maintain about 85% fully certified professional controllers (CPC) and 15% developmental controllers, the latter being certified and productive on one or more operational positions. As anticipated attrition in our controller workforce increases, the current practice of hiring one-for-one will not be sufficient to address this retirement surge. We must also be careful to maintain an appropriate balance of CPC's and developmental controllers. Again, we are looking at ways to expedite the training process for new controllers and to place controllers at facilities with existing or projected staff shortfalls. The success of these efforts will have a significant affect on the timing and magnitude of hiring new staff.

While planning for the future we must also pursue initiatives that will enhance the productivity of our current workforce. These include addressing staffing imbalances where they exist by hiring only into those facilities where controllers are needed, or moving personnel from overstaffed facilities to places that need more controllers, and, where possible, using CPC transfers at no expense to the government. I should note that NATCA has been very helpful in facilitating such relocation opportunities. We have also developed pilot programs to measure more correctly a controller's productive work time, and to reduce the cost of controllers in the workman's compensation program with the

hope of seeing the return of some individuals to productive status. We have also begun a program to educate employees on proper sick leave usage with a goal of reducing the overall sick leave usage rate by eight percent this fiscal year. Finally, at Congress' request, we are preparing regulations that would permit a controller, under certain conditions, to remain in the workforce beyond the mandatory separation age of 56.

We have no misconception that these measures will fully address the expected sharp increase in controller attrition rates, but we hope that they will ease some of the staffing problems facing the agency in the near term.

Finally, I would like to provide some preliminary highlights from a report that we are preparing at the request of this Committee that was contained in *Vision 100*. The report will serve as an action plan that I believe will effectively address many of the concerns around this issue. As directed, the report will be complete in December.

In preparing the report, our initial findings indicate that we must intensify our focus on training, ensure appropriate distribution of developmental controllers throughout our facilities, and make greater use of simulation in training.

With safety being our paramount concern, the fundamental principle for training is that it cannot add risk. As I stated, we know that training is unique to each controller option and facility, as well as the individual experience the student brings to the job. Part of our review showed that we must be particularly careful when decreasing training time, because depending on the experience of the controller, the training required to reach full

certification can vary from 18 months to 33 months. We need to be careful not to move controllers in training to the floor too quickly.

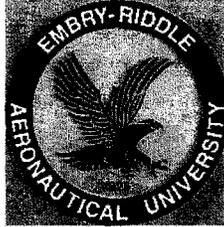
As I mentioned earlier, we are focusing on the ratio of developmental controllers to certified professional controllers. Our study shows that there must be a careful balance to optimize safety and efficiency. We must manage the flow of developmentals to ensure that there are not an excessive number of trainees at any one location. Our study to this point indicates that adequate time on-position - - controlling traffic - - with an instructor is key to the training for each developmental.

The report will also detail that the FAA is looking at increasing the use of high-fidelity training simulators to decrease the time and the overall cost of controller training. The increased use of more sophisticated simulators will produce the same kind of cost-effective training we've seen in the training of airline pilots. We hope to leverage the available technology to find meaningful application of simulators that will accelerate the training and facility checkout time for all new controllers. MITRE recently completed a worldwide survey that has led to the successful development of a prototype that we believe will be of value to our efforts.

The report will describe a training plan that examines: (1) the expected level of knowledge of new hires; (2) the number of trainees by quarter; (3) the expected number of trainees by course; (4) the number of instructors required; (5) the number of OJT hours required; and (6) a schedule for the release of trainees to facilities.

In conclusion, I want to thank both GAO and the IG's office for their work in this area. The information they have provided has been very helpful as we develop our plan of action. I know that everyone who has looked into this matter recognizes the challenge we are facing, but I remain confident that it is a challenge we will meet in order to continue to have the safest and most efficient air traffic control system in the world.

This concludes my statement. I will be happy to answer your questions at this time.



STATEMENT OF DR. GEORGE EBBS
EMBRY-RIDDLE AERONAUTICAL UNIVERSITY
HOUSE AVIATION SUBCOMMITTEE
JUNE 15, 2004

Mr. Chairman:

I'm honored to appear before your subcommittee and to represent Embry-Riddle Aeronautical University.

With your indulgence, Mr. Chairman, I would like to take a moment to introduce Embry-Riddle to your colleagues. Founded in 1926 as a training school for aviators and aviation mechanics, Embry-Riddle has remained true to its calling as an institution specializing in teaching the theory and practice of professional disciplines directly related to the fields of aviation and aerospace. In 1968, Embry-Riddle became the world's first fully accredited university devoted exclusively to education and research in aviation and aerospace. As these industries have grown, so have we. Today, Embry-Riddle has two residential campuses; one in Daytona Beach, Florida and one in Prescott, Arizona. In addition to 5,000 students enrolled in Daytona and 2,000 enrolled in Prescott, Embry-Riddle also provides course offerings and degrees to more than 20,000 military and civilian professionals through our extended campuses at 130 locations worldwide.

Embry-Riddle offers a number of bachelors and masters degrees in aviation and aerospace related fields ranging from Aeronautical Science (our undergraduate professional pilot degree), Air Traffic Management, Aviation Safety and Security, Meteorology and Aerospace Engineering to Human Factors Psychology, Airline and Airport Management and Space Physics. Embry-Riddle works on a daily basis with federal agencies including the FAA, NASA, NSF, NWS, and DOD providing expertise and undertaking research, education, and training projects. In fact, it is Embry-Riddle instructors who teach Air Force Academy cadets to fly and Embry-Riddle faculty who provide safety training for about 600 Air Force safety officers each year in Albuquerque.

In all, Embry-Riddle is actively engaged in the education, training, growth and development of almost every area of aviation and aerospace, here in the United States, and around the world.

Who we are and what we do applies with special force to the topic before your committee today: the status of the Air Traffic Controller Work Force. At Embry-Riddle Aeronautical University, almost 500 students are now preparing to become air traffic controllers through our Air Traffic Management degree program. To accommodate the popularity and growth of the program, initiated in the fall of 2000, we have just hired our sixth full-time faculty member dedicated specifically to this program.

Our ATC training program is not only the nation's largest among the 13 Collegiate Training Initiative (CTI) institutions, but our students on average, I would suggest, are the best prepared of any -- with skills and training equal to those who graduate from the ATC Academy in Oklahoma City. All of our graduates have consistently qualified for entry into the air traffic controller OJT environment. Feedback we receive from the FAA underscores our assessment of their capabilities and superior performance.

There are two reasons for this success. First, our faculty has outstanding credentials. We are the only school where every ATC faculty member has at least 20 years of experience as an air traffic controller and has an earned doctorate or a master's degree.

Second, our instructional environment is unrivaled. Our simulation equipment is industry standard and state-of-the-art. ERAU was among the first to install the Adacel tower simulators. NASA, FAA and the Air Force have since followed suit and have identical equipment.

It is our understanding that the nation faces a significant need for new controllers in the next ten years as our ATC system modernizes and expands and as many current long service controllers retire. With Embry-Riddle's programs, faculty and facilities -- designed specifically to educate quality air traffic controllers -- ERAU stands ready to play a significant role in helping to meet this growing need in a timely manner and at no additional cost to the government.

Mr. Chairman, there are two impediments to dramatically increasing controller supply that I would urge you and your committee to consider:

- 1) Today, every Embry-Riddle ATC graduate must attend an additional six-week training program at Oklahoma City before they move into the ATC OJT environment. We believe that this is an unnecessary and costly step. Were Embry-Riddle granted the same status as the FAA academy and the Minneapolis Community Technical College (MCTC) and were we permitted to send our graduates directly to the OJT environment, the FAA could realize significant savings in both time and expense.

What is contained in our four year ATC curriculum meets and exceeds the training program currently required at Oklahoma City. Consequently, our graduates currently experience unnecessary delays entering the OJT program – a program for which they are already well qualified. And the FAA is spending scarce resources training already qualified personnel who do not require it. I would also like to add and emphasize that Embry-Riddle students pay for their own education. Therefore, from an FAA perspective, training costs are zero. The motivation for our students entering this program at their own expense is the reasonable prospect of FAA employment at graduation.

- 2) I would also urge you and your committee to consider an accelerated ATC training program housed at ERAU. The program would target aspiring Air Traffic controllers who already have a college degree. With a program such as this, we could deliver an additional 600 trained air traffic controllers to the FAA annually. This figure is 60% of the estimated national requirement. Current federal rules limit Embry-Riddle to training only degree seeking students. This restriction serves no educational or public policy purpose and we would urge its elimination.

To prepare for this accelerated program, Embry-Riddle can acquire the necessary equipment and add the necessary faculty, without cost to the FAA. Once the equipment and faculty are in place, we can train a degreed controller -- utilizing an intense and demanding curriculum -- in about six months. Assuming entering classes of 100 students every two months, we feel confident that ERAU can graduate 600 new controllers annually. These graduates would be trained to the same exacting standards we currently maintain in our undergraduate program and they can be expected to be fully as qualified for immediate OJT entry into the FAA ATC system. Equally important, they will have paid for this education themselves.

We believe that these two reforms can be easily implemented, significantly increasing the number of highly qualified new ATC controllers at significant savings to the FAA and the nation. The FAA incurs approximately \$6,000 in per diem costs and \$12,000 in salary for each student who attends the academy. If Embry-Riddle graduates were allowed direct entry into the OJT work force, the savings to the FAA could approach \$18 million per year.

Mr. Chairman, as you and your colleagues address the air traffic controller issue, I would urge you to consider private sector alternatives that can provide qualified controllers at minimal cost to the government. We at Embry-Riddle Aeronautical University are up to this challenge.

United States General Accounting Office

GAO

Testimony
Before the Subcommittee on Aviation,
House Committee on Transportation and
Infrastructure

For Release on Delivery
Expected at time 10:30 a.m. EDT
Tuesday, June 15, 2004

**FEDERAL AVIATION
ADMINISTRATION**

**Plan Still Needed to Meet
Challenges to Effectively
Managing Air Traffic
Controller Workforce**

Statement of JayEtta Z. Hecker, Director
Physical Infrastructure Team



June 15, 2004

FEDERAL AVIATION ADMINISTRATION

Plan Still Needed to Meet Challenges to Effectively Managing Air Traffic Controller Workforce



Highlights of GAO-04-887T, a testimony before the Subcommittee on Aviation, House Committee on Transportation and Infrastructure

Why GAO Did This Study

In the summer of 2000, the air traffic control system lacked the capacity to handle demand efficiently, and flight delays produced near-gridlock conditions at several U.S. airports. A combination of factors, including the crises instigated by the events of 9/11, temporarily reduced air traffic, but air traffic is now back to near pre-9/11 levels. The ability of the air traffic control system to handle expected traffic in coming years may depend in part on the Federal Aviation Administration's (FAA) effectiveness in planning for a long-expected wave of air traffic controller retirements.

GAO's testimony focuses on (1) the magnitude and timing of the pending wave of air traffic controller retirements, (2) the challenges FAA faces in ensuring that well-qualified air traffic controllers are ready to step into the gap created by the expected large number of retirements, and (3) challenges that will affect the ability of the air traffic controller workforce to meet future changes in the airline industry and use of airspace. GAO's statement is based on past reports on the air traffic controller workforce, including GAO's 2002 report that surveyed controllers and analyzed controller workforce data. GAO has updated this work through interviews with and the collection of data from key stakeholders in the aviation community. This work was performed in accordance with generally accepted government auditing standards.

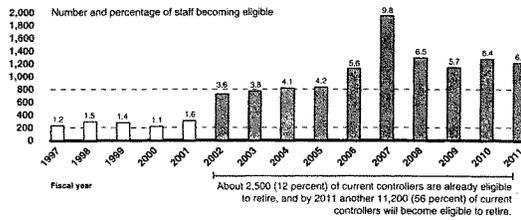
www.gao.gov/cgi-bin/getrpt?GAO-04-887T.

To view the full testimony, click on the link above. For more information, contact JayEtha Hecker, (202) 512-2634 or heckerj@gao.gov.

What GAO Found

FAA faces a bow wave of thousands of air traffic controller retirements over the coming decade. GAO's 2002 report warned that almost half of the controller workforce (about 7,000 controllers) would retire over the next 10 years and about 93 percent of controller supervisors would be eligible to retire by the end of 2011. In addition, GAO's analysis showed that retirements could increase dramatically at the busiest air traffic control facilities. FAA and the Department of Transportation's Inspector General have also reported that a surge in controller retirements is on the way.

Past and Projected Air Traffic Controller Retirement Eligibility, by Fiscal Year (2002 Report)



Legend: Past eligibility rate each fiscal year as a number and as a percent of fiscal-year total (white bars); Projected eligibility rate each fiscal year as a number and as a percent of fiscal-year total (shaded bars).

FAA faces numerous hiring and training challenges to ensuring that well-qualified controllers are ready to fill the gap created by the expected retirements. For example, it can take 2-4 years or more to certify new controllers, and FAA's training facility and air traffic control facilities, where years of on-the-job training occur, have limited capacity. While FAA must make hiring decisions from a long-term perspective, it has generally hired replacements only after a current controller leaves. In 2002, GAO recommended that FAA develop a comprehensive workforce plan to deal with these challenges. However, FAA has not finalized a plan, and its recent actions call into question whether it has adequate strategies to address these challenges. For example, since the beginning of this year, FAA lost nearly 400 controllers and has hired only 1 new controller. Its fiscal year 2005 budget proposal does not request any funding to hire additional controllers.

Challenges will also affect the ability of the air traffic controller workforce to meet future changes in the airline industry and use of airspace. Challenges include the need for FAA to overcome management problems with acquiring systems to modernize the air traffic control system and to adjust to shifts in the use of airspace, including increases in the use of smaller aircraft and changes in air traffic patterns around the country.

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to participate in today's hearing on the challenges the Federal Aviation Administration (FAA) faces in effectively managing its air traffic controller workforce: in particular, challenges in planning effectively to address the large number of controller retirements expected over the next decade in order to help avoid any related disruptions to air travel. We all recall that in the summer of 2000, the air traffic control system lacked the capacity to handle demand efficiently, and flight delays produced near-gridlock conditions at several U.S. airports. A combination of factors—the downturn in travel caused by the general economic slowdown and of course the crises instigated by the events of 9/11—temporarily reduced traffic significantly and reduced pressure on the air traffic control system—but air traffic is now back to near pre 9/11 levels.

The ability of the air traffic control system to handle expected traffic in coming years, including the status of FAA's preparations for handling the long-expected wave of air traffic controller retirements, has again become a pressing issue. Air traffic controllers play an integral role in maintaining the safety and efficiency of the nation's air traffic control system, and ensuring an appropriately sized and trained workforce is of high importance. We applaud the subcommittee's focus on this critical issue and seek to contribute to the discussion by focusing on the following three topics: (1) the magnitude and timing of the pending wave of air traffic controller retirements, (2) challenges FAA faces in ensuring that well-qualified air traffic controllers are ready to step into the gap created by the expected large number of retirements, and (3) challenges that will affect the ability of the air traffic controller workforce to meet future changes in the airline industry and use of airspace.

Our statement is based on our past reports in three areas: the air traffic controller workforce, including our 2002 report in which we surveyed controllers and analyzed controller workforce data;¹ air traffic control modernization; and airline competition. We

¹*Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (GAO-02-591, June 14, 2002).

have updated this work through interviews with and collection of data from key stakeholders in the aviation community, including several current and former senior FAA officials. We performed our work in accordance with generally accepted government auditing standards.

In summary, Mr. Chairman, we found that:

- FAA faces a bow wave of thousands of air traffic controller retirements over the coming decade. Our 2002 report warned that almost half of the controller workforce (about 7,000 controllers) would retire over the next 10 years and that FAA estimated it would experience retirements of controllers at a level 3 times higher than that experienced over the 5-year period from 1996-2000. On top of the substantial retirements, at the time, FAA also projected that an additional 2,000 controllers would be needed by 2010 to address forecasted increases in demand for air travel. We also found that about 93 percent of the 1,862 controller supervisors would be eligible to retire by the end of 2011, which could exacerbate the problem of maintaining adequate controller staffing. In addition, our analysis showed that the busiest terminal facilities and the "en route" centers, used to manage aircraft beyond a 50-nautical-mile radius from airports, would experience a sizable increase in controllers reaching retirement eligibility. FAA and the Department of Transportation Inspector General have also reported that a surge in controller retirements is on the way; the question is – Will FAA be ready for it?
- FAA faces numerous challenges related to ensuring that well-qualified controllers are ready to step into the gap created by the expected wave of retirements but it has not implemented strategies to meet them. Key among these challenges is efficiently hiring and training new controllers in numbers large enough to meet anticipated shortfalls. For example, since it takes 2-4 years and sometimes longer for a newly hired controller to become certified, hiring and training decisions need to be made from a longer-term perspective. However, we found in prior work that FAA's process of generally hiring replacements only after a current controller leaves does not adequately take into consideration this training time. Hiring challenges include effectively screening candidates to help ensure that they

have the aptitude needed to control air traffic. Efficiency in hiring will become even more important as FAA faces the large surge in controller retirements, for hiring people who do not make it through the training process wastes money and time—and may affect both the cost of the controller workforce and the ability of FAA to fill positions quickly enough to maintain a sufficient controller workforce to meet its mission. Training challenges include the limited capacity at the training center in Oklahoma City and at the air traffic control facilities. In addition, because of the significant amount of on-the-job training that currently occurs through one-on-one training, to effectively handle a large number of new controllers, there needs to be an overlap period during which experienced controllers likely to retire soon and newly hired controllers are both on board. While this will result in a temporary increase in the cost of the air traffic controller workforce, eventually more senior, high salary controllers will retire and be replaced by new controllers at lower salaries, possibly reducing expenses; and the need for overlap between these two groups can be reduced. Our 2002 report recommended that FAA develop a comprehensive workforce plan to deal with these challenges, but FAA has not finalized a plan and its recent actions call into question whether it will have adequate strategies to address these challenges. For example, last year, FAA hired 762 controllers, but according to a senior National Air Traffic Controllers Association official, many of these hires took place at the end of the year, and because of limited space in training facilities, many of those hired were unable to begin entry level training immediately. Moreover, since hiring those controllers at the end of the year to reach a level of 15,635, FAA has lost nearly 400 controllers and has hired only 1 new controller through May of this year. Its fiscal year 2005 budget proposal does not request any funding to hire additional controllers to address the wave of retirements.

- Challenges will also affect the ability of the air traffic controller workforce to meet future changes in the airline industry and use of airspace, and these challenges underscore the importance of comprehensive workforce planning that considers and addresses the entire context in which air traffic controllers operate.

Among these challenges is the need for FAA to overcome significant and longstanding management problems it has had with acquiring new air traffic control modernization systems within cost, schedule, and performance goals, including the need to effectively involve controllers in the development, deployment, and refinement of these new systems and consider how these new systems will affect the workforce. Another challenge will be adjusting to shifts in the types of aircraft used in commercial aviation (e.g., more flights by smaller aircraft, such as regional jets or air taxis), general aviation, and fractional ownership, where individuals or companies purchase a share in an aircraft for their occasional use. These shifts could have implications for the Aviation Trust Fund. Another challenge likely to impact the controller workforce will be keeping pace with the dynamic nature of the airline industry, in which major and low cost airlines are likely to change flight patterns, in part by adding or removing hubs. For example, industry sources have recently reported that US Airways plans to reduce service to Pittsburgh. Such changes may alter the flow of air traffic in particular areas, emphasizing the need for an air traffic control system that is nimble and can seamlessly continue to provide services as demand shifts.

FAA Faces a Pending Wave of Air Traffic Controller Retirements

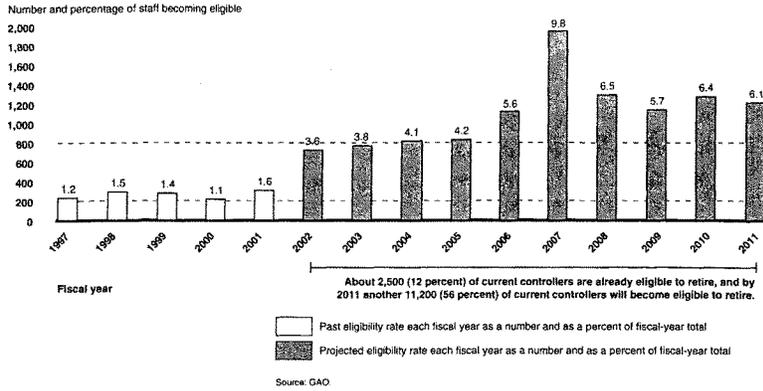
Although the exact number and timing of the controllers' departures are impossible to determine, scenarios we developed indicate that the total attrition of controllers from FAA will grow substantially in the short and long terms. As a result, FAA will likely need to hire thousands of air traffic controllers in the next decade. At the end of fiscal year 2003, FAA had 15,635 controllers, and according to its staffing standard, it is targeting a controller staffing level of 15,136 in fiscal year 2004, 15,300 in fiscal year 2005, and 16,109 in fiscal year 2009. However, so far this year, the agency has lost nearly 400 controllers due to retirements and as of May had hired only 1 controller. FAA has reported similar projections of a wave of air traffic controller retirements, and in a 2004 report, the Inspector General also reported on the coming wave, citing FAA's estimate that nearly

7,100 controllers could leave the agency by 2012.³ Our 2002 report found that FAA estimated it would experience retirements of controllers at a level three times higher than that experienced over the 5-year period from 1996-2000. On top of the substantial number of retirements, at the time, FAA also projected that an additional 2,000 controllers would be needed by 2010 to address forecasted increases in demand for air travel.

Our 2002 report analyzed, among other things, the retirement eligibility levels for various portions of the controller workforce and found that the annual number of controllers first becoming eligible for retirement would peak in fiscal year 2007, when about 10 percent of the air traffic controllers will become eligible to retire. (See fig. 1.) In addition, we found that by 2011, about 68 percent of the current controllers would be eligible to retire.

³*Opportunities to Improve FAA's Process for Placing and Training Air Traffic Controllers In Light of Pending Retirements*, (Department of Transportation Inspector General, Report Number: AV-2004-060, June 2, 2004).

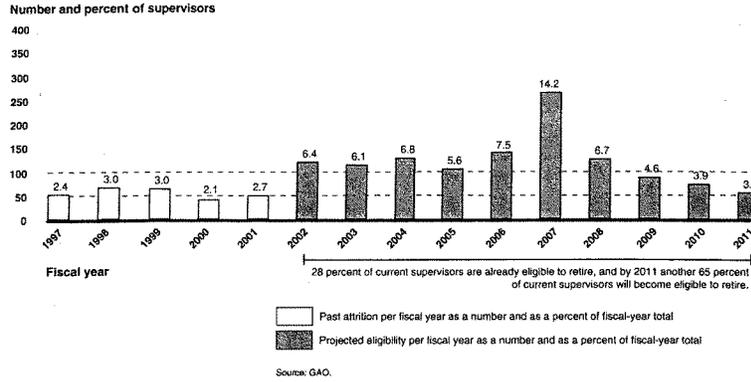
Figure 1: Past and Projected Air Traffic Controller Retirement Eligibility, by Fiscal Year



Note: This figure appeared in *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (GAO-02-591, June 14, 2002).

We found a similar situation with the retirement eligibility of supervisors. Because supervisors are important to air traffic control operations and because they tend to be older than others controlling traffic, we examined retirement eligibility and survey results of supervisors at FAA as of June 2001. We found that supervisors will also become eligible to leave FAA in very high numbers over the next decade. Specifically, we found that 1,205, or 65 percent of current supervisors, would become eligible to retire between 2002 and 2011. (See fig. 2.) However, with 28 percent of current supervisors already eligible to retire and another 65 percent reaching eligibility by 2011, a total of about 93 percent of 1,862 current supervisors will be eligible to retire by the end of fiscal year 2011. As a result, FAA may face substantial turnover in its supervisory ranks over the next decade. This turnover could put a further strain on FAA's ability to maintain a sufficient certified controller workforce, as experienced controllers will be tapped to fill open supervisory positions, leaving fewer to control air traffic or provide training for new controllers.

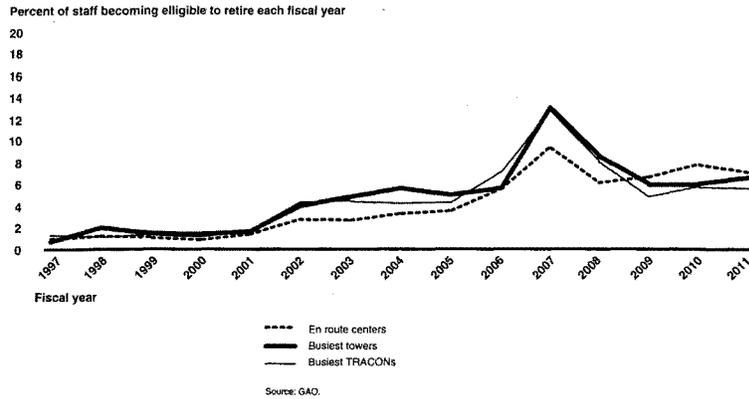
Figure 2: Past and Projected Retirement Eligibility for Supervisory Air Traffic Controllers



Note: This figure appeared in *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (GAO-02-591, June 14, 2002).

Because of the crucial role certain facilities play in the national air space system, we analyzed the impact of retirement eligibility on the 21 major “en route” centers (air route traffic control centers used to manage aircraft beyond a 50-nautical-mile radius from airports), the 10 busiest airport towers, and the 10 busiest TRACON facilities (terminal radar approach control facilities used to track airplanes and manage the arrival and departure of aircraft within a 5-to-50 nautical mile radius of airports). Based on our analysis of FAA’s employee database, we found the en route centers and the busiest terminal facilities will experience a sizeable increase in the number of controllers reaching retirement eligibility. As figure 3 shows, retirement eligibility in these facilities grows over the next decade.

Figure 3: Past and Projected Retirement Eligibility for En Route Centers, 10 Busiest Towers and 10 Busiest TRACONS, by Fiscal Year



Note: This figure appeared in *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (GAO-02-591, June 14, 2002).

Based on our analysis for the towers, we found that the Denver tower had the highest proportion of retirement-eligible controllers as of September 30, 2001, with 14 of its 51 controllers (27 percent) eligible to retire. We found that by the end of fiscal year 2006, 45 percent of Denver's current controllers would be eligible to retire, and by the end of fiscal year 2011, 46 of its 51 controllers (90 percent), will reach retirement eligibility.

Our analysis of the 10 busiest TRACON facilities showed that the Dallas/Fort Worth TRACON had the highest level of current controllers eligible to retire at the end of fiscal year 2001, with 36 of its 147 controllers (24 percent) eligible. We found that by the end of fiscal year 2006, the cumulative percentage would grow to 46 percent, and by the end of fiscal year 2011 would reach 87 percent, as 128 of the 147 controllers currently at the facility would reach retirement eligibility.

In examining the 21 major en route centers, we found that the Jacksonville center had the highest proportion of retirement-eligible controllers at the end of fiscal year 2001, with 79 of its 376 controllers (21 percent) eligible for retirement. According to our

analysis, by the end of fiscal year 2006, at least 29 percent of current controllers would be eligible for retirement at 10 centers—Albuquerque, Atlanta, Boston, Fort Worth, Houston, Jacksonville, Los Angeles, Memphis, Seattle, and Washington, D.C.

We are not alone in seeing a bow wave of controller retirements approaching over the next several years. This month, FAA provided us with projections that 329 controllers would retire in fiscal year 2004, and that this level would double by fiscal year 2007 to over 650 in that year, and double again to 1170 by fiscal year 2013. These levels are significantly higher than the average of less than 200 retirements per year over the past 5 years (1999-2003). Similarly, the Department of Transportation Inspector General reported this month that increasing numbers of controllers will become eligible to retire through 2012, with a peak of retirement eligibility around fiscal year 2007, and that FAA had estimated that nearly 7,100 controllers could leave FAA by fiscal year 2012.

FAA Faces Challenges to Hiring and Training an Adequate Number of Well-Qualified Controllers but Lacks Strategies to Meet These Challenges

There are several challenges related to hiring and training large numbers of air traffic controllers in the short amount of time available. Although we identified these challenges in 2002 and recommended that FAA create a comprehensive workforce plan that addresses these challenges, FAA has not yet created a plan. Moreover, its recent actions suggest that it has not implemented strategies to meet these challenges and put into place a system that will bring on board air traffic controllers in time to deal with the projected retirements of many controllers. However, senior FAA officials told us that the agency's new Air Traffic Organization is currently preparing a comprehensive business plan, including a comprehensive controller workforce plan, which is due to the Congress in December 2004.

A key component of workforce planning is ensuring that appropriately skilled employees are available when and where they are needed to meet an agency's mission. This means that an agency continually needs trained employees to become available in time to fill newly opened positions. We reported in 2002 that FAA's hiring practice was generally to

hire new employees only when current employees leave, which does not adequately account for the time needed to train controllers to fully perform their functions. The amount of time it takes new controllers to gain certification depends on the facility at which they work, but generally, training takes from 2 to 4 years and can take up to 5 years at some of the busiest and most complex facilities. Moreover, during the training period, the current training process depends upon substantial one-on-one training, during which an experienced controller works directly with a controller in training, monitoring the trainee's actions, so there must be an overlap of experienced controllers and newly hired controllers. FAA regional officials, who are responsible for ensuring that FAA's air traffic facilities are adequately staffed, were particularly concerned about FAA's general hiring practice. Specifically, the officials were concerned that significant increases in retirements would leave facilities short of qualified controllers while new trainees were hired and trained.

Our report also noted that the lack of experienced controllers could have many adverse consequences. For example, several FAA regional officials stated that if a facility becomes seriously short of experienced controllers, the remaining controllers might have to slow down the flow of air traffic through their airspace. If the situation became dire, FAA could require airlines to reduce their schedules, but this would be an unlikely, worst-case scenario, according to some FAA regional officials. Also, because there would be fewer experienced controllers available to work, some FAA facility officials stated that those controllers could see increased workloads and additional, potentially mandatory, overtime. In addition to potentially resulting in increased work-related stress and sick leave usage, it could also cause experienced controllers to retire sooner than they otherwise might. For example, based on our 2002 survey of controllers, we estimated that 33 percent of controllers would accelerate their decision to retire if forced to work additional mandatory overtime.

Identifying sources of future potential employees with the requisite skills and aptitude is also important. Efficiency in hiring will become even more important as FAA faces the wave of controller retirements, for hiring people who do not make it through the training

process wastes money and time—and may affect both the cost of the controller workforce and the ability of FAA to fill positions quickly enough to maintain a sufficient controller workforce to meet its mission. FAA has historically hired new controllers from a variety of sources, including graduates from institutions in FAA's collegiate training institute program, the Minneapolis Community and Technical College, former FAA controllers who were fired by President Reagan in 1981, and former Department of Defense controllers. FAA can also hire off-the-street candidates to become controllers. The success of hiring candidates who actually become controllers depends in large part on identifying potential candidates who have the appropriate aptitude for controllers' work. Historically, FAA used its initial entry-level training at its academy to screen out candidates who could not become successful controllers. According to FAA officials, as many as 50 percent of off-the-street applicants have dropped out before finishing the required training program, at a cost of \$10 million per year, a rate that highlights the difficulty of successfully hiring candidates to replace the thousands of new controllers expected to retire. FAA has recently begun to test a new screening exam that it hopes will better ensure that potential new hires have the skills and abilities necessary to become successful controllers. It will take a number of years to determine if the new test has the desired results.

Training challenges include the limited capacity at the training center in Oklahoma City and at the air traffic control facilities. In addition, because of the significant amount of on-the-job training that currently occurs through one-on-one training, to effectively handle a large number of new controllers, there needs to be an overlap period during which both experienced controllers likely to retire soon and newly hired controllers are both on board. While this will result in a temporary increase in the cost of the air traffic controller workforce, eventually more senior, high salary controllers will retire and be replaced by new controllers at lower salaries, possibly reducing expenses; and the need for overlap between these two groups can be reduced.

Our 2002 report recommended that FAA develop a comprehensive workforce plan for controllers to deal with these challenges, but FAA has not finalized a plan and its recent

actions call into question whether it will have adequate strategies to address these challenges. For example, last year, FAA hired 762 controllers, but according to a senior National Air Traffic Controllers Association official, many of these hires took place at the end of the year, and because of limited space in training facilities, many of those hired were unable to begin entry level training immediately. Moreover, since hiring those controllers at the end of the year to reach a level of 15,635, FAA has lost nearly 400 controllers and has hired only 1 new controller through May of this year. Its fiscal year 2005 budget proposal does not request any funding to hire additional controllers to address the wave of retirements.

Challenges Will Also Affect the Ability of the Controller Workforce to Meet Future Changes in the Airline Industry and Use of Airspace

There are also challenges in the broader context of the air traffic control system that will affect the ability of the air traffic controller workforce to meet future changes in the airline industry and use of airspace. These challenges need to be considered as FAA develops and implements a comprehensive plan for its controller workforce. Challenges include the need for FAA to (1) overcome significant and longstanding management problems it has had with acquiring new systems to modernize the air traffic control system intended to facilitate the safe and efficient movement of air traffic by controllers and (2) adjust to shifts in the use of airspace, including increases in the use of smaller aircraft and changes in air traffic patterns around the country.

Controller Workforce Planning Inextricably Linked to FAA's Air Traffic Control Modernization Efforts

Controller workforce planning needs to take place in the larger context of FAA's Air Traffic Control modernization efforts in order to make optimal use of the agency's investments. However, as our past work has shown, FAA needs to address longstanding problems it has had in deploying new air traffic control systems on schedule, within budget, and with promised capabilities to facilitate the safe and efficient flow of air traffic by controllers. These new systems are intended to improve the safety and efficiency of the nation's air traffic control system, with some offering the potential to

improve the productivity of the controller workforce. To maximize the usefulness of new systems to controllers and to help ensure that safety is not eroded by the introduction of new capabilities, sustained controller involvement is needed as new systems are developed, deployed, and refined. When there is an ineffective link between technology and needs, money and time will be wasted, and the effectiveness of the air traffic controller workforce may be reduced. Moreover, these new systems may change the productivity of the controller workforce, an effect that will need to be taken into account as FAA refines its estimates of future controller workforce needs.

For example, our past work on the Standard Terminal Automation Replacement System (STARS)—the workstations used by controllers near airports to sequence and control air traffic—highlights the importance of controller involvement in the development, deployment, and refinement of air traffic control systems. In 1997, when FAA controllers first tested an early version of this commercially available system, they raised some concerns about the way aircraft position and other data were displayed and updated on the controllers' radar screens. For example, the controllers said the system's lack of detail about an aircraft's position and movement could hamper their ability to monitor traffic movement. In addition, controllers noted that many features of the old equipment could be operated with knobs, allowing controllers to focus on the screen. By contrast, STARS was menu-driven and required the controllers to make several keystrokes and use a trackball, diverting their attention from the screen. To address these concerns, among others, FAA decided to develop a more customized system and to deploy an incremental approach, thereby enabling controllers to adjust to some changes before introducing others. This incremental approach costs more and is taking longer to implement than the original STARS project. Despite the importance of controller involvement in the development, deployment, and refinement of new air traffic control systems, such activities can be very time-consuming, often take controllers off-line, and place additional pressure on an already constrained workforce. FAA needs to take into account these demands on the controller workforce as part of its comprehensive workforce plan.

Increases in Use of Smaller Aircraft and Changes in Air Traffic Patterns Around Country May Also Affect the Air Traffic Controller Workforce

Changes in patterns of aircraft usage are likely to affect the needs of the air traffic controller workforce. The increased use of regional jets, the possibly expanding use of air taxis, ongoing general aviation aircraft usage, and fractional ownership, where individuals or companies purchase a share in an aircraft for their occasional use, could all increase the number of smaller aircraft in the sky, placing increased demands on the air traffic controller workforce. In addition, possible changes in air traffic patterns around the country may also impact this workforce.

In 2001, we reported that we had found consensus among the studies we reviewed and the industry experts we interviewed that the growing number of regional jets had contributed to congestion in our national airspace.³ The industry experts we spoke with repeatedly expressed concern about the impact of adding so many aircraft so quickly to airspace whose capacity is already constrained. Because hundreds of new aircraft had been added to already congested airspace while comparatively few turboprops had been taken out of service, many of the experts believed it was inevitable that congestion and delays would increase. They also noted that with many more regional jets on order, congestion and delays were not likely to diminish in the near future. Earlier this month, the Chairman and Chief Executive Officer of AirTran Airways noted that the air traffic control system may have difficulty absorbing the hundreds of regional jets now on order.⁴

In coming years, air taxis may also add to crowding in the skies. FAA officials told us that they have been briefed on proposals for using air taxis to carry about four passengers each in selected metropolitan areas where there is heavy surface traffic congestion. The use of such air taxis could increase the demand on controllers to

³ *Aviation Competition: Regional Jet Service Yet to Reach Many Small Communities* (GAO-01-344, February 14, 2001).

⁴ Testimony of Joseph Leonard, Chairman and Chief Executive Officer of AirTran Airways before the Subcommittee on Aviation, House Committee on Transportation and Infrastructure, June 3, 2004.

provide air traffic services in these metropolitan areas, where it is likely that there is already heavy air traffic. Furthermore, it is possible that any increases in general aviation or fractional ownership could also increase the amount of traffic in the skies—traffic that must be effectively directed by air traffic controllers to ensure the safety of the airways. Moreover, because fees collected for the Aviation Trust Fund are based largely on ticket taxes assessed on paying airline passengers, the change in the mix of aircraft could have implications for the Aviation Trust Fund.

Given the dynamic nature of the airline industry, in which major airlines and low cost airlines may change their flight patterns by adding or removing hubs, the number of flights in any one location may spike or drop abruptly. Recent examples include Independence Air's move to set up operations at Washington Dulles International Airport and reports by industry sources of a US Airways plan to reduce service to Pittsburgh. These types of potential shifts in the location of demand for air traffic services underscore the need for a nimble air traffic control system that can seamlessly continue to provide services as demand shifts.

Concluding Observations

FAA faces a complex task in effectively addressing the bow wave of controller retirements that is heading its way. The number of factors involved, including the need to time hiring so as not to overload training capacities and the need to be responsive to the changing demands of a dynamic industry, highlight the importance of a carefully considered, comprehensive workforce plan. This plan needs to include strategies for addressing the full range of challenges in order to seamlessly transition from the current workforce to a future workforce that is well qualified, trained, and can accommodate changes in the use of our airspace. However, although we recommended to FAA 2 years ago that it develop a comprehensive plan for this purpose, it has not yet finalized a plan. Senior FAA officials told us that the Air Traffic Organization is currently preparing a comprehensive business plan, including a comprehensive controller workforce plan, which is due to the Congress in December 2004. This is an important opportunity to establish strategies to meet the challenges ahead. Today these challenges continue to

underscore the need for action in developing strategies that take into account (1) the expected timing and location of anticipated retirements, (2) the length of the hiring and training processes, (3) limitations on training capacities, and (4) changes in the airline industry and use of airspace that may affect the air traffic controller workforce in coming years. Without focused and timely action on all of these fronts, the gap created by the expected bow wave of controller retirements could reduce the effectiveness of the air traffic control workforce to meet its mission just as increased activity in the skies makes its effectiveness more critical than ever to the safety of our airways.

This concludes my statement. I would be pleased to respond to any questions that you or other Members of the Subcommittee may have at this time.

For further information on this testimony, please contact JayEtta Z. Hecker at (202) 512-2834 or by e-mail at heckerj@gao.gov. Individuals making key contributions to this testimony include, David Lichtenfeld, Beverly Norwood, Raymond Sendejas, Glen Trochelman, and Alwynne Wilbur.

Response to Congresswoman Eddie Bernice Johnson's question to JayEtta Hecker,
Director, Physical Infrastructure Team, U.S. General Accounting Office before the
Subcommittee on Aviation hearing on The Status of Air Traffic Controller
Workforce, June 15, 2004

Question:

According to the GAO's June 2002 report, the Southwest Region has the third largest apportionment of air traffic control specialists at two thousand twenty-eight (2,028). Could you elaborate on the implications projected retirements would have on this particular region?

GAO Answer:

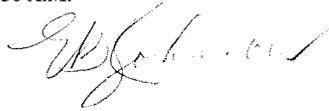
At the time of our report, *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (GAO-02-591, June 2002), the FAA's Southwest Region had 2,028 controllers, consisting of air traffic control specialists, traffic management coordinators, operations supervisors, and other controllers not actively controlling traffic. In the report, we assessed FAA's overall strategy to meet potential future controller attrition system wide, but we did not specifically assess the impact of controller attrition on the Southwest Region, or any of FAA's regions in particular. We found that FAA was not adequately prepared to meet expected future attrition, and needed to develop a comprehensive workforce strategy for mitigating the impact of the attrition.

During our discussions with officials from FAA regions, we found that if FAA did not develop an effective workforce plan, controller attrition could result in a lack of experienced controllers, and this could have many adverse consequences. For example, several FAA regional officials told us that if a facility becomes seriously short of experienced controllers, the remaining controllers might have to slow down the flow of traffic through their airspace. In addition, if the situation became dire, FAA could require airlines to reduce their schedules, but this would be an unlikely, worst-case scenario, according to some FAA regional officials. The report used an example from the Southwest Region to highlight the upcoming need for additional controller staffing. Specifically, in May 2001, officials from the Southwest Region requested that FAA headquarters provide 48 additional staff to mitigate the impacts of future retirements and ensure quality customer service. However, due to operational and budgetary constraints, headquarters denied this request. Some FAA facility officials also stated that because attrition would result in fewer experienced controllers available to work, those remaining controllers could see increased workloads and additional, potentially mandatory, overtime. Some facility managers told us that they expected this increased burden to result in additional work-related stress for the remaining controllers, which would increase sick leave usage. It could also cause experienced controllers to retire sooner than they otherwise might. For example, the report included the results of our survey of controllers, which estimated that 33 percent of controllers would accelerate their decision to retire if forced to work additional mandatory overtime.

Because the potential impact of controller attrition at any one facility or region depends on the demographics of the controller workforce at that location, we recommended that FAA develop a comprehensive workforce plan to help ensure adequate staffing levels. Specifically, we

recommended that in this plan, FAA identify the number and timing of hiring necessary to ensure that facilities have an adequate number of certified controllers available to perform needed duties. As part of this effort, we recommended that FAA determine and plan for expected attrition levels and timing at each facility.

SUBCOMMITTEE ON AVIATION
STATUS OF THE AIR TRAFFIC CONTROLLER WORKFORCE
TUESDAY, JUNE 15, 2004 @ 10:30 A.M.

- Thank you Mr. Chairman. 
- Your leadership on this very important matter is to be commended and I welcome our witnesses here this morning.
- Our nation's aviation system is vital to our economy and way of life and we can not afford to short change either.
- The future success of our nation's aviation industry is greatly dependent on our investment today. Adequate investment in equipment modernization, in addition to the recruitment and retention of capable aviation personnel are critical components in insuring air safety and efficiency for many years to come.

- Success in the aviation equation will only be as good as the sum of the parts. Our nation's fifteen thousand air traffic control specialists serve as a vital component to this equation. However, based on estimates from the FAA, as well as the DOT Inspector General, over half of the controller workforce could retire over the next nine years (FY2004-2012).
- FAA further estimates that twenty-five point five percent of controllers eligible to retire will leave in the first year of eligibility, resulting in increased workloads for remaining personnel.
- I have heard, first hand, from air traffic controllers that service the multiple airports within my congressional district. One of their primary concerns—next to keeping air traffic control out of the hands of privatization—centers on the possible vacuum created by a retirement crunch.

- Furthermore, as evidenced by a 2002 GAO report, FAA regional officials, who are responsible for ensuring that FAA's air traffic facilities are adequately staffed, are equally concerned about FAA's replacement-hiring policies.
- According to the report eight of nine regional officials would like for FAA to allow them to hire new controller staff so that experienced, fully qualified controllers will be ready when current controllers retire.
- The reports also cites that several regions stated that they had made formal and informal requests to FAA headquarters to obtain additional controllers who could be hired and trained in advance of future requirements.

- In May of 2001, officials from the Southwest region of FAA, the region which encompasses my congressional district, formally requested 48 additional staff members to “ensure that quality customer service is maintained, budgetary concerns are addressed, and controller attrition is dealt with.” Unfortunately, in April of 2002, FAA denied the region’s request citing operational constraints.
- Passenger travel on commercial airlines is expected to reach one billion by 2014 and a lack of experienced controllers could have many negative consequences. Reactionary policies regarding this matter are not an option. We must begin to address this issue head on. America’s flying public expects and deserves nothing less.
- Again, I welcome our witnesses and I look forward to hearing from them on this very important subject matter.

Opening Statement of William O. Lipinski
June 15, 2004
Aviation Subcommittee Hearing
Status of Air Traffic Control Workforce

Thank you Mr. Chairman for holding this hearing today on this important and timely issue. I also thank our witnesses. I'd like to tell you a little about the situation in and around my district. The Chicago Terminal Radar Approach Control (TRACON) facility located in Elgin, Illinois is responsible for the airspace over the Chicago area up to thirteen thousand feet. Chicago TRACON, which besides O'Hare airport, is responsible for aircraft in and out of Midway, Du Page, Aurora, Palwaukee, and Waukegan airports. Chicago TRACON currently is authorized one hundred and one controllers. They currently have seventy-three full performance controllers (FPLS). This number is down from the high of eighty-seven FPLS in June of 1998.

Since September of 1996 they have picked up seventy-three new trainees. Ten were previously FPLS. Of the seventy-three, twenty-six withdrew or failed training. Twenty-six certified including the ten previous FPLS. Twenty-one are still in the one to three year training process. Chicago TRACON historically has a training failure rate of fifty percent.

Over the last seven years Chicago TRACON has gained thirty- three FPLS and lost thirty-eight. Seven FPLS have retired in the last three years. There are twelve FPLS eligible to retire now. Six are eligible in 2005 and seven in 2006. This number is expected to go up significantly in 2007, the twenty-fifth anniversary of the controller strike of 1981. It is clear the situation here is dire. Action needs to be taken now, so that controllers can be trained before the

current controllers retire. We cannot afford to wait until it is too late. I hope that the Administrator can tell us today the specific steps that the Administration is taking to ensure the flying public's safety by providing adequate staffing levels of air traffic controllers in and around my district and at busy airports across the country. Thank you and I yield back the balance of my time.

Testimony of

**Ruth E. Marlin
Executive Vice President**

National Air Traffic Controllers Association

before the

U.S. House of Representatives

**Committee on Transportation & Infrastructure
Subcommittee on Aviation**

Status of the Air Traffic Controller Workforce

June 15, 2004

Introduction

Good morning Chairman Mica, Congressman DeFazio, and members of the Subcommittee. I want to thank you for the opportunity to testify today on the staffing shortage facing our air traffic control system. I am Ruth Marlin, Executive Vice President of the National Air Traffic Controllers Association.

We're here today because we all recognize that our air traffic control system, the safest and most efficient in the world, is facing a staffing shortage of crisis proportions in the coming years. The overarching solution to this crisis is the hiring and training of thousands of new controllers. There is no other way around this problem. The consequences of inaction are dire. Without adequate numbers of certified controllers we cannot increase system capacity and safely meet the needs of our nation's travelers – instead we will see increasing delays and operational errors. But the controller shortage affects more than the day-to-day operation of the system – it jeopardizes the future of the system and America's leadership role in world aviation. We simply will not have the resources available to modernize equipment, redesign airspace and update our standards.

There has been a great deal of discussion about the need to plan more precisely in the hiring, training and placement of new controllers in the system, and I agree this is important. However, we cannot delay hiring while these plans are developed. We need to move forward to bring new controllers into the system, allowing us to fill known vacancies while we develop better plans to identify future vacancies. NATCA is eager to assist the agency in refining the process. We have a great deal of experience in the field, as the majority of any controller's training is performed by NATCA bargaining unit members. Our expertise and experience is essential if the FAA is going to improve the controller training process, and we are happy to provide it. But the problem cannot wait. It gets worse every month as we fall further behind. And with the delay, the solution becomes more difficult and more costly to implement.

We need Congress to provide the funding to allow the FAA to hire 1,000 additional controllers. This is not a problem we can simply push off to another year, because there is limited capacity to train controllers in the system. Delaying the solution makes the problem exponentially worse. We can no longer wait. For many locations, we have waited too long already. Congress needs to act now.

About NATCA

NATCA is proud to represent over 15,000 air traffic controllers serving the FAA, Department of Defense and private sector. But NATCA is not a single profession union -- aviation safety depends on the expertise of many different kinds of professionals. NATCA represents approximately 1,200 FAA engineers, over 600 traffic management coordinators, and thousands of federal employees working as automation specialists, support specialists in field facilities and regional personnel from FAA's logistics, budget,

finance and computer specialist divisions, and agency occupational health specialists, nurses and medical program specialists.

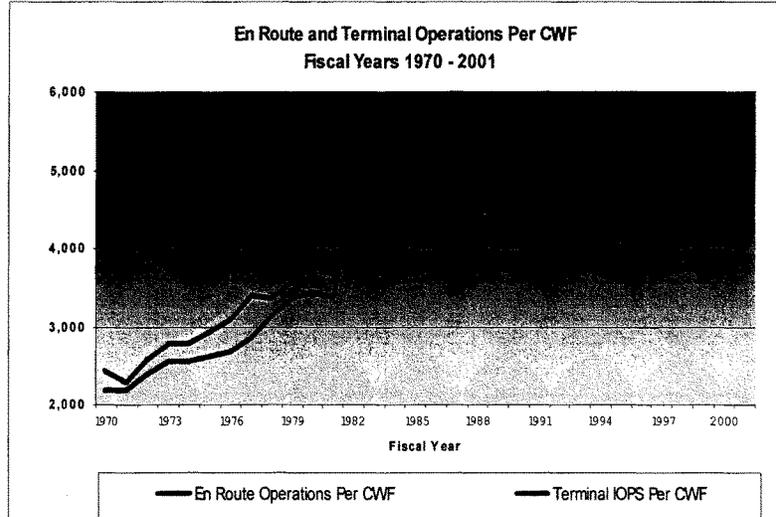
NATCA members are committed to ensuring the high performance operation of the vast network of sophisticated air traffic control, navigation, surveillance, communication, and automation equipment that makes up the National Airspace System. Safety is what we do – it is our sacred trust. Aviation safety is quite simply the litmus test against which all of our actions should be measured. And no single issue threatens the continued safety of our air traffic control system more than the staffing shortage in front of us. Unless the Federal Aviation Administration and Congress address this crisis now, we risk compromising the safest, most efficient air traffic control system in the world.

Moreover, we risk abandoning our nation's well-earned leadership role in aviation. We are a model that the rest of the world strives to attain. While we see opportunities to improve and often criticize our system, the rest of the world sees our system as a goal. I have spoken with controllers and executives from around the world and they look to the United States with admiration. Australia is trying to emulate our airspace, Europe wants to achieve our efficiencies, and Argentina would benefit by modeling our infrastructure. Everyday I am reminded how proud I am to be part of the world's finest air traffic control system. Everyday I am proud of my country for leading the world in air traffic control.

Efficiency and Productivity

As every member on this distinguished panel knows, our air traffic control system is the safest, most efficient system in the world. But what you may not know is that our controllers are also the most productive. According to a recent study by EUROCONTROL, American air traffic controllers are 79% more productive than their European counterparts. Support costs are 57% lower, and while individual employment costs in the U.S. are slightly higher than in Europe, our longer working hours mean that the hour for hour costs are comparable. We work longer hours, more days per month and take fewer days off each year and work more airplanes at a time than our European counterparts. What these figures mean is that the American air traffic control system is far more cost effective than its European counterpart. The overall indicator of cost effectiveness is average costs per flight hour; and according to Eurocontrol's own report, their costs were 74% higher than in the U.S. This is a record to be proud of.

It is a testament to the men and women I represent that our system is the best. And we have been able to maintain this gold standard of excellence even as our workload has skyrocketed. The following chart depicts the changes in operations per controller workforce employee from 1970 to 2001. En route operations per controller workforce employee increased by 165% and terminal instrument operations increased by 115%. This is a real increase in controller productivity compared with only a 69% real increase in operational costs. This is even more striking when the non-personnel costs covered by operation dollars is considered.



The increase in controller workloads can only be expected to continue in the years ahead, as the FAA embarks on an ambitious plan to enhance system capacity and air traffic continues to climb, this summer projected to surpass pre-September 11th levels. Secretary of Transportation Mineta recently established the goal of increasing flight capacity threefold before the end of the decade. To reach this goal and retain the safety standards that are the hallmark of our system, the FAA must begin hiring thousands of controllers to replace the thousands who are expected to retire in the years ahead.

While safety is the responsibility of all participants in the nation's air transportation system, the FAA's air traffic controller workforce serves on the front line, separating thousands of commercial, military and general aviation aircraft operations on a daily basis. The more than 15,000 professional air traffic controllers are essential to the seamless, safe, and efficient movement of these aircraft at airports, terminal radar approach control (TRACON)s and enroute centers. It should be an absolute priority of the FAA to ensure that there are enough qualified and fully trained air traffic controllers to handle the increased traffic growth, the opening of new sectors and runways, and to prepare for the impending retirement crunch.

Scope of the Problem

The General Accounting Office has painted an extremely bleak picture of the future of air traffic control if the staffing shortage challenge is not addressed. Using its own controller attrition simulation model, GAO projects that nearly 7,500 controllers will leave the workforce between 2002 and 2011 – that’s 50% of the current total number of controllers. At the 10 busiest airports, the study projects that 74% of current controllers will retire within the next 8 years. What this means for the system as a whole is more delays and possible safety risks, according to the GAO.

For the traveler, the math is simple - fewer controllers equal more delayed flights. In order to safely accommodate the traffic in a short-staffed system, the traffic will have to be “flowed.” That is air traffic management lingo for restricting capacity – which causes delays and cancellations. This is not speculation, this is already happening everyday. While the documentation may not say “staffing delay,” the controllers working the system know the problem. For example, in Chicago Center, they log “volume delays” because the volume of traffic exceeds the amount the existing staffing can handle. In Miami Center, more traffic could be accommodated if certain sectors were divided into two sectors, but they lack the staffing to implement any of these plans. You cannot open a new sector if you don’t have any controllers to work the scope.

In order to manage the current staffing shortages, we continue to see high rates of mandatory overtime leading to lower morale and even more rapid rates of retirement. NATCA surveys have shown that increased mandatory overtime causes people to retire even earlier than planned. Unfortunately, we have already seen that happening. Controller morale continues to decline partly because there is no relief in sight.

The GAO report concludes that, so far, the FAA has not done enough to adequately plan for the coming staffing crisis and must do so as soon as possible. Specifically, it stated, “Ultimately, FAA’s ability to successfully plan for and manage this situation will dictate its overall impact on the nation’s air traffic control system and the safety and efficiency of air travel in the United States.” But the FAA’s planning isn’t enough; they need the resources to meet their mandate.

The Department of Transportation’s own Inspector General echoes these findings. On March 17, 2004, Inspector General Ken Mead testified that the FAA is so far not adequately prepared to handle the impending staffing crisis. He stated that,

“Accurate cost and workforce data are particularly critical in light of the anticipated wave of controller retirements. FAA currently estimates that about 7,000 controllers could leave the agency over the next decade. Whether the FAA will need to replace all of them on a one-for-one basis depends on many factors, including future air traffic levels, new technologies, and initiatives that FAA undertakes in its hiring and training process.”

The Inspector General went on in his testimony to outline three critical questions the FAA needs to answer in order to get a grip on the problem: 1) When the retirements will occur, 2) Where the vacancies will occur, and 3) What the costs and time period for on-the-job training will be. The IG concluded that the FAA has failed to address these and other questions yet.

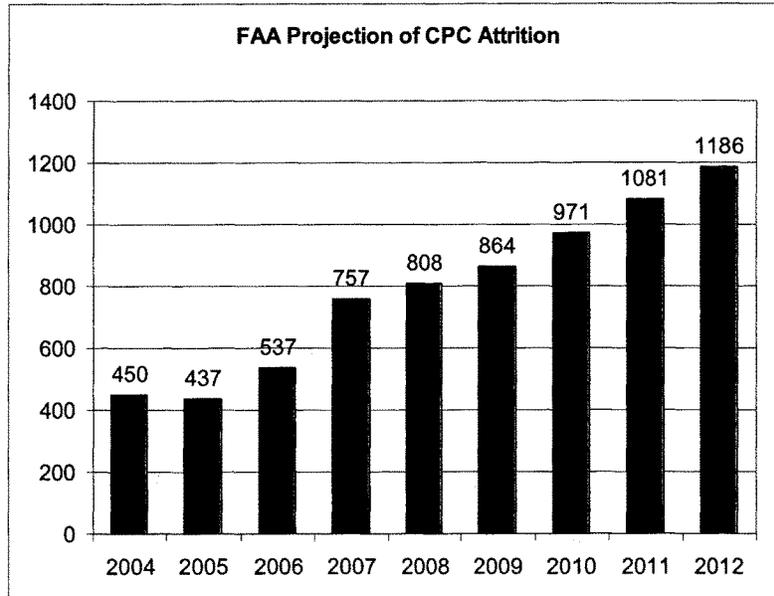
The thousands of controllers hired during the post-PATCO recovery period are reaching retirement eligibility. Based on FAA data, we will be facing up to a 50% shortage in the next ten years. FAA Administrator Marion Blakey acknowledged in recent testimony that the coming shortage of controllers will reach "tsunami" proportions. Our window of opportunity to prevent that tsunami from becoming a catastrophe is rapidly closing. Unfortunately, retirement is not the only reason why controllers vacate operations positions. The congressional mandate to increase the number of supervisors depletes the controller workforce even further and increases the demands on our training capacity. Supervisors are not hired from outside the FAA, you must be a Certified Professional Controller to qualify for the job. Additionally, each year operational controllers move to other positions in the FAA and each one increases our need to hire additional controllers.

This problem is not sudden or unexpected. It is known and we have had advance warning. Whether or not we address the problem and prevent our aviation infrastructure from collapsing under its own weight is a choice. You have the opportunity to make that choice. Either we will continue to be a world leader in aviation, or we will not. Either we will continue to have the safest and most efficient system in the world, or we will not. My members will continue to do everything possible to keep our collective heads above water, but it is Congress and the administration that can send us a lifeboat.

Everyone has acknowledged the problem. We can do yet another round of studies and reports but the answer is plainly in front of all of us. The FAA must immediately begin hiring and training the next generation of air traffic controllers to prepare for the inevitable shortage. And Congress must provide the FAA with resources to do so. Delays will not suffice anymore, waiting until a fully qualified controller retires to begin training his replacement is simply too late. Unless enough new controllers are hired now, we will be left with a system that is woefully understaffed and simply unable to accommodate the demands for air transportation.

In the FAA's projection, 450 controllers will retire this year, 437 in 2005, 537 in 2006, and 757 in 2007 – a total of 2,181 in the next three years. Even under the most conservative estimates it takes 3.1 years to train a controller to the full performance level where they can work independently as a certified professional controller. At a one for one rate of replacement, the FAA will hire only 887 controllers in 2004 and 2005, assuming all of them qualify in minimum time, we will still be nearly 1,300 controllers short even as more and more begin to leave the system. By FAA's estimates, the numbers of controllers leaving in any single year continues to accelerate, soon exceeding 1,000. As the problem accelerates, our ability to fix it is diminished because there is a limit to the number of controllers who can be in trained in any given year and most of the

controllers retiring are also experienced instructors. So each year we are faced with fewer instructors and more trainees.



Real Solutions

What we need is action, now. NATCA is prepared to work with the FAA and Congress to address this crisis before it becomes insurmountable. We have identified real solutions that can make a real difference. However, we all need to recognize that the first and most important priority is to provide funding to hire more controllers.

The President's FY2005 budget request provides no funding for the hiring of additional new controllers. If we defer this problem for just one year, the need balloons from 2,181 to nearly 3,000 in 2006. And since those controllers remain in training for several years, we will quickly see over one third of the workforce in training, another third providing that training and we will be simply unable to operate the system at maximum efficiency. Three years ago we were talking about gridlock and while we have had a brief respite from that, the respite is over. I said it then and it is just as true now, a system headed for gridlock, staffed with trainees is a recipe for disaster. We have to get ahead of the problem so we can stay ahead.

Mr. Chairman and members of the Committee, we have asked for additional funding for new controllers in the FY 2005 Transportation, Treasury and Independent Agencies Appropriations Bill. We are well aware of the federal government's fiscal limitations and know the staffing problem cannot be solved in one year. We also know that as the nation tries to recover economically, now is not the time to cripple our air transportation system. Our airlines are finally coming back. There are new start-ups reinvigorating the industry, and after three very tough years of bankruptcies and bailouts, there seems to be light on the horizon. We must ensure that air traffic continues to be safe, orderly and expeditious. That is our mandate.

There are other corollary steps we can take to pave the way for the addition of thousands of new trainees into an already delicate system. We need to make room for these trainees at lower-volume facilities by transferring experienced controllers to higher-volume facilities. With the prospect of thousands of new controllers entering the system, all of whom require intensive on-the-job training, it makes sense to begin preparations to accommodate them now. And it makes even more sense to make space at facilities that have the capacity to handle them.

We can do that today. We have hundreds of controllers with active bids to higher-level facilities. These are locations that have identified vacancies. They are not anticipating a shortage, they already have one. As we are all aware, the vast majority of moves for air traffic controllers do not include Permanent Change of Station (PCS) funds. In fact, according to the October 2002 GAO report to this committee, only 16% of moves involve a promotion and only 6% of lateral moves involve any PCS funds whatsoever.

As the Inspector General illustrates in the most recent report on controllers training, controllers transferring from other FAA facilities certify in half the time needed to certify trainees from other sources. This is the single most tangible and verifiable way to reduce the time and cost associated with on-the-job training – one of the major issues identified in the Inspector General's report issued on June 2, 2004.

There are also minor policy changes that can be adopted to avoid making the problem worse. One constructive step is for the FAA to stop terminating, removing, transferring or reassigning any air traffic control specialist *solely* because the agency erred in hiring that individual after he or she reached the maximum entry age of 31. This has happened on occasion when the FAA hired a controller under the age of 36 (above which no waivers are permitted) who had been granted an age waiver by the Department of Defense, then later determined that the FAA would not recognize the DOD waiver. Why remove capable, fully-trained workers based on a technicality when we are facing a severe staffing shortage? The current rules covering FAA and DOD age waivers are unclear and we have asked that the language above be adopted into law.

Another positive step is to increase the length of time a graduate from one of the FAA identified Collegiate Training Initiative schools can remain eligible for hire as a

controller. Under earlier hiring source efforts, prospective employees, once eligible, remained eligible as long as they were under the maximum age for hire. Under the current CTI program, eligibility expires after two years. I believe the Administrator is currently working to address this problem and I applaud her willingness to examine this issue.

In addition, the Congress has mandated an increase in the number of supervisors. We must ensure that these supervisors are used in operational positions covering the watch schedule and not put on administrative schedules while Controllers-in-Charge are pulled from the schedule during long periods of watch coverage, particularly on nights and weekends. While the Controller-in-Charge program has been very effective, in too many locations it has been used to reduce available controller staffing.

Finally, we are very concerned that this Committee has inadvertently created an incentive for controllers to leave operational positions by extending early retirement benefits to second level managers that, unlike controllers, traffic management coordinators, and first line supervisors, are not subject to a mandatory retirement age. The primary incentive for controllers to remain in this high stress environment for 20 years is to reach eligibility under the controller retirement provisions of both CSRS and FERS. Without this incentive, we increase the likelihood that experienced controllers will leave operational positions. At the time when we should be most focused on retaining those experienced controllers, rather than create incentives, like extending the increased annuity to all years of active ATC service rather than ending it after 20 years, we have created a disincentive that is even opposed by the Office of Personnel Management.

NATCA and the FAA share a proud tradition of working together to reach common ground, especially when our air transportation system's safety is at stake. An excellent example of this cooperation is the agreement we signed that called for air traffic controllers on the front lines to be involved in modernization programs administered by the FAA from the "drawing board" through to final implementation. In the past five years, controllers and the FAA, working together, have installed and integrated into the air traffic control system 7,100 major systems and pieces of equipment, as well as more than 10,000 hardware and software upgrades. As a result, delays due to equipment were down 70% in 2002. There are several other initiatives we have undertaken in partnership with the FAA:

- The Choke Point Initiative has reduced delays by 20%
- Air Traffic Controllers agreed to use their break times to perform air safety functions, which saved taxpayers \$28 million in 2002 alone.
- The "Controller in Charge" program, in which controllers voluntarily take on certain supervisory duties, saved taxpayers more than \$27 million over three years.

These successes are not limited to national programs. In facilities where local managers are willing to work with the local union, we have seen tremendous successes. For

example, FAA facility management and NATCA members in Newark teamed up to implement a new system that reduced delays on one runway by 42%. Considering this airport once made front-page news as the most delayed airport in the country, this is no small feat. In Cleveland Center, which for many years topped the chart of facilities with the most operational errors, working together to implement and staff choke point sectors reduced operational errors 37% in the first year of the program. We are proud to be part of these and hundreds of other successes that come from a constructive working relationship and the willingness to focus on common goals.

These are just some of the many ways NATCA and the FAA have been able to improve efficiency and save money. Now is the time to team up to confront one of the biggest challenges we've faced yet – the air traffic controller staffing shortage. NATCA supports the FAA's attempts to modernize the system and make the work controllers do more productive with the introduction of new equipment. This single effort, however, will not curb the need to hire thousands of new controllers in the coming years and, in fact, the staffing shortage might make it impossible to implement new technologies.

The situation at the Anchorage Center illustrates the point. At current staffing levels, the FAA is struggling to get the ATOP program underway because the training required to teach the new system requires controllers to be in the classroom rather than the control room. With seven new employees, the program can only be implemented as long as everyone works six-day work weeks. This arrangement will cost \$1 million in overtime pay. The fact is there is a better short and long-term solution – 12 new employees can be hired, as Anchorage management has requested, and the training can be completed with minimal overtime and impact on the workforce. Through guaranteed attrition—retirements and transfers—in the coming years the 12 new employees will be absorbed in only two years. This plan delivers dual benefits as it allows us to address both the training needs for ATOP and prepare for coming retirements.

Examples of the Staffing Crisis Around the Country

The statistics, as revealing as they are, do not tell the full story. The following are just a few of the real-life examples of staffing shortages currently occurring across the country:

- Los Angeles Center (ZLA) is authorized 309 controllers but has only 276 on board; of that number only 219 are fully qualified. It expects the number to drop to 206 by 2005 and even further if supervisor retirements are backfilled by promoting operational controllers.
- Las Vegas Tracon, the 18th busiest in the country with over 600,000 operations a year, is authorized 56 controllers but has only 34 fully qualified controllers – three controllers have already retired this year and a fourth is pending.
- Newark Tower requires 40 controllers under the FAA staffing standard, yet it has only 29 fully certified controllers. Of these, six are eligible to retire in the next five years.

The current controller workforce is stretched to the limit and we cannot call up the reserves. There are no reserves. The situation at the Chicago TRACON illustrates the problems that lie ahead. For six years, the number of full performance level controllers has declined steadily as retirements have increased. The TRACON is authorized to have 101 controllers, and it currently has 101 working. The catch is that only 73 of these are fully certified, with the rest in intensive training. Not only is the facility short-staffed, but a significant portion of the 73 certified controllers spend their time providing on-the-job instruction for trainees.

Of the current workforce, 20 controllers are eligible to retire right now and 17 more are eligible in the next three years. Managers in Chicago have relied heavily on overtime to keep traffic flowing in one of the nation's busiest hubs. On May 26, 2003, controllers began working regularly scheduled six-day weeks during the summer months. Operational errors are up, and morale is down.

This is a disturbingly accurate picture of what awaits the entire air traffic control system if the staffing shortage crisis is not adequately addressed. Efficient, productive controllers doing their best, as they are overworked in understaffed towers and centers, is admirable but ultimately unsustainable and dangerous.

Contrast the dismal situation in Chicago with what happened in Cleveland when more controllers were hired. When the Cleveland Air Route Traffic Control Center—the world's busiest facility—was plagued by complex and congested airspace, in implementing new choke points sectors the FAA gave the center a modest 7% staffing increase to alleviate the problem. The result was a 38% reduction in operational errors. More controllers and greater resources translate into positive results for the air traffic control system.

Initiatives, But Not Solutions

We have had no shortage of ideas to address the problem by doing anything but the obvious, hire more controllers. At the end of the day, there is no panacea, no magic bullet to make the problem in front of all of us disappear.

Raising the Retirement Age

Congress has directed the FAA to allow age waivers to let controllers work beyond the mandatory retirement age. This is an area in which we should exercise extreme caution. And while that might seem like a possible solution, we remind you of the video tape that you just viewed of what air traffic controllers experience each and every day. I am an air traffic controller, and it is a job that I love - as do the overwhelming majority of my colleagues. In order to survive the every day stress and demand, you would have to love it.

But love doesn't guarantee safety. Another complicating factor is that even if the retirement age was increased, our research indicates that only a small percentage of

controllers would seek the waivers and those controllers would only work a maximum of five additional years. Prolonging the inevitable is simply not a solution for ensuring that we have enough controllers looking out for safety in our skies.

Time On Position

I would also like to take a moment to address the issue of controller time on position. This is a measure of time that controllers are working with the primary responsibility for an operational air traffic control position. It is only a portion of the controller's job functions and does not include receiving position relief briefings, mandatory recurrent training, debriefing trainees, and performing other FAA assigned duties. Using this as a sole measure of controller productivity is akin to determining the productivity of a member of Congress by measuring time spent on the House floor. It simply is not an accurate measure.

We all know that this is not an accurate measure but since it is the only time measured and available for any FAA employee, it has a great deal of visibility and has taken on a disproportionate importance in the policy debate. Some have suggested that one way to deal with the staffing shortage is to increase daily time on position. If safety is the paramount concern in every decision that the FAA makes, as it should be, then this "solution" is not only counterintuitive, but a recipe for disaster. To understand why, one need look no further than the FAA's own regulations on pilot hours worked. The law says that pilots who work for an airline cannot fly more than 100 hours per month or more than 1,000 hours per year. Even though flying does not involve much hard physical work, pilots can feel a lot of stress because they are responsible for the safety of their passengers. They must be vigilant and constantly prepared to react quickly if something goes wrong. The same is true for air traffic controllers.

As the video showed, each controller is responsible for many planes at once and has to be constantly focused on the task at hand. There's a reason for that time off during a controller's day. Safety. How many members of this panel would feel comfortable flying through airspace controlled by someone who had worked for many more straight hours at a time than they currently do? As one controller put it recently, "the best way to increase the number of operational errors on the job is to extend the number of hours in a row we work."

NATCA has not pushed for regulatory limits on working hours like the FAA has issued for pilots, or like those that exist for controller in other countries, because we have always been able to work the scheduling issues in a constructive way through collective bargaining. We are proud of the fact that we can allow the agency the maximum flexibility to manage peak and unexpected traffic levels, without excessive regulatory constraints. We are proud to be part of the team and help make it through the truly difficult periods. But failure to address the staffing shortage is not a difficult period; it is a systemic failure. Our ability to work through it is diminished when there is no relief in sight. Controller fatigue can seriously diminish the safety of our skies.

Sick Leave

A similar flawed line of reasoning questions why air traffic controllers use more sick leave than average federal employees. There are simple answers to this question that strongly suggest how flawed an aggressive effort at scaling back sick leave time would be in dealing with the staffing shortage. Controllers have a higher medical standard than other federal employees. We have seen an increase in medical disqualifications issued by FAA flight surgeons, and NATCA has contracted with independent medical experts to help controllers retain their medical certificates.

In addition to stringent medical qualifications, most over the counter cold and flu medications cannot be taken before or while performing controller duties. Unlike most FAA or other government employees, controllers do not have an individually assigned workspace or computer. Keyboards, chairs and other work tools may be shared by more than a dozen people in the same day, making the potential for spreading communicable illnesses far greater than in a normal office environment.

Our workforce is also aging and in general, older controllers are less healthy than younger ones. Years of working air traffic takes a physical toll on the individual and a general degradation of health is, unfortunately, to be expected. In a recent study released by Cornell University, researchers concluded that lost productivity due to “presenteeism” – the failure of ill employees who report to work to maintain productivity standards – costs employers far more than absenteeism, for the simple reason that “sick employees can’t concentrate, work more slowly and clog up the productivity process.” Apart from the fact that nobody wants our system – the most productive in the world – to fall behind, we also don’t want to imagine the potentially catastrophic effects of sick controllers on the job who are unable to focus and do their jobs properly.

Training

A month ago, at NATCA’s annual Lobby Week luncheon, Administrator Blakey raised the issue of controllers paying for a portion of their training. The truth is that under the Collegiate Training Initiative, many potential controllers are already investing in a college degree based program to build their skills and eligibility for this profession. While ideally this program should help to reduce training time, the FAA has hired too few controllers in the past several years to do a valid analysis of the success rate.

While the schools, like Embry-Riddle Aeronautical University, Missle State Tennessee University, Purdue University and the Universities of North Dakota and Alaska have invested millions of dollars to develop programs that meet FAA standards, the slow pace of hiring has made it difficult for them to attract and retain students. As you know Mr. Chairman, Embry-Riddle, one of the largest of the training schools, is located in your district. In fact, nine of the fourteen FAA-approved training schools—are situated in or near the districts of subcommittee members.

As I stated earlier, the current rules only allow graduates to remain on the FAA eligibility list for two years and some well qualified prospective controllers will be rendered ineligible simply because the FAA lacks the funds to fill the positions. Extending the eligibility of these students is a positive step but we should also be working to move these individuals from the list of eligible new hires onto the training roles. What we need to do now is attract people, not drive them away.

The recent Inspector General's report provided some useful data and insight into the issues, and I have elaborated on his chart below:

**Training Statistics Provided by 17 Facilities (Fys
2002 and 2003)**

Facility	Facility Level	Training Failures	Number of Newly Certified Controllers	Average Years to Certify as a Controller*	Average Hours of Training on Live Traffic*	Failure Rate
Atlanta Center	12	11	36	2.1	666	23.40%
Chicago Center	12	5	28	3.5	905	15.15%
Cleveland Center	12	2	26	2.7	677	7.14%
Jacksonville Center	11	1	28	1.5	402	3.45%
Los Angeles Center	11	20	26	2.5	847	43.48%
Minneapolis Center	11	1	22	1.3	434	4.35%
New York Center	12	15	31	3.8	696	32.61%
Oakland Center	11	6	14	3.4	655	30.00%
Washington Center	12	4	12	2.0	492	25.00%
Total (Center)		65	223	2.5	641.56	22.57%
				Excluded because of recent consolidation	Excluded because of recent consolidation	
Atlanta TRACON	12	18	3	1.8	462	85.71%
Chicago TRACON	12	14	3	1.7	721	82.35%
Minneapolis TRACON	11	1	12	1.7		7.69%
New York TRACON	12	35	16	1.7	Average data not available. Data available by individual	68.63%
Southern California TRACON	12	3	8	1.0	299	27.27%
Total (TRACON)		71	42	1.6	494	62.83%
LaGuardia Tower	10	0	2	1.8	291	0.00%
Los Angeles Tower	12	1	8	1.3	425	11.11%
Minneapolis Tower	11	1	5	0.6	316	16.67%

Total (Tower)		2	15	1.2	344	11.76%
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*statistics are for CPCs that certified during Fys 2002 and 2003 and do not include data from training failures or developmentals who have not certified.

While the Inspector General's data and analysis is useful, a deeper picture is needed if we are to provide a more useful analysis. For example, the Inspector General points out that New York Center had 15 training failures while the Washington Center had only 4, leading the reader to conclude that ZDC and ZNY are comparable, but that there is some disparity in their training outcomes. However, if we look at the failure rate, ZDC has a rate of 25%, while ZNY's rate is 32.6%. While this is significantly higher, it is far from exponentially higher as the raw figures may lead one to conclude. Moreover, ZNY is an Oceanic Center. The Oceanic option requires additional training beyond that at a facility where no Oceanic (procedural) air traffic control services are provided. One would logically conclude that this additional requirement would lead to an increase in both training time and failure rate. When compared to the statistics from Oakland Center, another Oceanic facility, we see both the average training time and failure rate are comparable:

Facility	Facility Level	Training Failures	Number of Newly Certified Controllers	Average Years to Certify as a Controller*	Average Hours of Training on Live Traffic*	Failure Rate
New York Center	12	15	31	3.8	696	32.61%
Oakland Center	11	6	14	3.4	655	30.00%

New York Center's numbers are only marginally higher, however it is also a higher ranked facility (ATC 12 vs. ATC 11) based on the volume and complexity of traffic.

What does all of this mean? Quite simply, that there are no easy answers. There are many differences between facilities and types of facilities that must be considered. The one thing that the Inspector General concludes in this report, and NATCA knows to be true, is that transfer controllers certify faster than do external new hires.

The FAA has a clear opportunity to take advantage of this fact and reduce training time. Given that the system as a whole is short staffed, we know the largest shortages as well as the highest rates of retirement will occur at the busiest facilities. And we know that these facilities have the greatest impact on the National Air System as a whole. The conclusion is simple – the FAA should begin to aggressively fill vacancies at high level facilities with existing air traffic controller personnel, even if that will create temporary shortages at the lower activity facilities, because it is at these facilities where external new hires will have the greatest chance of success and will require shorter training time.

Conclusion

Mr. Chairman and members of the Committee, we cannot and must not take the fact that our nation has the safest, most efficient air traffic control system in the world for granted. It must be a critical ongoing goal. While controllers will continue to do everything we can to uphold this gold standard, our skies are only as safe as the number of eyes who are watching it. The reality is that we are facing a very serious staffing crisis. And we need to start training now – in fact, we needed to start training yesterday – to make sure we have enough controllers to do the job right. Our training is difficult – and not everyone makes the cut. And that’s the way it should be. But if we don’t start introducing more controllers into the system, delays, congestion and even worse will result. And that’s not a resolution that any of us want to see.

Thank you for the opportunity to appear before this distinguished Committee. I look forward to answering any questions you may have.

**Before the Committee on Transportation and Infrastructure
Subcommittee on Aviation
United States House of Representatives**

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Addressing Controller Attrition: Opportunities and Challenges Facing the Federal Aviation Administration

**Statement of
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U.S. Department of Transportation**

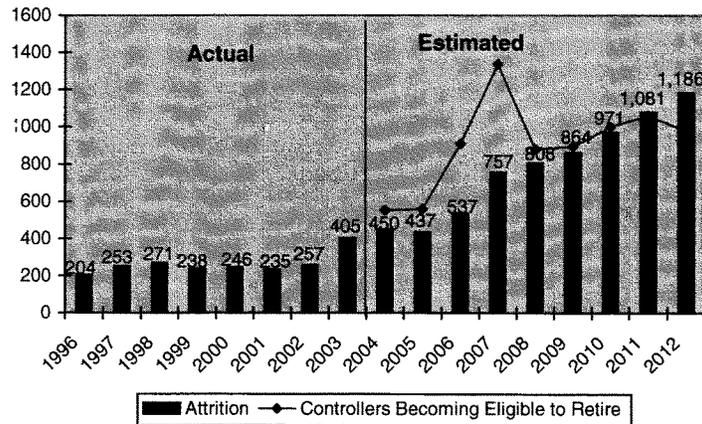


Mr. Chairman and Members of the Subcommittee,

We appreciate the opportunity to testify today. Two weeks ago we issued an audit report on placing and training air traffic controllers in light of the expected increase in attrition. This is a significant issue for the Federal Aviation Administration (FAA)—one that will continue to be a “front-burner” challenge over the next decade. Our testimony this morning will focus on several key areas where FAA has opportunities to better prepare today for the expected increases in controller hiring and training.

Attrition in FAA’s air traffic controller workforce is expected to rise sharply in upcoming years as controllers hired after the 1981 Professional Air Traffic Controllers Organization controllers’ strike become eligible for retirement. FAA currently estimates that nearly 7,100 controllers could leave the Agency over the next 9 years (Fiscal Years (FY) 2004-2012). In contrast, FAA has only experienced total attrition of about 2,100 controllers over the past 8 years (FYs 1996-2003).

FAA Air Traffic Controller Attrition Compared to Retirement Eligibility*



* Attrition data are as of May 2004. The number of controllers becoming eligible includes only those controllers reaching retirement eligibility in that year and does not include prior years. Retirement eligibility estimates are as of December 31, 2003.

Whether FAA will have to replace all of these controllers on a one-to-one basis depends on many factors, including future air traffic levels, new technologies, and initiatives that FAA undertakes in its hiring and training process. However, it is

clear that as a result of the anticipated increases in attrition, FAA will have to begin hiring and training controllers at levels the Agency has not experienced since the early 1980s.

A substantial challenge for FAA will be to hire and train new controllers within a tightly constrained operating budget. FAA has recently made progress in this area by renegotiating several pay rules with the National Air Traffic Controllers Association (NATCA) that previously allowed some newly hired controllers to earn base salaries in excess of \$79,000 while in training. The renegotiated rules now allow FAA to set newly hired controllers' salaries at levels that are more commensurate with an entry-level position (\$25,000 to \$52,000), which should help FAA avoid higher costs as it begins hiring and training greater numbers of new controllers.

This is clearly a good first step in managing the costs of hiring and training a substantial number of new controllers. However, given the number of retirements facing the Agency, it would be prudent for FAA to develop a detailed cost plan to determine exactly how much increased hiring and training requirements will impact the Agency financially over the next 10 years. More importantly, FAA will need to continue identifying ways to make every stage of its process for hiring, placing, and training new controllers more efficient and cost effective. Administrator Blakey and her staff are well aware of this need and have committed to exploring new avenues for accomplishing this task.

While addressing the expected surge in controller attrition represents a significant challenge, there are opportunities as well. An important point worth noting is that new controllers will generally have lower base salaries than the retiring controllers they replace (the average base salary of a fully certified controller today is about \$113,000). Over time, this could help reduce FAA's average base salary and, in turn, help reduce FAA's operating cost growth. However, if FAA does not place new controllers where and when they are needed, the potential reductions in base salaries will be offset by lower productivity from placing too many or too few controllers at individual facilities.

Today, Mr. Chairman, I would like to discuss three issues that we see as key for FAA to address the expected increase in controller attrition. They are:

- Developing better attrition estimates by location,
- Assessing newly hired controllers' abilities before they are placed at facilities, and
- Determining ways to reduce the time and costs associated with on-the-job training (OJT) while still achieving results.

First, Mr. Chairman, let me briefly explain the process for becoming an FAA controller. FAA air traffic controllers are hired from multiple sources. These include the Department of Defense (DOD), FAA's Contract Tower Program, and graduates from several FAA-approved colleges, as well as controller reinstatements and some hiring off the street.

Once hired, new controllers undergo an extensive training process. Training to become a fully certified controller usually consists of training at both the FAA Academy and OJT at their assigned facility. The time required at the FAA Academy varies depending on whether the new recruit has completed courses at an FAA-approved college and their previous experience. The time required also varies depending on whether the new recruit will be assigned to a terminal or enroute facility.¹

Once newly hired controllers complete Academy training, they are sent to an air traffic facility to begin the OJT process. New controllers are considered developmental controllers or "developmentals" until they have certified as an air traffic controller (proven they can control air traffic in all sectors of their assigned area). In general, during OJT developmentals receive classroom and simulation training on the airspace of their assigned facility (usually through contract instructors) before training on live traffic with a certified FAA controller designated as an OJT instructor. After certifying on all sectors within his or her assigned areas (usually between five and seven sectors), the developmental becomes fully certified or a certified professional controller. One point worth noting, Mr. Chairman, is that as hiring increases, FAA will need to begin keeping statistics on the success rate of candidates from the Agency's various hiring sources to identify those sources that produce the most competent candidates.

Now let me turn to the three key issues we would like to discuss today.

Developing Better Attrition Estimates by Location

FAA has national estimates of expected attrition within the controller workforce that are based on attrition rates for the previous 3 years. According to FAA managers, they used data from the previous 3 years because current data more accurately reflect potential future retirement trends. FAA plans to reassess its attrition estimates each year as it accumulates further data on retirement trends. We considered this methodology to provide a reasonable estimate of future

¹ Newly hired controllers with coursework at an FAA-approved college attend the Academy for 8 to 11 weeks depending on the type of facility they are assigned to. Newly hired controllers with no prior experience and no coursework from an FAA-approved college must attend the academy for 13 to 16 weeks. Former DOD controllers assigned to a terminal location and graduates from the MARC school in Minnesota bypass the Academy altogether. Former DOD controllers assigned to an enroute location must attend the Academy for 11 weeks.

retirements at the national level. However, those estimates do not take into account where vacancies will occur and it is almost certain that many will be at some of the busiest and most critical facilities within the National Airspace System.

We found that FAA's estimates are not developed from the bottom up. Most locations we visited during our audit had estimates of attrition over the next 2 years, but each location used different information to develop those estimates. For example, one facility only projected mandatory retirements, another projected attrition for transfers but not retirements, and another projected all types of attrition (i.e., retirements, transfers, hardships, resignations, and removals). Because of these differences in the way estimates were made, there were wide variances in projected attrition rates from facility to facility. To illustrate, as shown in the following table, the Chicago Center projected 115 controllers would leave in the next 2 years because all attrition was considered in its estimates, whereas the Jacksonville Center projected 10 retirements because only mandatory retirements were included in its estimate.

*Facility Attrition Projections at 17 Locations Visited
(FYs 2004 and 2005)*

Facility	Projected Attrition	Data Used for Projections
Atlanta Center	87	All controllers eligible to retire
Chicago Center	115	All controllers eligible to retire and all other categories of attrition (e.g., transfers, worker's compensation)
Cleveland Center	49	Detailed information on all categories of attrition
Jacksonville Center	10	Mandatory retirements
Los Angeles Center	32	Mandatory retirements and projected transfers
Minneapolis Center	27	Estimated attrition based on previous years
New York Center	29	Detailed information on all categories of attrition
Oakland Center	41	All controllers eligible to retire
Washington Center	65	Estimated attrition based on previous years
Atlanta TRACON	8	Retirements and estimated training failures
Chicago TRACON	34	Estimated attrition based on previous years
Minneapolis TRACON	4	Mandatory retirements
New York TRACON	16	Mandatory retirements and projected transfers
Southern California TRACON	106	Confirmed retirements for FY 2004 and eligible retirements through FY 2005
LaGuardia Tower	8	Estimated attrition based on previous years
Los Angeles Tower	5	FY 2004 projected losses, no estimates are available for FY 2005
Minneapolis Tower	4	Mandatory retirements

We recommended that FAA establish a system to uniformly estimate controller attrition by location and adjust national attrition and hiring estimates as needed. FAA agreed with our recommendation and stated that it is examining ways to refine its current process for estimating attrition by location, but has not yet established a timeframe for implementation.

Developing accurate estimates of attrition by location is a critical first step to manage the expected surge of attrition, but if FAA simply replaces retiring controllers one-for-one at each location, it will only maintain existing staffing imbalances. Various groups have repeatedly expressed concerns that some FAA air traffic facilities are either under- or over-staffed. However, determining the extent of those imbalances is problematic because the facility staffing standards used by FAA are not precise.

At the direction of Congress, the National Academy of Sciences reviewed FAA's staffing standards in 1997 and found that they cannot be used to provide highly accurate estimates of staffing requirements for individual facilities. According to the National Academy of Sciences, this is because the initial design, data collection, and models used by FAA to develop the standards were designed to generate national estimates not facility estimates.

More accurate staffing standards are absolutely critical if FAA is to turn the challenge of replacing retiring controllers into an opportunity to alleviate staffing imbalances within the controller workforce. However, the single most important tool that would help FAA develop better standards is an accurate labor distribution system. A labor distribution system is the keystone to measuring workforce productivity and more accurately determining staffing needs by location.

CRU-X is the labor distribution system FAA chose to track hours worked by air traffic employees. As designed, CRU-X could have provided credible workforce data for addressing concerns about controller staffing, related overtime expenditures, and determining how many controllers are needed and where. However, CRU-X has not been deployed as designed because of a September 2002 agreement between FAA and NATCA that limited the system's capability to gather data regarding workforce productivity. Specifically, the agreement eliminated (1) requirements for controllers to sign in and out of the system when arriving or leaving work, and (2) tracking time spent by controllers performing collateral duties (time when they are not controlling aircraft).

In February 2004, FAA provided NATCA with substantive changes planned for the system and began negotiations with the union in March. However, CRU-X's deployment has now been on hold for almost 2 years while FAA and NATCA continue negotiations over its implementation. NATCA has raised valid concerns

about the pending retirements and an accurate labor distribution system is an area where the union needs to work with the Agency to address the expected increase in attrition. Accordingly, FAA and NATCA need to implement the system as quickly as possible so both the Agency and the union have objective data to determine how many controllers are needed and where.

Another critical factor for managing costs and allocating resources at the facility level is an effective cost accounting system. Although FAA had implemented a high-level cost accounting system for the old Air Traffic line of business, it has not developed a plan to design and implement system changes to reflect the new Air Traffic Organization, which was established in January 2004. Until this is completed, the new \$9 billion organization will not have the cost accounting information it needs to operate efficiently and effectively, and facility managers will not have the cost information they need to effectively manage increased hiring and training requirements.

Assessing Newly Hired Controllers' Abilities Before They Are Placed at Facilities

FAA air traffic facilities are categorized into multiple levels (from 5 to 12)—the higher the level, the greater the demand on a controller's judgment, skill, and decision-making ability. However, FAA places new controllers without assessing if they have the knowledge, skills, and abilities to certify at their assigned facility. Currently, FAA places newly hired controllers based only on where and when vacancies occur, and many of those vacancies occur at some of FAA's busiest and most complex facilities.

At the 17 facilities we visited, we found multiple instances where a developmental controller spent years in training without being able to certify, only to be transferred to a less-complex area or a lower-level facility, where OJT started again. For example, after training for almost 7 years at the Chicago Center and not certifying, a developmental was moved to another area² within the same facility where the OJT process started again.

In the 1980s, the FAA Academy was primarily used as a screening program to identify candidates who did not have the necessary skills to be successful as a controller. As a result, approximately 50 percent of new hires failed to pass initial training at the Academy. In the 1990s, the Academy transitioned from screening new hires to teaching skill sets and currently passes around 95 percent of students.

² FAA en route center's air space is divided into areas or segments of airspace that are further divided into sectors or smaller segments of airspace. A group of sectors make up an area. Centers have responsibility for several areas.

This change in direction from a screening process to a training program was the reason FAA developed the Air Traffic Selection and Training (AT-SAT) test. The AT-SAT test is designed to assess an applicant's potential to be a successful air traffic controller before hiring. FAA started administering the AT-SAT test in January 2004 to all applicants who are new to the air traffic controller profession.

We recommended in our report that FAA develop an assessment process for identifying a new controller's potential to certify at a certain facility and use this information in placing newly hired controllers. FAA agreed with our recommendation and is currently evaluating whether AT-SAT scores can be used to better match new controllers with high-aptitude scores with higher-level facilities.

Determining Ways To Reduce the Time and Costs Associated with On-The-Job Training While Achieving Results

Mr. Chairman, let me conclude with the most important and the most challenging issue for FAA. That is reducing the time and costs associated with training new controllers on the job. The OJT process is the longest part of the training process, and thus the most expensive. At the locations we visited, the overall time required for a newly hired controller to become certified averaged 3.1 years but in some cases took as long as 7 years. Although OJT is the longest and most expensive portion of controller training, we found that it is very decentralized, and FAA provides minimal national oversight of this portion of training. For example, FAA does not have national statistics on key performance measurements such as:

- The time it takes controllers to certify,
- Delays in the OJT process,
- Where and when training failures occur, and
- The total cost to provide OJT.

National statistics on the training process were kept after the 1981 strike, but FAA stopped collecting the data in the mid-1990s as hiring declined significantly. Because FAA could not provide national statistics on the OJT process, we collected data at the 17 facilities we visited so we could assess the OJT process. The compiled data showed wide variances in the OJT statistics that could be key indicators of whether the process is being managed in a timely and cost-effective manner. However, since FAA does not capture any national statistics, these variances are not investigated to identify reasons for the differences or to determine if actions are needed to improve the OJT process. For example:

- During FYs 2002 and 2003, New York Center had 15 training failures, while the Washington Center had only 4 training failures. At the time we visited, both these facilities had around 70 developmentals. We also found that the number of training failures may be understated. At some facilities visited, we found developmentals who could not certify in one area were moved to another area, where training started again. However, those individuals were not counted as training failures. FAA officials at those facilities told us that they only consider it a training failure when a developmental is moved to another facility.
- At the New York Center, developmentals took an average of 3.8 years to certify. In comparison, at the Minneapolis Center, developmentals took an average of 1.3 years.
- New controllers at the New York and Cleveland Centers trained on live traffic about the same number of hours (an average of 696 and 677 hours a year, respectively). However, we found that developmentals at the New York Center took, on average, more than a year longer to certify (3.8 years compared to 2.7 years), even though both Centers provided the same average amount of time training on live traffic.

We were unable to determine the specific reasons for the variances among the data collected. However, we found many factors affect OJT, including the hiring source, level of the facility, local training policies, and operational needs of the facility. For example:

- **Hiring Source.** The Minneapolis Center primarily obtains replacements for controllers from other FAA facilities, while the New York Center's primary sources of new controllers are former DOD controllers and graduates from FAA-approved colleges. At the 17 facilities we visited, statistics showed that transferred controllers are usually able to certify faster at a new facility than newly hired controllers.
- **Level of Facility.** The facility level may also affect the time it takes to certify. For example, the New York Center is a level 12 facility (the most complex), whereas the Minneapolis Center is a level 11. At the New York Center, developmentals took an average of 3.8 years to certify, compared to an average of 1.3 years to certify at the Minneapolis Center.
- **Local Policies.** Facility policies may also affect training. For instance, we found cases where developmental training is disrupted by prime time leave periods and operational needs of the facility. Prime time leave periods are negotiated with the union at the facility level so that bargaining unit employees can take up to 2 consecutive weeks of leave. At the New York Center, for

instance, classroom training stops completely during the summer, and contract instructors are furloughed. In contrast, at other facilities we visited, OJT was a continual process and was not stopped during prime time leave periods.

We also found that OJT may be delayed because of facility policies requiring a certain number of students in a training class. For example, a developmental at the Oakland Center completed one phase of OJT and had to wait 6 months before starting the next phase. According to the facility training manager, the delay occurred because a minimum of four students is required before the next phase of classes could begin. In contrast, the Cleveland Center had no gaps in training. The training manager stated that a class will be started even if only one developmental is ready for the next phase of training.

- **Operational Needs.** Once new controllers have certified on a sector, they can independently work that sector for the facility in an operational status. However, new controllers cannot become fully certified until they certify on all sectors within their assigned areas (usually between five and seven sectors). Some facility managers stated that this extends the length of controller training because time working operationally does not count toward OJT. At hard-to-staff facilities, new controllers certified on a particular sector may be used operationally on that sector repeatedly to alleviate short-term staffing shortages. This may be one reason why it takes longer to train at the New York Center than the Cleveland Center, even though both provide almost the same number of hours training on live traffic.

The wide variances in data we reviewed and the multiple factors affecting the OJT process underscore the need for FAA to evaluate, manage, and improve the overall OJT process. Unless FAA accumulates site-specific statistics on a national level, FAA has no means to assess the overall OJT process, determine whether training resources can be more efficiently and effectively used, and identify the best practices. Those actions will be key to reducing the time and costs required for new controllers to become fully certified.

To prepare for hiring and training new controllers over the next 8 years, it is imperative for FAA to determine better ways for reducing the time and costs associated with the OJT process while still achieving results. FAA needs to explore ways to reduce the time and costs of providing OJT training, such as an improved placement process, better prepared candidates through increased educational requirements, and/or enhanced simulation training at large facilities.

To do this, however, FAA first needs the basic data to effectively manage the program. We recommended that FAA begin compiling national statistics and establish a baseline to better manage the OJT process and include that information in developing a tracking system for training.

FAA agreed with our recommendation and is coordinating a study to establish national baseline statistics. FAA is also in the process of developing a tracking system that will be implemented at the completion of the baseline study, which is expected to be done in December 2004. Clearly, these actions are steps in the right direction; the key now will be follow-through.

This concludes my statement³, Mr. Chairman. I would be pleased to address any questions you or other member of the Subcommittee might have.

³ This testimony was conducted in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States. The work supporting this testimony was based on prior and ongoing audits conducted by the Office of the Inspector General.

**MINNEAPOLIS COMMUNITY AND TECHNICAL COLLEGE
AIR TRAFFIC CONTROL TRAINING PROGRAM
RESPONDING TO THE NEEDS OF THE FAA AIR TRAFFIC
CONTROL TRAINING**

The following documentation is submitted on behalf of the Minneapolis College Air Traffic Control Training Program (MCTC/ATCTP). This post-graduate Program is known in the Federal Aviation Administration community as Mid-America Aviation Resource Consortium (MARC). It is a cooperative venture between the Minneapolis Community and Technical College, Minnesota Department of Transportation, and the Federal Aviation Administration (FAA). The program started in 1989 by action of the Subcommittee of Transportation in Congress. Our primary purpose is to provide an innovative collegiate training alternative to the Air Traffic Control Training Program at the FAA Academy in Oklahoma City. In fulfilling our purpose we prepare well-qualified students in the fundamentals of en route Air Traffic Control (ATC) as well as training them on equipment they will use in the field. These developmental controllers, hired by the FAA, report directly to en route centers and do not attend the FAA Academy in Oklahoma City.

MARC HISTORY

Since 1989 the U.S. Congress has made a significant investment in this program. Funds were provided to develop classroom facilities, purchase equipment, develop curriculum, build a state-of-the-art Air Traffic Control Radar Training Center and cover direct instructional and operational costs of the ATC training program. The students train with the same equipment used in all FAA air route traffic control centers across the United States.

This program has made a significant contribution to the FAA's efforts to develop a more diverse ATC workforce (see *attached Student Demographics Chart*).

The first class graduated in summer of 1991. Our graduates are very successful. Feedback from the 22 FAA en route centers employing our graduates indicates they are superior ATC candidates. More than 87% of the 791 graduates placed in the field are still employed in ATC positions within the FAA and more than 40% have been fully certified as Certified Professional Controllers (CPC).

This program provides the FAA excellent ATC developmental controllers and has contributed significantly to the improvement of ATC training and flight safety. Because to a large extent, we are an autonomous organization, we are able to implement new ideas and instructional techniques very quickly and efficiently. We receive immediate feedback and evaluate the efficacy of our program. This successful training strategy is enhanced through the utilization of high fidelity simulation in the DSR lab. Functionality and equipment knowledge is second nature to our students when they enter the field. The combination of these techniques has provided significant evidence of its value as a training methodology.

FUTURE FAA ATC NEEDS

Based on the GAO report (GAO-02-591). It is estimated that by 2010, the FAA will lose 7,000 controllers, nearly 50% of those currently employed. Signs of this shortage are starting to appear now with increased controller attrition, longer work week, increased overtime, etc. The FAA faces an enormous challenge to replace these controllers. It generally takes three to four years for an ATC developmental to achieve Certified Professional Controller (CPC) certification. Consequently, many of the replacement controllers should be in the training pipeline now. These numbers are staggering as they represent the largest turnover of ATC staff since the 1981 strike. This fact alone should compel the Federal Government to continue to support the MCTC/ATCTP.

BETTER PREPARED—SHORTER TIME TRAINING—LESS COST

Our students are selected through rigorous entrance requirements. Students pay their own tuition, fees and housing and living expenses while attending the program.

After successfully completing the program and passing the FAA class II physical and security check, the graduates are placed directly into one of the 22 en route centers. They must provide their own moving cost to their first assignment.

In addition to our program, the FAA's College Training Initiative Program of thirteen colleges also trains students in ATC while the student is obtaining a college degree. Once the CTI student graduates from college they are hired by the FAA and sent to the FAA Academy in Oklahoma City for additional training. Since these CTI graduates will be FAA employees when going to the academy additional costs are incurred for training. The figures listed below for the FAA cost are based on lowest controller salary, government per Diem rates and air transportation

	FAA Academy Students	MCTC Students
Student Salary	\$8,244	
Per Diem	\$4,200	
transportation	\$850	
FAA Overhead	\$22,000	
Total	\$35,294	* based on \$1.7M annual budget

FY 05 OPERATING BUDGET REQUEST

The MCTC/ATCTP is seeking your commitment to continue providing a cost effective, innovative alternative to other FAA ATC Training programs. The request to fund operations for FY2005 is \$1,703,965. This funding will continue to support the current level of graduates and meet the needs of the FAA.

The MCTC ATC Training Program will produce up to 32 graduates at the end of each training course. Three classes will be offered in FY 2005. 1) January-May, 2) May-August, 3) August-December. These graduates shall possess the knowledge and skills necessary for initial assignment in the FAA Air Traffic Control Field Facilities. Graduates will also be able to successfully satisfy all performance requirements and standards that are, or will be, applied to FAA Academy graduates of the initial Qualification courses.

MCTC/ATCTP JUSTIFICATION

Although the program is partially funded by student tuition, it would be in the best interest of the Federal Government to continue to support this program for the following reasons:

- For the last 14 years at MCTC/ATCTP, 830 students have been trained in the en route specialty where attrition is the highest.
- 75% of all FAA en route hires per year come from MCTC/ATCTP and have outstanding success in the field.
- MCTC/ATCTP training program is capable of increasing graduate output from 96 to 160 per year. This would lower the cost per student by 20% for very little cost as the demand for more controllers increase.
- MCTC/ATCTP facility can serve as a research facility for testing new instructional techniques and hardware.
- MCTC/ATCTP program graduates are trained on the same equipment used in all en route centers. Our program can serve as a model for meeting future needs of the FAA.

State-of-the-Art ATC En route Radar Laboratory

It should be noted that the cost of the initial purchase of this facility was \$8 million dollars. By working with the FAA, Lockheed Martin, Sony, and Raytheon, we identified excess equipment used in the system design phase, secured donations and price reductions, which amounted to a savings of approximately \$7 million dollars.

CONCLUSION

Today the program has an excellent reputation in the field for providing well-rounded, trained personnel for the en route centers. As the FAA needs to hire and train ATC developmentals to replace the controllers that will be lost in the next six years, we believe it is prudent to continue to support this program

Our future funding requests will vary depending on the number of graduates the FAA intends to hire each year. They have indicated a significant increase in the number of new hires is anticipated, but specific numbers have not been mentioned. This program is committed to provide quality controllers at considerable savings to the federal government.

Air Traffic Control Training Program, Minneapolis Co Demographic & Retention Data

Minneapolis College is currently offering its 29th Air Traffic Control Training class.
32 students are enrolled. Graduation is scheduled for April 30, 2004

Characteristics of Graduates

913	Enrolled Spring 1990 - Present
799	Graduates Spring 1990 - Present
87.5%	Graduation Rate

<i>Gender and Ethnicity</i>		White	Asian	Hispanic	Black	N. Am.	Unkn
30.0%	Female	213	8	5	11	1	2
70.0%	Male	456	33	25	28	3	14
	Total	669	41	30	39	4	16
	Percent	83.7%	5.1%	3.8%	4.9%	0.5%	2.0

Characteristics of Academic Failures

881	Enrolled Spring 1990 - Present
81	Non-Graduates Spring 1990 - Present
9.2%	Academic Failure Rate

<i>Gender and Ethnicity</i>		White	Asian	Hispanic	Black	N. Am.	Unkn
32.1%	Female	20	2	0	4	0	0
67.9%	Male	37	7	3	5	1	2
	Total	57	9	3	9	1	2
	Percent	70.4%	11.1%	3.7%	11.1%	1.2%	2.5

Characteristics of Current Prospective Applicants

896	Applicant Prospects	32 students have selected for starting April
215	Completed Applications	
24.0%	Application Completion Rate	

Gender

	Female	Male	Unknown	Total
Count	246	643	7	896
Percent	27.5%	71.8%	0.8%	100.0%

Ethnicity

	White	Asian	Hispanic	Black	N. Am.	Unkn
Count	481	24	22	40	5	32
Percent	53.7%	2.7%	2.5%	4.5%	0.6%	36.2%

Age in 2003

	16 - 21	22 - 23	24 - 25	26 - 27	28 - 29	30
Count	23	131	228	227	188	97
Percent	2.6%	14.7%	25.5%	25.4%	21.0%	10.9%

Last update

Sent by: John Michelik 803-499-5041 6/26/2004 8:48:00 PM Page 2 of 2
June 26, 2004

Aviation Sub-Committee
Washington D.C.

Dear Honorable Members,

Please enter this letter for the record into the testimonies given during this hearing. I was highly encouraged by Congress holding a hearing on this increasingly important situation. However, I was equally discouraged by testimonies the committee received making no mention to the qualified, experienced and professional men and women air traffic controllers who have served this country honorably in our Armed Forces. There are hundreds, if not thousands of veterans who have already proven that they can safely control the skies above this country under austere circumstances. Many of us veterans feel overlooked, and we are confused as to why the FAA does not consider veterans as an obvious solution to the ever approaching crisis among the air traffic control community. We have already performed, and are certified in, a job that takes years to be fully qualified. I am even more shocked as to the solutions offered to your esteemed committee by the panel. Decreasing amounts of training in air traffic colleges, or allowing people without degrees in air traffic control to receive minimal training before entering a FAA facility, are not safe approaches to this problem. It is in the best interest of the college to say they can increase controller graduations since a faster program means more students, which in turn means more money for the institutions. An interesting question to be asked is, how many prior military controllers do these schools have as students? Many veterans use these schools to get degrees in jobs they are already qualified for because they feel real job experience alone does not get them employed. Moreover, increasing simulator training in FAA facilities and extending working hours of qualified controllers is not a viable solution to a long term problem. Air traffic control is too critical to the safety of American citizens and our economy. Solutions should be offered that reflect the importance of putting qualified people in position.

The applicants under the Veterans Recruitment Appointment (VRA) are already medically qualified, certified and experienced as compared to virtually all other areas the FAA draws employment. I personally have real job experience, safely directing aircraft in all three air traffic control areas: en route, terminal and tower environments. No amount of bookwork or simulator training can take the place of actual real life job experience, especially when it comes to safely directing aircraft carrying so many American lives. We veterans have honorably served and defended American lives with great personal sacrifice. Please consider our commitment, dedication, professionalism, experience and service to this country when making recommendations about the looming air traffic control shortage.

Sincerely,



Christopher T. Perks, Senior Airman
Air Traffic Control Specialist
North Carolina Air National Guard

06/18/2004 09:42 FAX

JUN-15-2004 21:34 FROM: NELIDA RIVERA

(787)743-7402

TO: 12022254629

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P.2

June 15, 2004

Aviation Sub-Committee
Washington DC

Dear Sir or Ma'am,

Please enter this letter for record as part of the Air Traffic Control Workforce Hearing held June 15, 2004. I was stunned with the testimonies in the hearing. In no way did the FAA members or NATCA (National Air Traffic Control Association) mention tapping into the option of hiring all qualifying VRA (Veteran's Recruitment Appointment) pool of candidates for Air Traffic Control (ATC) job positions. Us VRA applicants are a large group of hundreds if not thousands of former Military controllers that are seasoned, experienced and knowledgeable individuals that have operated and adhered to very strict FAA and each Armed Force Service's guidelines that acquire our various certifications be it in TOWER, TRACON, RADAR environments under FAA standards to fulfill the military mission. The majority of us have trained/supervised others, managed facility crews, entire ATC facilities and implemented policies that create a safe environment for Department of Defense (DoD) facilities everywhere while serving in Active, Reserve and National Guard tours of duty during peace and war periods.

Hiring all qualified and experienced ATC Veterans NOW! should be the first option to help ease NOW! the current ATC workforce problem before beginning talk of privatizing, shifting focus on hiring and training any other inexperienced workforce, or developing programs that will take a long time to establish and expensive in the long run.

The FAA is currently considering hiring college graduates and other applicants with no ATC experience before hiring seasoned and experienced Veterans such as myself. I believe my ATC experience makes me uniquely qualified for hiring consideration with the FAA, especially when the former Military controller facility upgrade time is minimal due to our "HANDS ON EXPERIENCE" in the ATC field with the DoD in comparison to a college student with no experience and basic knowledge. Furthermore, our sacrifices as Veterans should afford us preferential consideration above any other FAA Air Traffic Control applicant and that's without mentioning those with Veteran's Preference points.

Also, the FAA requires that CTI (College Training Initiative) graduates take the AT-SAT evaluation test and once hired by the FAA, must complete FAA Academy courses for both the En-Route and Terminal option whereas VRA appointments are not required to take the AT-SAT test or attend the FAA Academy for terminal training due to our proven experience. In the interest of saving money, and hiring more mission ready "new hires", Military Veterans may prove to be that much more of a benefit and essential to the FAA. We have proudly served our country like many others and look forward to answer the call with our service as FAA employees if they would hire us.

Thank you for your time. Please contact me anytime at (787) 743-7402, (787) 509-9661 or email Ahead@hotmail.com I look forward to discussing this issue with you or your designee.



Carlos R. Rivera
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