

A vertical strip on the left side of the cover features a close-up of the American flag's stars and stripes, and the tail fin of a commercial airplane.

The First Semi-Annual Aviation Workforce Management Conference

“Continuing the Dialogue”

Report



Department of Transportation
1200 New Jersey Avenue, SW
Washington, DC 20006

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INTRODUCTION

In 2010, the Honorable Ray LaHood, Secretary of Transportation, chartered the Future of Aviation Advisory Committee (FAAC) with the mandate to provide information, advice, and recommendations to the U.S. Department of Transportation (DOT) to ensure the competitiveness of the U.S. aviation industry. In particular, Secretary LaHood chartered the FAAC to address transportation needs, challenges, and opportunities of the U.S. and global economies.

The FAAC was composed of 19 members—a diverse group of leaders representing all facets of the U.S. aviation industry, including air carriers, airports, labor, manufacturers, finance and academia, consumer interests, and stakeholders. The FAAC issued 23 consensus recommendations, all of which were accepted by Secretary LaHood. Recommendation 17, which addressed workplace issues, specifically asked for a semi-annual Aviation Workforce Management Conference. This is the first of such conferences.

The purpose of the First Semi-Annual Aviation Workforce Management Conference is to develop collaborative and innovative actions in Science, Technology, Engineering, and Math (STEM) education and to bridge the gap of information and understanding that exists between the aviation workforce and its management.

RECOMMENDATION 17—WORKFORCE/MANAGEMENT CONFERENCE

The Secretary of Transportation should endorse and implement a semi-annual Aviation Industry Workforce-Management Conference beginning in September 2011. The mandate of the conference would be to bridge the gap of information and understanding that generally exists today between the aviation workforce and its management, with the ultimate goal of a healthier industry for all.

Problem/Challenge

The range of issues confronting air carrier workers represents a vast, complicated, emotional, and at times contentious debate. The Competitiveness and Viability Subcommittee has discussed several controversial issues, and has uncovered common ground in some contentious areas, while finding other areas remain more polarized and without any agreement. These topics of debate are fundamental to the aviation industry and its workforce. Examples include—

- Outsourcing of aviation functions and jobs,
- Aviation safety and security oversight, and
- Protection of U.S. jobs under international alliance arrangements.

Despite a lack of concurrence, the FAAC believes there would be real value to greater exploration of these issues, as well as best practices within the aviation industry. Deeper discussion and closer communication could lead to greater mutual understanding and movement toward consensus.

Rationale

The traditional business model in which workers work and managers manage has created a chasm of misunderstanding in the aviation industry, and this division has grown in the aftermath of deregulation and subsequent challenges. From the employee perspective, jobs are in constant flux, pay and benefits continue to regress to the mean, and concerns about inflation and job security have been dismissed in the interest of creating shareholder value. The management view can be summarized by the quandary that while employee satisfaction is a significant concern, the company must first survive, and then succeed in a hyper-competitive landscape. The first problem is contingent on the second: without success there can be no shared success. Employees who are not engaged or educated in the business do not understand the business case. Managers are largely unaware they have an available, untapped resource that is capable of understanding the business, expert in its fields, and responsive when a case for enlightened self-interest is made. The parties can find substantive common ground and make real progress if they give these issues proper consideration and if they have the opportunity and the forum to learn from each other. Case studies and best practices should be a core component of the summit.

WELCOMING REMARKS

The Honorable Susan Kurland, mistress of ceremonies, DOT Assistant Secretary for Aviation and International Affairs, welcomed the attendees to the First Semi-Annual Aviation Workforce Management Conference and thanked Ms. Maria Fernandez-Greczmiel, Federal Aviation Administration (FAA), Ms. Bonnie Gray, FAA, and Ms. Shelia Helton-Ingram, DOT, for their efforts in coordinating the conference. She stated this first conference stems from a recommendation from the FAAC. Assistant Secretary Kurland recognized the FAAC members in attendance: Mr. Bryan Bedford, Republic Airways Holding, Inc.; Ms. Thella F. Bowens, San Diego County Regional Airport Authority; Mr. John Conley, Transportation Workers Union (TWU), American Federation of Labor and Congress of Industrial Organizations (AFL-CIO); Ms. Pat Friend, formerly of the Association of Flight Attendants (AFA); Mr. Bob Lekites, Airbus; Ms. Ana McAhron-Schulz, Air Line Pilots Association (ALPA); Mr. Bill McGee, Consumers Union; and Mr. Dan McKenzie, Rodman & Renshaw.

Assistant Secretary Kurland explained that the FAAC was commissioned by the Secretary of Transportation, the Honorable Raymond LaHood. She stated the FAAC members recognized the value of keeping the conversation going after the completion of the FAAC.

Assistant Secretary Kurland noted the need to maintain an open dialogue regarding workforce, labor, management, and academia. She added Secretary LaHood chartered the FAAC approximately 18 months ago and asked the question, “Are we listening?”

Assistant Secretary Kurland explained recommendation 17 from the FAAC, the Aviation Workforce Management Conference, is evidence of the affirmative.

Assistant Secretary Kurland stated the conference brings together three Cabinet Secretaries, representatives from management and labor, and experts from the educational field. She explained the memorandum of understanding (MOU) signed by the Secretaries will formally establish a collaborative effort among the U.S. Department of Transportation, U.S. Department of Education (ED), and U.S. Department of Labor (DOL) to foster development of a skilled workforce through STEM programs and initiatives. Assistant Secretary Kurland introduced Secretary LaHood and noted the conference is taking place because of his commitment and dedication to asking tough questions at the right time.

Secretary LaHood thanked the FAAC members for their extraordinary leadership and the time each of them dedicated to the committee. He explained his commitment to the FAAC was to ensure each recommendation was followed. Secretary LaHood stated one recommendation was to gather Cabinet members and discuss how to work together, which is the goal of the conference.

SECRETARIAL FIRESIDE CHAT

Secretary LaHood thanked the Secretary of Labor, Ms. Hilda Solis, and the Secretary of Education, Mr. Arne Duncan, for attending the conference. Secretary LaHood explained how he met with Secretary Solis and Secretary Duncan personally and expressed the importance of their attending the conference. He stated the two focus areas are promoting learning and training in the STEM disciplines and improving labor relations in the aviation industry.

Secretary LaHood noted studies show mentoring is crucial in getting young people interested in STEM. He stated DOT established the Youth Employees STEM Mentoring Program, which connects experienced Government experts with backgrounds in STEM disciplines, with young people across the country. Secretary LaHood added he traveled to Spellman College to offer opportunities for young women to get involved as interns in transportation. He explained the internships were offered to see if young women wanted to aspire to get into the transportation industry. Secretary LaHood noted this program has been successful.

Secretary LaHood again thanked Secretary Solis and Secretary Duncan for attending. He noted the panel would start with a few discussion topics, then the floor would open for questions from the audience, and close with the Secretaries signing the MOU.

Secretary Duncan stated in order for the United States to remain competitive and a leader in aviation, workers must be educated and trained for the work of the future. He noted that both Secretaries are proponents of STEM and requested that each discuss some opportunities under development at DOL and ED. Secretary LaHood invited Secretary Solis to respond first.

Secretary Solis thanked Secretary LaHood and noted DOL cares deeply about STEM education. Secretary Solis stated she feels it is necessary for more individuals to seek careers in STEM areas. She noted the job recovery program has emphasized the need to help individuals earn credentials in these areas, but also the need to focus on incumbent workers. Secretary Solis stated it is necessary to continue education in math and science and to increase the apprenticeship programs to include math and science careers. She noted that a traditional welder position may not require math, but it is necessary to develop math and science skills as the needs of these jobs begin to change.

Secretary Solis stated the Federal Government does not pay for many registered programs; rather, industry management sponsors them. She noted \$750 million goes into those training programs, and this is an opportunity for businesses to get trained personnel up to speed. Secretary Solis stated there is an overall need to continue improving the focus on math and sciences to attract more young people into these fields.

Secretary Solis highlighted the lack of women and minorities in STEM fields. She noted less than 6 percent of Latino women work in STEM fields, and the figure is lower for African-American women. Secretary Solis noted if the United States is to remain competitive and innovative with the appropriate labor force, then people must enroll in math and science courses. In addition, she stated the number of teachers trained in STEM disciplines must increase. Secretary Solis added DOL is working jointly with ED to enhance funding at community colleges, noting a \$2 billion investment to increase the capacity in math and science areas. She emphasized the need for new forms of learning and more opportunities for community colleges to expand because many have closed or limited enrollment in medical and STEM fields.

Secretary Solis stated more should be done to retool the current workforce. She noted 14 million people are out of work and only a portion can transition seamlessly to STEM industries. Secretary Solis contended it may be possible, with training, to get appropriate licensing through workforce investment programs, which are dependent on public/private partnerships. She expressed happiness that President Obama made funding available through the American Recovery and Reinvestment Act of 2009. Secretary Solis stated this funding allows for partnerships with businesses and emphasized that these programs are not strictly Government funded. Secretary Solis invited the aviation community and manufacturers to participate, because partnerships are critical to the success of these programs.

Secretary LaHood thanked Secretary Solis for her response and invited Secretary Duncan to respond.

Secretary Duncan thanked Secretary LaHood for the opportunity to participate. He stated that ED owns a huge part of the STEM problem and is focusing on fixing the pipeline. Secretary Duncan noted many states historically lowered standards in areas such as math to make their statistics look better, but this has not helped to produce the needed workforce. He stated he has talked to many chief operating officers (CEO), who reported that many high wage, high skill jobs are still unfilled in this tough economy. Secretary Duncan noted the educational system is not producing the talent CEOs need to fill these positions.

Secretary Duncan explained that Tennessee lowered its standards and reported that 91 percent of its students were proficient in math. He stated Tennessee then did a courageous thing and raised standards, reporting that only 34 percent of students were proficient in math. Secretary Duncan noted 45 states have raised standards in math and science within the last 2 ½ years, representing a huge step in the right direction. He added 20 states are cooperating to raise standards to international benchmark science standards. Secretary Duncan stated while it may not be pretty, the statistics will be the truth and they provide a good baseline against which to measure improvement.

Secretary Duncan agreed with Secretary Solis' statement about the lack of qualified teachers in STEM fields. He noted it is difficult for students to love something if their teacher is not confident in the subject area. Secretary Duncan stated President Obama has challenged ED to recruit 100,000 math and science teachers because there has been a shortage for 3 decades. He noted, while it is radical, he has proposed to pay math and science teachers more money to attract talent, especially in inner cities and rural areas. Secretary Duncan added STEM education must begin before high school. He observed there are model programs to help develop a pipeline of teachers, but a great deal of work will be necessary to fix the pipeline problem.

Secretary LaHood asked Secretary Duncan how the message of raising educational standards is being received by educational institutions. Secretary Duncan stated the fact that 45 states have already voluntarily adopted international benchmark standards is extraordinary. He noted there is a growing recognition in the country that the education of young people helps determine future economic prosperity, so behavior must change. Secretary Duncan added that the changes in standards, while supported and encouraged by ED, are not mandated. He observed that teachers and principals love the changes and there is no resistance to the demands of a higher level of professional development. Secretary Duncan stated the changes are all examples of leadership at the state and local level.

Secretary Solis stated there are plenty of existing mentorship programs, and DOL is starting to create liaisons to ethnic institutions to draw out people who are interested in math and science. More specifically, she explained the liaisons will create partnerships and internships to expose students to careers in STEM industries. She noted individuals need to be motivated to pursue these careers and the partnerships must create a bridge to allow individuals to continue in these fields. Secretary Solis offered the example of her two sisters, who are engineers, and explained that they participated in a summer program to gain lab experience at the California Institute of Technology. She added that her sisters received inspirational coaching from faculty. Secretary Solis asserted when faculty members take interest in students, the students remain motivated and engaged. She stated the business community can also step up and do more to expose individuals to nontraditional fields.

Secretary LaHood asked if anyone in the audience had any questions or comments on this topic. Mr. Clark Martin, Federal Highway Administration, asked how well the departments are doing in informing young people about career opportunities. He stated if students are motivated to work toward a career interest, they may try to do better in their STEM work.

Secretary LaHood stated he thinks DOT is doing well with college students. He noted it has worked with Spellman College to create opportunities for young women, and DOT also worked closely with women transportation programs to encourage more women to get careers in transportation. Secretary LaHood added he just attended a meeting in San Francisco, CA, with foreign transportation ministers for a panel discussion on how to get more women involved in transportation.

Secretary LaHood noted there are tremendous opportunities available and DOT has a strong internship program for college students, employing over 100 interns last summer. He stated interns worked with top employees in every department to learn what DOT does and to inspire more people to pursue careers in transportation. Secretary LaHood added this has not filtered

down to the high school level and while DOT does have a strong internship program, more can be done. He stated DOT signed an MOU with a women's transportation program to provide more transportation opportunities. Secretary LaHood noted it is important to get the best people possible in transportation careers designing roads, runways, and airports. He explained if the country is to continue its long tradition of leading the world in transportation infrastructure, then it is necessary to find the right people who want a career in transportation.

Secretary Duncan stated ED has been very uneven with connecting middle and high school students to careers. He noted ED is working hard to reinvigorate technical education programs because students often do not understand the relevance of their studies. Secretary Duncan provided examples of extraordinary programs:

- Aviation High School, Seattle, WA: A majority of students go on to college and learn how their education can lead to a career.
- Schurz High School, Chicago, IL: Students can enroll in an automotive technology program, gain hands-on experience building cars, and receive guidance on the next steps in their education.
- Christo Rey School, Chicago, IL: Students attend classes 4 days a week and work as interns 1 day.

Secretary Duncan stated so many students come from communities with few good jobs and high unemployment rates; it is hard for them to aspire to something about which they know nothing. He noted it is necessary to expose students to STEM careers and give them a vision of the future, to help them understand why their education is important. Secretary Duncan stated he loves internship programs, but much more work must be done at the middle and high school levels.

Secretary Solis explained DOL has a Job Corps program, which consists of 124 centers with small campuses where 300–400 students live. She stated these centers train students, give them exposure, and enter them into apprentice-type learning. Secretary Solis noted the centers partner with management groups or construction companies to help students learn the tools of a trade, receive training, and get hired while gaining good experience and credentials. She stated these centers focus on math and science.

Secretary Solis stated she recently visited a school in New Mexico in which students receive the opportunity to work on job sites to gain on-the-job training. She noted once students complete their credentials, they often gain full-time employment.

Secretary Solis stated, in addition to the Youth Build program, there are programs focused on construction, restoration, and renewable energy. She noted these programs are critical for exposing rural and inner city students to STEM industries and helping them be successful. Secretary Solis observed it is crucial to expand those programs and add more partners in order to expose and motivate students to get into these fields.

Secretary LaHood asked if anyone in the audience had any questions or comments regarding the last discussion. With no response from the audience, he transitioned to the economic hardships the United States faces. He stated every sector of the economy is suffering and management is

examining the idea of employee satisfaction as a result, while trying to create opportunities for new jobs. Secretary LaHood noted there will be a session later in the conference between FAA Administrator Randy Babbitt and a representative from the National Air Traffic Controllers Association (NATCA) on labor/management relations.

Secretary LaHood stated DOT is promoting the passage of a long-term FAA bill for the implementation of the Next Generation Air Transportation System (NextGen). He noted the long-term bill would boost the economy and create jobs in aviation. Secretary LaHood stated the FAA has gone several years without long-term funding and this has hindered Administrator Babbitt's work on technology advancements. He noted a surface transportation bill would put thousands of people to work and fix infrastructure.

Secretary LaHood requested that Secretary Duncan and Secretary Solis comment on the hard economic conditions and their impact on labor and education. He stated he recently visited his hometown of Peoria, IL, for the school system's opening day. Secretary LaHood noted he congratulated the union and the administration on coming together to negotiate a contract that helped teachers and students. He stated people are beginning to realize that labor and management must come together in hard economic times to find the balance for students.

Secretary Duncan agreed that this is a tough economic time. He stated he went on a bus tour of schools and saw some disheartening things:

- In Milwaukee, WI, the school system has gone from having 100 art teachers to 11 at the elementary level.
- In Pittsburgh, PA, the school system is contemplating eliminating all extracurricular activities.
- In Cleveland, OH, the school system is thinking about laying off about 400 teachers in October 2011.

Secretary Duncan noted he saw labor and management working together everywhere he visited. He expressed his support for tough-minded collaboration and stated many school systems are fighting for their kids. Secretary Duncan added the American Jobs Act of 2011¹ will be able to save as many as 300,000 teachers' jobs, which would avoid increases in class size and cuts to extracurricular activities. He noted this Act would provide \$30 billion to save teachers' jobs and \$30 billion for school construction. Secretary Duncan stated many schools have leaky roofs and broken windows; however, the obvious solution is to defer maintenance, which is not fiscally responsible. In addition, he noted so many schools do not have math, science, or computer labs. He stated, with this Act, there is an opportunity during tough economic times to do the right thing. Secretary Duncan expressed hope in the passing of this Act.

¹ H. Doc. 112-53

Secretary Solis emphasized the need for an appropriate number of teachers to prepare young people to be competitive in STEM industries. She noted she is happy President Obama has put forward a plan to restore jobs. Secretary Solis stated a Congressionally approved plan is necessary to obtain funding for bridges and ports. She explained bridges and ports drive the ability to transport products abroad and domestically. Secretary Solis added there is a backlog of infrastructure projects, so the \$50 billion will help to put people back to work. She stated it will have a tremendous impact not only on construction workers, but suppliers, developers, accountants, financial advisors, and even coffee shops. Secretary Solis observed that quick action on the American Jobs Act is necessary, and she encourages support of the Act. She stated new jobs should not depend on political affiliation because job creation is the right thing to do for the United States.

Secretary LaHood asked if there were any questions from audience on this topic. With no response, he moved the discussion to changes in the aviation industry since the events of 9/11. With regard to aviation, Secretary LaHood stated the closure of Ronald Reagan Washington National Airport, Arlington, VA, (DCA) for 6 months affected him the most. He noted it affected many people, including maintenance workers, shop workers, and people who run the airport. Secretary LaHood added that hundreds of people lost their jobs, and the whole aviation industry is still struggling to bounce back 10 years later. He stated DOT has worked very hard with friends in aviation to help the industry in its recovery. Secretary LaHood noted this is the reason the FAAC task force was put together: so industry professionals could come together to identify some critical areas.

Secretary LaHood stated there is an aging population in aviation careers, including pilots and those who work at airports. He acknowledged aviation does not fall under their jurisdictions, but he asked Secretary Solis and Secretary Duncan to discuss how they are working to improve opportunities since 9/11.

Secretary Solis stated she met with Senator Sam Brownback in Kansas regarding the seasonal issues experienced by a large sector of the aviation community. She stated many employees do not have year-round projects, so the issue becomes how to keep those people employed. Secretary Solis noted that some companies keep employees on board while dealing with seasonal employment issues, and train them for other tasks. She explained DOL will use funding from the American Jobs Act to expand programs like unemployment insurance for the long-term unemployed.

In addition, Secretary Solis stated DOL is looking to increase training programs. She noted it is necessary to examine every sector, including entry level, trade level, and apprentice programs. Secretary Solis stated her Assistant Secretary for Employment and Training Administration, the Honorable Jane Oates, will address that topic later on in the conference and discuss how DOL is rolling out those programs.

Secretary Solis stated money is needed in certain sectors and partnerships with businesses are crucial where industries are growing, such as Silicon Valley, in the information technology, high tech, and biomedical industries. She noted it is important to look at those parts of the country and make investments to spur growth and expand the workforce. Secretary Solis stated she is working with Secretary Duncan to fund programs to help community colleges work better and encourage employees on factory floors to help write curriculums. She noted more relevant curriculums will help unemployed individuals obtain better jobs that are not currently being filled.

Secretary Duncan observed that ED historically has been a part of the problem, but it now has the opportunity to be much better. He noted there are encouraging changes, including the 20 States coming together to increase science standards and non-profit organizations coming together to train the next generation of STEM teachers. Secretary Duncan stated ED is working to recreate technical education and adult learning and to promote community colleges. Secretary Duncan encouraged industry professionals to push ED hard to become a better partner. He also encouraged industry professionals to do what they can to give students exposure through job shadowing, internships, or career days.

Before the signing of the MOU by the Secretaries, Secretary LaHood asked if the audience had any questions. Ms. Lydia Mercado, Research and Innovative Technology Administration, stated she is leading an effort to coordinate workforce issues and commends Secretary LaHood on bringing this group of Cabinet members together to discuss these important issues. Ms. Mercado noted when leaders can connect at national level, partnerships at state and local levels flow better. She thanked the Secretaries for their time and participation.

Mr. Martin elaborated on what Ms. Mercado said by adding he has the sense that in the last year or two, DOT, DOL, and ED have come together to work closely with associates. He noted he is excited about opportunities and recognizes the need to get to state and local levels. Mr. Martin stated it is necessary to connect students with jobs and STEM education, and employers need to develop internship programs so the community can come together for workforce development. He noted DOT and the FAA need to be commended for this conference. Mr. Martin stated the National Center for Freight & Infrastructure Research & Education will be hosting a National Transportation Workforce Summit April 24–26, 2012, and invited the Secretaries to participate in the program. He thanked the Secretaries for their comments and leadership and noted their participation shows the community that these issues are important.

Mr. David Grizzle, FAA, posed a question for Secretary Solis. He stated he shares her enthusiasm for mentoring, but not everyone is a good mentor. Mr. Grizzle asked what current actions focus on creating good mentors.

Secretary Solis stated she visited a program called Job Clubs, which involves about 300 highly trained, highly skilled, well-educated individuals who are looking for work. She noted the program revolves around coaching each other on how to get their next job. Secretary Solis stated there are so many new methods for people to get together, including social media. She added they present the opportunity for people to discuss what skill sets employers seek and find other entities that want to provide mentorship. She noted many people in the corporate world can serve as mentors, but they need to break out of industry silos.

Secretary Solis shared that her best experience came from an internship in which she had a good mentor who instructed and coached her. She noted young people, especially women, need the motivation to pursue nontraditional fields and skills. Secretary Solis stated these people can make astounding accomplishments once they get through an apprentice program.

Secretary LaHood asked Secretary Duncan if he had any examples of good mentoring programs and the attributes of a good mentor. Secretary Duncan stated there are many good examples of mentoring programs, and mentorship is a learned skill. He noted there are many national programs that do good work, but many people remain out of reach. Secretary Duncan explained it is necessary to get more adults involved because many students face tough odds just to get to school. He observed there is a lot of available training to help mentors improve their skills. Secretary Duncan stated the experiences for young people with mentors are transformative because many young people do not have that support at home.

SIGNING THE MEMORANDUM OF UNDERSTANDING

Secretary LaHood thanked Secretary Solis and Secretary Duncan for their participation in the conference. Under the direction of Assistant Secretary Kurland, the three Secretaries signed the MOU (Appendix D).

LABOR/MANAGEMENT RELATIONS PANEL

BEST PRACTICES IN LABOR/MANAGEMENT RELATIONS

Assistant Secretary Kurland thanked Secretary LaHood, Secretary Solis, and Secretary Duncan. She stated this is exactly type of conversation needed and this conference fulfills a recommendation of the FAAC. Assistant Secretary Kurland announced the next topic for discussion would be best practices in labor/management relations. She introduced Administrator Babbitt and Mr. Paul Rinaldi, President, NATCA.

Administrator Babbitt stated he was glad to have the opportunity to discuss the points raised by the FAAC. He observed that he and Mr. Rinaldi started their respective positions at roughly the same time, which served as a blessing and a curse. Administrator Babbitt stated they had very little experience to call upon, but had the advantage of a clean sheet. He noted they are trying many new things and he applauds Mr. Rinaldi as a terrific partner who is willing to try new things. Administrator Babbitt explained he and Mr. Rinaldi are trying to clear a pathway and he is confident that pathway is the road to success. He reiterated that they have tried many new initiatives. He added he was looking to share some things with the audience, but also wanted to hear the thoughts from the audience. Administrator Babbitt invited Mr. Rinaldi to comment.

Mr. Rinaldi stated his new position has been a challenging experience so far, and collaboration is a challenge. He stated there are often positional sides in the labor world, and traditional labor relations use grievances, mediation, and arbitration. He noted it is a pleasure to say that the FAA and NATCA have the same goals, which is to run the safest transportation system in the world. Mr. Rinaldi observed that common goals drive collaboration. He stated he and Administrator Babbitt can collaborate as best they can at national level, but the culture at the lowest level must change in order for them to be successful. Mr. Rinaldi explained they are taking initiatives and are seeing good successes at local levels. He stated the FAA operational directors in Dallas, TX, the next level of leadership, are working with the NATCA executive vice president and regional vice presidents to further the collaboration. Mr. Rinaldi noted this is a sustainable process.

Administrator Babbitt observed that collaboration is a nice word, but it takes a lot of work, faith, and confidence to do it. He observed that it surprises people to know there are 8 labor unions at the FAA, 25 collective bargaining agreements, and over 30,000 employees represented collectively with bargaining units. Administrator Babbitt acknowledged that Mr. Rinaldi touched on the challenge of taking collaboration to lower levels. He stated he discovered that everyone can use some education, everyone can use better skills, and things change over time. Administrator Babbitt added the FAA agreed they needed professionals to teach them as a group, so 15 top FAA managers and 15 FAA labor leaders gathered to learn from industry professionals how to do a better job communicating.

Administrator Babbitt stated one byproduct of pushing collaborative efforts to lower levels is empowering employees to become problem solvers. He noted the FAA set up a forum to get local employees involved. Administrator Babbitt explained they were able to sit down and work out problems among their teams. He observed that employees could use their solution or escalate the problem if a solution is not found. Administrator Babbitt added the result of the forum is that at the local level, problems were solved 100 percent of the time. He explained that people love to make their own decisions and should be empowered to do so. Administrator Babbitt noted the challenge now is to get employees to buy into the collaborative culture. He asked Mr. Rinaldi if it is a challenge to convince his employees that collaboration works.

Mr. Rinaldi confirmed it is a challenge for him. He noted that from 2004 to 2009, which he referred to as the lost years, air traffic controllers were not involved in the creation of new equipment procedures and did not have a say in the work environment. Mr. Rinaldi observed that since 2009, there is a new need to work collaboratively. He noted the challenge is that many controllers do not want to participate after what happened in the lost years. Mr. Rinaldi stated it is necessary to convey the message that the old path does not work, and they are now on a new path to success. He added he was in San Diego, CA, on Monday, September 19, 2011, and he stressed the importance of communicating issues. Mr. Rinaldi stated if change is not happening at local level, management needs to address it so the best product can be made. He explained the challenge is communicating properly, but as the employees see success, it will become less challenging.

Administrator Babbitt noted that Mr. Rinaldi's point on communicating properly is critical. He observed that when the FAA members went through training, they completed exercises in communication. Administrator Babbitt stated everyone can benefit from practice, lessons, and recurrent training for the skill sets employees use. He emphasized that one difficult thing to convey managers is that a collaborative environment will not provide answers to all problems. Administrator Babbitt explained there are still some issues on which employees may not agree, but the vehicle for the solution exists. He added there are people who can help facilitate discussions and help reach a solution. Administrator Babbitt stated a third party solution is often not as effective as a first party solution; however, the third party solution may spark additional conversations leading to a solution developed by employees.

Mr. Rinaldi stated that is the same philosophy NATCA instills at the local level. He noted employees at the local level know what is best for the facility, while he and Administrator Babbitt know what is best for the industry as a whole.

Administrator Babbitt stated the best example he can offer is the issue of controller fatigue. He noted it made front-page news and as a result, it was necessary for him to go on the road with Mr. Rinaldi. Administrator Babbitt asked Mr. Rinaldi to comment on what it meant to employees in the workplace to have the management and labor on the same page.

Mr. Rinaldi stated having labor and management in the same room sends a clear message. He explained it was critical to gather the controller workforce and local management to deliver the message that the aviation system is the safest, most efficient system in the world, and it employs highly trained, highly skilled employees. Mr. Rinaldi added the controller fatigue issue is not

indicative of the profession. He noted statistics show that the aviation industry is almost 100 percent safe, but sometimes issues take a life of their own in the press and become their own reality, even though it is the farthest thing from the truth. Mr. Rinaldi observed that by traveling across the country with Administrator Babbitt, they were able to express a message of validity to the controllers, management, technical operations, and other aviation industry workers. He noted when he and Administrator Babbitt stood together with the same mission, industry professionals began to believe their message.

Administrator Babbitt observed that one of the difficulties they faced was the focus of the story in the news; however, the aircraft landing at DCA was never out of radar contact. He explained that even though the aircraft did not have communication with the controllers, the aircraft was in constant contact with Potomac Terminal Radar Approach Control, which provides radar service for arrivals at a number of airports. Administrator Babbitt noted because of the security issues around Washington, DC, aircraft maintain radar contact until touchdown, in addition to being handed off to a control tower. Despite the radar contact, he stated the situation was viewed as a horrible situation. Administrator Babbitt noted it was his job, along with Mr. Rinaldi, to convince employees that they were still proud of them. He stated the press magnification of this one incident demonstrates one of the challenges they faced.

Administrator Babbitt stated the FAA controls 70,000 instrument flight rule operations and carries 2.5 million people each day. He observed that this day will be uneventful, just like every other day for the last 4 years. Administrator Babbitt explained that due to their success, anytime an incident occurs, it becomes a giant issue. He offered the following analogy: in a 40 foot pane of glass, someone will notice one thumbprint. Administrator Babbitt added that will be the only thing noticed, not the other areas without spots. He noted this is a challenge the FAA faces, along with the challenge of letting employees know the he is proud of the work they do that does not make it into the press. He stated it is difficult to recognize all the great accomplishments employees make.

Mr. Rinaldi stated that the night before he left Kansas City, MO, for Chicago, IL, there was a severe line of weather in Chicago, IL. He noted the level of teamwork displayed was incredible. Mr. Rinaldi added that management coordinated tasks and controllers communicated effectively; however, when he presented this story to the press they deemed it not newsworthy. He explained that this is a challenge of being so good: the expectation is that the United States' aviation system is the best in the world and it should operate efficiently day in and day out.

Administrator Babbitt stated he spent time visiting leadership teams, and it was very helpful for management to get to know him. Administrator Babbitt noted the FAA has adopted quarterly labor/management forums as a result. He explained that a labor/management forum allows management to sit down with labor and bring issues to the table. He observed that it also allows labor members to see challenges faced by management.

Mr. Rinaldi stated it is important to broaden communication and help labor understand a decision's rationale and where a thought process is coming from. He added it also provides labor the opportunity to see management's side of the picture. He stressed the importance of a continued dialogue so that labor can help management see how decisions will affect the local level. Mr. Rinaldi noted the importance of addressing issues from different perspectives in order to achieve common goals.

Administrator Babbitt noted that measuring progress is hard, but he sees a tremendous amount of cooperation and collaboration at the FAA. He stated the FAA has implemented Idea Hub, which allows employees access to bring ideas to the forefront without going through bureaucratic channels. Administrator Babbitt explained Idea Hub gets approximately 1,000 hits a week from employees who want to analyze problems, bring their own ideas forward, and promote employee engagement. He added this idea, along with union leadership, has allowed the FAA to take the biggest step forward in better places to work in the Federal Government. Administrator Babbitt observed this progress comes from this open dialogue.

Administrator Babbitt asked if the audience had any questions. Ms. Friend observed that coalitions are dependent on the individuals who build the relationship. She asked if Administrator Babbitt or Mr. Rinaldi had any suggestions or recommendations for how this collaborative relationship can succeed beyond their tenures.

In response to Ms. Friend's question, Mr. Rinaldi stated that is a challenge that he and Administrator Babbitt face. He noted if the collaborative environment revolves around them, management and labor may relapse into old habits when they leave. Mr. Rinaldi explained he and Administrator Babbitt have been very methodical in building this relationship in order to leave a lasting process regardless of who the President, the Administrator, and the Secretary of Transportation are. He noted this process is about showing the aviation industry, the flying public, Congress, and the White House that a competitive edge is maintained in the aerospace industry through having a collaborative environment before making decisions. Mr. Rinaldi acknowledged that they have a long way to go, but he is confident they will get there. He noted their determination shows the aviation community they will not go back to the lost years when subject matter experts made decisions without the input of the employees who conducted the work.

Administrator Babbitt stated it is interesting that Ms. Friend asked a question regarding the subject that he and Mr. Rinaldi discuss often. He noted it is necessary to ensure their work will continue regardless of political, Administrative, and leadership changes. Administrator Babbitt stated he has seen the pendulum swing back and forth with the change in Administrations. He noted the pendulum will continue, but the swing can be limited. Administrator Babbitt stated there is no need to change completely when the Administration changes. He noted they must focus on the safest, most efficient system in the world, while maintaining flexibility to adapt to changes.

Administrator Babbitt stated it is a challenge to continue to push their collaborative efforts to lower management levels. He noted he has seen great success and progress, as demonstrated through the En Route Automation Modernization (ERAM) installation. He added ERAM is the biggest current transformation of technology. Administrator Babbitt explained the program

stopped at one point due to the lack of communication. He stated it is back on track and although they may hit bumps, the collaborative environment allows work to continue. Administrator Babbitt noted this project is dependent on the collaboration between technical operations, controllers, and others who work with the equipment. He stated this is a great example of results from a collaborative environment.

Mr. Rinaldi stated ERAM will ultimately prove collaboration is the right path. He noted billions could be wasted if the teams did not work together. Mr. Rinaldi stated the people who use the technology must work with engineers so they system can function properly.

Administrator Babbitt stated the collaborative spirit exists in other areas and he applauds the large aircraft manufacturers for reaching out to flight attendants, pilots, and mechanics for input on the design process.

Administrator Babbitt solicited questions from the audience. In the absence of questions from the audience, Administrator Babbitt stated the overall labor relations environment has shifted in the United States. He asked Mr. Rinaldi where he sees the future of labor relations headed.

In response, Mr. Rinaldi noted he has seen great changes in the past few years, including solving half a million grievances. Mr. Rinaldi added an alternate dispute resolution (ADR) process has been used at NATCA to resolve issues before arbitration or litigation. He noted he is seeing creative, joint decisions as a result. Mr. Rinaldi explained NATCA set up one ADR per region, per quarter, for 3 days. He observed they often do not need that amount of time because disputes are solved quicker than expected. Mr. Rinaldi noted the future of labor relations will allow for collaboration on NextGen issues, cost savings, and improved professional standards, and it opens the door to do more.

Administrator Babbitt identified a part of what he and Mr. Rinaldi are doing is continuing to work together to find career pathways. He noted the FAA could do a better job of retaining good employees who are ready for a new challenge, rather than having them move to a different company. Administrator Babbitt observed this applies not only to the FAA, but to all corporations. He explained the top management at FAA came from all over the agency, with a clear understanding of what the FAA does. Administrator Babbitt noted the FAA is looking forward to designing better educational pathways, giving employees better access to computerized training, mentoring programs, leadership development programs, and emerging leaders programs, in order to enhance their employees.

Administrator Babbitt thanked Mr. Rinaldi for his time, the organizing committee for allowing them to share their thoughts, and the audience for the attention and participation. Mr. Rinaldi expressed his thanks as well.

WORKFORCE MANAGEMENT PANEL

BUILDING AN ARCHITECTURE OF COOPERATION AND CONTINUING THE DIALOGUE

In her introduction of this panel, Assistant Secretary Kurland stated the next panel would explore how to build cooperation as the conversations continue. She welcomed the moderator, Mr. David Grizzle, Chief Operating Officer, FAA, and the panel of experts: Mr. John Conley, International Administrative Vice President, TWU, AFL-CIO, and FAAC Member; Capt. Lee Moak, President, ALPA; Mr. Larry Gibbons, Director of Mediation Services, National Mediation Board (NMB); Mr. Brian Bedford, President and CEO, Republic Airways Holding, Inc., and FAAC Member; and Mr. Joe Harris, Senior Labor Counsel, Southwest Airlines.

Mr. Grizzle thanked Assistant Secretary Kurland for the introduction and the panel members for their participation. He observed that Mr. Rinaldi and Administrator Babbitt's discussion covered a topic that could never have been described 3 or 4 years ago. Mr. Grizzle noted this topic is a productive and improved working relationship between management, labor, and the FAA.

Mr. Grizzle stated that this panel would focus on the practice, challenges, and opportunities for collaboration in the air carrier industry. He noted a distinction Administrator Babbitt and Mr. Rinaldi previously drew: collaboration means more than playing well together; it also means working together to produce better outcomes than would be attained through non-collaborative work.

Mr. Grizzle highlighted Captain Moak's aviation industry experience and asked him to discuss industry collaboration. Specifically, Mr. Grizzle asked Captain Moak to compare collaboration in the present day to previous years and if the practice has become easier or more difficult.

Captain Moak stated during the post-deregulation period, air carrier workers worked under a contract but had no requirement to understand the industry. He noted that over the 30 years following deregulation, worker contracts were renegotiated and revised with smart provisions that made the case for collaboration. One such provision, he noted, was a profit sharing component that has forced air carrier labor to understand the business.

Captain Moak cited his observation that workers have adapted to the idea that company profitability is necessary to ensure a healthy company and a successful career. He claimed a profit sharing component couples every employee to their company, creating an obligation and responsibility to ensure that all aspects of operations contribute to profitability. Captain Moak stated that attitude is a significant change that occurred over the past 30 years, and it represents the future. He noted labor has realized that collaboration is essential to sustainability and suggested that more recent contracts reflect this new understanding.

Mr. Grizzle asked Captain Moak if information sharing is important. Captain Moak responded that it is critical and asserted that one should not be expected to make a decision as a labor union without current, factual information. Mr. Grizzle noted discussion on that topic would continue later.

Mr. Grizzle noted that many in the industry wondered how Southwest Airlines was able to perform the way they did, and asked Mr. Harris to discuss the experience and practice of collaboration at Southwest Airlines over the past decade. Mr. Harris stated he does not see progression in generational terms. He noted his vision necessitates ongoing, continuing change concurrent with change in administrations.

Mr. Harris stated that Captain Moak and Mr. Conley's positions are very difficult, and require an understanding of business and interactions with management. He observed that the roles are political, because they must stand for reelection. Mr. Harris claimed that historically, the individuals with the most success in reelection were those that took hard-line positions with management. He claimed that being cooperative partners is a greater challenge for labor than management. He stated within management, it is necessary to work with individuals with egos and a historical understanding of labor/management relations.

Mr. Harris claimed human interpersonal relationships are essential for success. He stated that without those relationships, the great ideas, contracts, and structures are ineffective. Mr. Harris explained that enabling people to fill these roles in a statesman-like fashion is a continuous process. Mr. Harris suggested that the Southwest Airlines experience was not a progression in terms of decades, but rather a perpetual process encouraged by company leaders.

Mr. Grizzle asked Mr. Gibbons to comment on Mr. Harris' discussion. Mr. Grizzle stated Mr. Harris spoke of the challenges faced by a union leader caused by constituent expectations or constraints. Mr. Grizzle noted Mr. Gibbons' background in labor mediation and management, and asked if the expectations of members, overseers, and investors are materially different for a union leader and a management leader in terms of collaboration.

Mr. Gibbons expressed his belief that collaboration is harder for union leadership, especially in modern times. He noted there is substantial unrest in the membership of many major unions. Mr. Gibbons noted the members are unhappy with what is happening, specifically within the air carrier industry. He claimed it is increasingly difficult for leadership to stay ahead of the people and navigate a path to productive leadership because people want to rebel. Mr. Gibbons observed that better leaders who want to work for management are ousted because of the tenacity of people in the air carrier industry. Mr. Gibbons argued that it will take time to change that culture, and as a result, leadership's effort to collaborate with management is very difficult.

Mr. Grizzle asked if anyone else would like to comment. Mr. Conley stated it was painful and difficult to work in the industry for the last decade and be involved in the adverse effects of 9/11. He noted the industry faced previously unimaginable challenges.

Mr. Conley highlighted the importance of creating and managing expectations and delivering on promises. He claimed an inability to keep promises will destroy credibility and integrity, directly affecting effectiveness with members. Mr. Conley acknowledged the difficulty in giving

members information they do not want to hear, but emphasized the importance of honesty. He stated leaders can either ignore reality or endure the difficulties associated with effective leadership.

Mr. Gibbons referred to Mr. Conley's comment on managing expectations. He claimed most people focus on managing employee expectations, but noted it is just as important for management to manage their expectations. Mr. Gibbons clarified that he was speaking of the collective bargaining agreement and that reasonable expectations is a requirement for all parties.

Mr. Grizzle noted Mr. Bedford is facing a significant challenge in meshing six different corporate cultures. Mr. Grizzle ventured a guess that more than half of the available seat miles currently flown involve a combination of corporate cultures. Mr. Grizzle asked Mr. Bedford to discuss his perspective on the challenges of practicing and sustaining collaboration during periods of corporate culture integration.

Mr. Bedford noted companies inherit different collective bargaining groups, representatives, and contracts, as well as cultures and styles of collaboration through mergers and acquisitions. He stated management would like to be able to take the aspects that are effective and incorporate them into other parts of the organization. Mr. Bedford noted, however, that this cannot occur without trust and an investment, such as sharing confidential information or an investment in time to develop relationships. Mr. Bedford explained that investments take time and trust is a precious commodity.

Mr. Bedford stated the industry has faced many challenges over the last 7–8 years, including multiple bankruptcies and concessionary bargaining. He noted the industry responded by taking from stakeholders, such as aircraft lessors, labor, investors, and banks. Mr. Bedford stated there is a limit to the resources that can be taken from stakeholders during the second round, however. Mr. Bedford argued that as a result, the dynamic had to change.

Mr. Bedford provided an example of his company consolidating in a synergistic manner by marginalizing overlapping hubs. He recognized a link between every benefit and its associated costs, which he related to a culture of bargaining and collaboration. Mr. Bedford claimed Delta Airlines is a successful example of this approach, while the outcome of the United Airlines/Continental Airlines merger remains uncertain. He noted most people would consider the US Airways/America West merger a failure.

Mr. Bedford stated that analyzing each of the aforementioned mergers and acquisitions highlights their respective successes and failures. He noted the Delta Airlines merger was a success because it took leadership from both management and labor, with both sides agreeing to start from a position of trust.

Mr. Bedford noted there was a management team at US Airways making an effort to collaborate, while the labor side split between two disagreeing unions. He stated the unions could not successfully collaborate with management, leading to a failed labor outcome. Mr. Bedford argued that the culture stayed split because of the labor dispute. He explained there are clear successes in mergers and acquisitions, and the industry should strive to replicate those models.

Mr. Grizzle asked Mr. Conley and Captain Moak if they would like to comment on Mr. Bedford's discussion. He added that he hoped audience members were contemplating adopting these approaches in their own companies. Mr. Grizzle noted that both Mr. Conley and Captain Moak represent bargaining units at multiple air carriers. He asked if they had any hints for extending collaboration from one sibling group to another.

Captain Moak referred to Mr. Bedford's earlier comments, and stated bankruptcy provides incredible clarity on what is important. He explained that DOT and NMB statistics show approximately 200 bankruptcies since 1978. Captain Moak noted 13 of those air carriers have been able to reorganize and still exist today. He asserted jobs are dependent on viable air carriers. Captain Moak stated instead of focusing on the component between management and labor, the first step should be discovering how to create a viable company. He emphasized that steps must be completed before labor and management argue with one another.

Captain Moak noted the air carrier industry has not been overly profitable in the preceding decades. He stated Government has a role in this. Captain Moak admitted he is new to Washington, DC, but what he notices is a lack of an advocate for aviation. He expressed his approval for the FAAC, but noted everyone should be concerned about the President's newly proposed taxes on aviation. He claimed these taxes will destroy middle class and union jobs, and will make the air carriers unprofitable.

Captain Moak noted FAAC recommendation 10 was to form a panel to analyze industry taxes, and asserted that this panel is necessary immediately. He claimed that without healthy companies, there will be no jobs. He emphasized the importance of every job in the current economic climate.

Mr. Grizzle asked Mr. Conley if he would like to comment. Mr. Conley agreed with previous comments from Mr. Babbitt and Mr. Rinaldi, and stated certain aspects of the lost years are so deeply ingrained that scars and unpleasant memories are difficult to remove.

Mr. Conley encouraged everyone to consider the workforce as a strategic advantage. He stated the work force is not something to be shunned or avoided, and added that members can sense when they are being evaded. Mr. Conley emphasized the importance of matching actions to words. He added that it is necessary to anticipate breakdowns because they are a part of any relationship.

Mr. Conley stated breakdowns cannot be allowed to decouple the relationship, and used Southwest Airlines as an example of a company that has the ability to overcome breakdowns ingrained in their company culture. He explained that as a result, Southwest Airlines' relationships likely will transcend generations. He added that other air carriers have not been as successful in that regard.

Mr. Grizzle asked Mr. Harris whether, in his view, collaboration is easier or harder in difficult times. Mr. Harris stated he did not know, but he did know that it is essential. Mr. Harris cited Mr. Gibbons' earlier statement regarding the importance of trust. He noted it takes time to build trust, and betrayal can happen overnight. Mr. Harris emphasized the importance of preserving that relationship. He stated trust requires courage and a willingness to take a risk. He highlighted the importance of trust in difficult times, when profits are difficult to achieve.

Mr. Harris stated management must be mindful that the failure of air carriers jeopardizes the jobs for all of their members. He added the air carrier business is very labor intensive, and as a result, management must realize people are a company's greatest asset.

Mr. Grizzle noted the FAA has made progress transcending betrayals of trust. He asked Mr. Gibbons how to move past betrayals, assuming Mr. Gibbons were an air carrier executive or union leader. Mr. Gibbons stated trust or credibility is the most challenging thing to build, and once lost, recovery is difficult if not impossible. He characterized Mr. Grizzle's question as very difficult to answer.

Mr. Gibbons stated he would like to talk about the tools the NMB has for the industry in terms of cooperation and collaboration, which include problem solving and mediation through ADR. He noted parties can use these tools before they enter collective bargaining.

Mr. Gibbons provided details on three active facilitation cases using facilitative problem solving. He noted two cases involve pilots and one involves flight attendants. Mr. Gibbons asked the group to look at the ongoing grievance mediation cases, stating there is a step inserted into contract negotiations to resolve issues before arbitration. He explained there are 16 active grievance mediation cases at the NMB, 15 of which involve pilots and flight attendants, with the remaining case involving fleet service. Mr. Gibbons added that of the 16 cases, 11 involve ALPA and AFA. Mr. Gibbons noted ALPA and AFA are setting a standard by using ADR as an approach with management to resolve their problems.

Mr. Gibbons stated Southwest Airlines is one of the most infrequent users of NMB mediation services. He added Southwest Airlines has a grievance mediation case and uses ADR services. Mr. Gibbons noted all 16 grievance mediation cases involve Southwest Airlines, regional carriers, or cargo carriers. He noted that at the current time, there are no major air carriers using ADR services. Mr. Gibbons expressed his amazement at this fact, because in his opinion, major air carriers need these services the most.

Captain Moak added his perspective on the issue of trust. He stated that to accomplish anything in air carrier labor, one must have a goal, remain focused on that goal regardless of another's actions, and have the ability to turn the other cheek. Captain Moak added there is always a person who can accomplish a deal and one who can find a reason not to do a deal. Captain Moak emphasized that accomplishments only result from focusing on the final goal.

Mr. Conley stated he wanted to respond to the question of overcoming betrayal. He noted what has always worked for him is to directly confront the issue, however uncomfortable it may be. Mr. Conley added if mistakes have been made, the best practice is to admit it and focus on the future. He stated individuals are the author of their own character and behavior. He detailed the importance of honesty and admitting to lying when it occurs.

Mr. Grizzle began to conclude the panel discussion with several observations. He noted the aviation industry is facing skills shortages that will continue to grow. Mr. Grizzle asked Mr. Bedford how a collaborative approach could attract workers needed by the industry over the next 10 or 20 years. He added the industry is not as attractive as it was in previous decades, thus increasing the difficulty in adding qualified individuals to the workforce.

Mr. Bedford stated he believes it is possible. He noted that in many aspects, corporate America and labor organizations have the same goals in terms of work force development and creating opportunities in aviation.

Mr. Bedford stated the aviation industry receives significant media attention when bad things happen. He claimed the worst thing that can happen is an accident with the loss of life, such as the Colgan Air Flight 3407 accident in Buffalo, NY. Mr. Bedford noted the accident led to sensational media reporting. He explained the aviation industry has an excellent overall safety record because there are groups dedicated to running a system with perfect safety. Mr. Bedford observed that the air carriers he is associated with have 37 years of perfect passenger safety.

Mr. Bedford stated air carriers are subject to media scrutiny, to the families of the victims calling for action, and to a polarized U.S. Congress. He argued that the current system is essentially dismantling professional advice received from organizations such as the FAA and National Transportation Safety Board. Mr. Bedford noted there is a current regulation that will create a significant labor shortage in the aviation industry, but nobody is focused on it. He claimed the regulation will destroy jobs and result in the loss of service in small communities. Referring to the group as an organization of industry, labor, management, and Government, Mr. Bedford called for everyone to work to fix the problem.

Mr. Grizzle asked for Captain Moak's input on where there are opportunities for collaboration. Captain Moak stated the problem exists in Washington, DC. He noted in the air carrier industry, companies have to interact with numerous Governmental agencies, in addition to the Congress. The Congress, he argued, is attempting to legislate regulations without cross-departmental coordination. Captain Moak argued the Government needs to compete on a global scale. He noted the aviation industry does not have an advocate in Government, and one is needed. Captain Moak stated leadership from industry is necessary, which he believes can come from labor. He added labor and management should be concerned about the new aviation taxes proposed by President Obama and the Transportation Security Administration, because they render the air carriers unprofitable and kill jobs. Captain Moak recalled that FAAC recommendation 10 called for a panel on taxes in the aviation industry. He emphasized that this panel is needed now to examine those taxes.

Mr. Grizzle noted an airplane cannot fly without being staffed. Captain Moak stated most agree that NextGen technology is needed in the industry. He explained that despite the benefits of the technology, NextGen will not exist until the Government commits financially to modernization. Captain Moak called the inability to pass an FAA bill with long-term funding a failure of leadership that hurts everyone in the industry.

Mr. Grizzle promised Mr. Babbitt that Captain Moak's comments were not scripted. Mr. Grizzle asked if there were any questions from the audience.

Mr. Will Ris, American Airlines, stated he would like to echo Captain Moak's statement that a mutual stake in the gains and losses of the industry is necessary. Mr. Ris also provided statistics on the effect of the Government's proposal for a \$100 departure fee. He stated it would cost American Airlines \$340,000 a day, \$1 million every 3 days, and \$115 million a year. Mr. Ris noted the funds would be drawn from proceeds that would otherwise go into a profit sharing fund. Mr. Ris called the policy harmful to labor, management, and jobs. He congratulated Captain Moak for bringing this important issue to the forefront.

Mr. Grizzle thanked Mr. Ris for his comment. With no additional comments from the audience, He thanked panel members on behalf of Secretary LaHood for participating in the discussion.

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH PANEL

DISCUSSION OF STEM INITIATIVES

Assistant Secretary Kurland thanked Mr. Grizzle and the panel for the stimulating discussion. She noted their discussion raised many questions for DOT to address.

In introducing the next panel, Assistant Secretary Kurland observed that during their fireside chat, the Secretaries had discussed STEM education and that the next panel would discuss what is happening with STEM at the grass-roots level. Assistant Secretary Kurland introduced the panel's moderator, Ms. Portia Wu, Senior Advisor for Mobility and Opportunity Policy with the White House Domestic Policy Council. She then introduced the STEM panelists: the Honorable Jane Oates, Assistant Secretary for Employment Training, DOL; Dr. Frank Chong, Deputy Assistant Secretary for Community Colleges, Office of Vocational and Adult Education, ED; Ms. Thella F. Bowens, President and Chief Executive Officer, San Diego County Regional Airport Authority and FAAC Member; Dr. Ralph K. Coppola, Director, Real World Design Challenge and Senior Director of Government & Strategic Education Programs, PTC; and Mr. James T. Brough, National Aviation and Space Education Program, FAA.

Ms. Wu expressed support for the initiative at hand and noted that previous panel discussions about STEM and opportunities in labor/management partnerships come at a very good time. She stated the STEM discussion feeds into the President's priorities. Ms. Wu added that STEM is an important factor in competitiveness in the 21st century, not only in aviation, but across industries. She emphasized the panel saw a historic MOU signed by the Secretaries, and agreed that interagency cooperation is important. Ms. Wu asked for comment from Deputy Assistant Secretary Chong or Assistant Secretary Oates on how to move forward from this moment, in order to put energy and resources into moving people through the pipeline.

Deputy Assistant Secretary Chong thanked the committee and noted that over the past year he and Assistant Secretary Oates have travelled throughout the country to roll out the Trade Adjustment Assistance Extension Act of 2011², under the leadership of Secretary Duncan and Secretary Solis. Deputy Assistant Secretary Chong explained the Act includes \$2 billion for the next 4 years and provides community colleges with much-needed funding to train unemployed and under-employed Americans for jobs. He added this will be accomplished by granting certificates and degrees and using technology in new ways. Deputy Assistant Secretary Chong stated he asked local community colleges, K-12 districts, and employers to collaborate. Deputy Assistant Secretary Chong stated they are working to develop language so students are exposed to the same vocabulary and regulations in training they will encounter in the workplace. He observed that the answer to Ms. Wu's question is to work hard across department lines, and through the leadership of the Secretaries, his department is trying to be a model for interagency cooperation.

² H.R. 2832

Assistant Secretary Oates expressed enthusiasm about signing the MOU with DOT because the transportation industry has experience using simulation as a training method. She added that colleges and training providers will require assistance in learning to use this technology and the transportation industry can provide assistance with the learning curve. Assistant Secretary Oates articulated this to be the best part of interagency communication: using the expertise in training people in real world technology faster. She emphasized that it is important to train people for modern jobs. Assistant Secretary Oates added that the transportation industry also trains for the jobs of the future and she noted DOL supports taking advantage of existing momentum.

Mr. Brough agreed with Assistant Secretary Oates and stated with many Americans unemployed and an industry that needs a skilled workforce, there is a unique opportunity. He noted, with the signing of the MOU, focus should be placed on the need for future human capital, especially in the aerospace industry. Mr. Brough added that interdepartmental cooperation will aid in efficiently using the assets of each department to address the workforce concern in the aerospace industry.

Ms. Wu noted the current political climate is tough on multiple fronts and added it is an important time for Government to work efficiently and in concert with outside organizations. She asked for comment from the panel about opportunities to efficiently partner with industry to foster growth.

Ms. Bowens stated collaboration is a key element for growth. She noted integrating the experience of teachers and employers to build curriculums is the most efficient way to train people for future jobs. Ms. Bowen noted STEM will play an important role in this integration.

Dr. Coppola indicated his organization has researched STEM workforce issues. He stated collaboration between Government, industry, and education is necessary to take advantage of each sector's resources. Dr. Coppola noted collaboration between these sectors is the best method to address the issue of the STEM workforce and provide a nationally scalable STEM model.

Ms. Wu expressed support for Mr. Coppola's comments. She emphasized that Secretary Duncan discussed STEM initiatives at the university level, as well extending those initiatives into middle and high school. Ms. Wu asked Mr. Brough to comment on what is needed to get middle and high school students interested in STEM related fields.

Mr. Brough responded that STEM does not have a presence in the classroom. He noted making students and teachers aware of the aerospace industry should be a priority. Mr. Brough stated students need awareness that not only is this a career path, but a well-paying one. He explained that many teachers, while inspired by the industry, face barriers to teaching modern technology in antiquated curriculums. Mr. Brough emphasized that flying, the purest form of physics, is a great example of STEM education. He noted that educators have a unique opportunity to take a relevant industry and make it accessible and exciting in the classroom. Mr. Brough stated it is important to demonstrate to students the relevancy of STEM education to potential career paths. He specifically noted that after exposure to the aerospace industry, many students actively consider careers in aerospace engineering.

Deputy Assistant Secretary Chong agreed with Mr. Brough's comments. He explained that learning by experience is preferable over the traditional lecture method. Deputy Assistant Secretary Chong advocated a path of study for high school students to follow to a selected career: for example, designing classes and curriculum that would be prepare a student to become an air carrier pilot. He stated there are opportunities to collaborate with local high schools and give students exposure to the aeronautics industry through mentorships and internships. Deputy Assistant Secretary Chong added that the White House Summit on Community Colleges formed the organization Skills for America's Future. He explained that its task is to develop partnerships with industry, and he invited the aeronautics industry to be one of those partners.

Assistant Secretary Oates articulated the need to include veteran members of the workforce who may have been displaced. She noted veteran workers, those with 10 or more years in the workforce, tend to be more reliable employees due to their life circumstances, as opposed to young students still in the pipeline.

Ms. Bowens noted that collaboration between industry and education needs to go beyond internships. She expressed her belief that teachers are proficient educators, but often lack the hands-on knowledge of employees in their respective industries. Ms. Bowens stated it is necessary to integrate people with knowledge about their industries into the classroom to provide the students with all the tools needed for success.

Dr. Coppola noted teachers are not as proficient in STEM as they should be. He stated the training process may take several years to implement. Dr. Coppola called for a nationally scalable mentoring program to use the available intellectual resources for teachers and students. He gave an example of a Web-based mentoring approach that has been successful. Dr. Coppola suggested that using available technology, STEM mentors could enter classrooms without a considerable monetary investment.

Mr. Brough added to Dr. Coppola's comments by stating that bringing these ideas together in a national forum would have a bigger impact. On a personal note, Ms. Wu added that parents play an important role in the success of their children's education. She noted there are several charter schools in the Washington, DC, area that are considering adding another language to the curriculum, but there are no schools adding math and science classes.

Ms. Wu asked Assistant Secretary Oates to comment on how to train older, out-of-work, capable people that need additional skills to work in a high technology industry. Assistant Secretary Oates proposed that educators and industry need to consider online technology. She stated free, online courses should be made available for potential employees to determine whether the required courses an industry requires match their existing skill sets. Assistant Secretary Oates noted industry must be more specific about the required coursework for careers. She added that dislocated workers need an accelerated degree option; they often do not have 4 years to devote to a bachelor's degree.

Mr. Brough agreed with Assistant Secretary Oates' comments. He stated the displaced worker may not realize their skills will transfer to new industries, and he called for the development of standardized certification programs that meet current industry standards.

Ms. Wu invited the audience to raise questions or comments. Ms. Theresa Appleton, University of Wisconsin, Madison, noted that one of the approaches her school has used is to educate middle school and high school teachers about industry so they can bring that knowledge back into the classroom. Ms. Appleton explained she has been organizing the National Transportation Workforce Development Summit, and much of the dialogue focused on STEM at the university level. She added that introducing well-paying jobs to high school age students should be a priority so they can get excited about STEM before their college education.

Ms. Wu acknowledged Ms. Appleton's comments and stressed that work in career and college readiness are areas DOL and ED were focusing on in the future. She added that with high-skill labor comes the need for qualified mid-level support staff educated in STEM. Ms. Wu requested the panel's comments on this issue.

Dr. Coppola cited national data on engineers to illustrate an upcoming engineer shortage in the United States. He discussed a university program that was able to increase retention of its engineering students by altering the curriculum to introduce the design process at an earlier time. In support of this, he noted statistics show that 7.5 percent of college students enter the engineering field and only half of those graduate with an engineering degree. Dr. Coppola emphasized the lack of qualified people available to fill high-skill jobs in this country. He explained that the United States is competing with low-cost, high-skill labor from India and China. Dr. Coppola emphasized that to compete in the global economic environment, students must learn to focus on innovation so they can be worth salaries four times as much as their low-cost foreign counterparts.

Ms. Wu asked if the audience had any additional questions. Mr. Tony Fowler, Fowler Consulting, noted a large gap in work skills. He stated the reason companies are not filling jobs is because prospective employees are missing the required skills. Mr. Fowler asked how skills are developed for modern jobs. He added there is a gap in elementary and secondary school counseling. Mr. Fowler asked about developing counselors' skills to focus on future career choices.

Ms. Wu asked the panel to focus on the second question posed by Mr. Fowler, regarding counseling. Assistant Secretary Oates responded by explaining that counselors are traditionally the first positions eliminated and teachers must fill the counselor role. She stated technology can help fill this gap. She called for an expansion of the career exploration tools available online.

Deputy Assistant Secretary Chong stated he recommended enhancing online tools, putting industry in the classroom, and supporting professional development for counselors. Ms. Bowens added that industry can act as counselors and mentors to areas that are underexposed to aviation. She noted industry has many avenues available to help foster an interest in aviation at an early age.

Ms. Wu thanked the panel for a very thoughtful and interesting discussion.

CLOSING REMARKS

Secretary LaHood extended special thanks to Assistant Secretary Kurland and her team, Ms. Fernandez-Greczmiel and her team, and the individuals who participated on the panels. He thanked his colleagues from the Cabinet and expressed gratitude for their expertise. Secretary LaHood thanked those that participated in the FAAC and noted DOT has put many of its recommendations into action, but are still doing more to implement them. He stated DOT will continue work on recommendation 17 with a conference in the spring of 2012, partnering with ED and DOL.

Secretary LaHood stated that more than a century ago, two brothers from the Midwest took to the heavens and made the United States the first in the race of flight. Since then, he noted the industry has had its share of setbacks including challenges stemming from the economic crisis of the last several years. Secretary LaHood expressed gratitude to the people in the room for their work to keep the highway of the air safe, secure, filled with passengers, and open for business. He observed that the aviation industry employees fill the skies with the constructive energy of entrepreneurship, connect families and friends across the country and around the world, and keep our nation and economy in motion.

Secretary LaHood stated the FAAC and this conference were designed with the explicit idea that the aviation sector can and must be repaired to meet the challenges of the future and seize its opportunities.

Secretary LaHood invited audience members with additional questions or comments to visit the FAAC Web site at <http://www.dot.gov/faac>.

APPENDIX A—CONFERENCE PARTICIPANTS

CABINET MEMBERS



Ray LaHood is the 16th United States Secretary of Transportation. He served previously for 14 years as the Congressman from Illinois' 18th district. Prior to LaHood's election to the U.S. House of Representatives, he was Chief of Staff to House Majority Leader Robert H. Michel. LaHood also served in the Illinois State Legislature and, before that, as a junior high school teacher. He graduated from

Bradley University in Peoria, Illinois. You can follow Secretary LaHood on his blog, Fast Lane, at www.fastlane.dot.gov.



Hilda L. Solis was confirmed as Secretary of Labor on February 24, 2009. Prior to confirmation as Secretary of Labor, Secretary Solis represented the 32nd Congressional District in California, a position she held from 2001–2009. In the Congress, Solis' priorities included expanding access to affordable health care, protecting the environment, and improving the lives of working families. A

recognized leader on clean energy jobs, she authored the Green Jobs Act which provided funding for "green" collar job training for veterans, displaced workers, at risk youth, and individuals in families under 200 percent of the federal poverty line. In 2007, Solis was appointed to the Commission on Security and Cooperation in Europe (the Helsinki Commission), as well as the Mexico — United States Interparliamentary Group. In June 2007, Solis was elected Vice Chair of the Helsinki Commission's General Committee on Democracy, Human Rights and Humanitarian Questions. She was the only U.S. elected official to serve on this Committee. A nationally recognized leader on the environment, Solis became the first woman to receive the John F. Kennedy Profile in Courage Award in 2000 for her pioneering work on environmental justice issues. Her California environmental justice legislation, enacted in 1999, was the first of its kind in the nation to become law. Solis was first elected to public office in 1985 as a member of the Rio Hondo Community College Board of Trustees. She served in the California State Assembly from 1992 to 1994, and in 1994 made history by becoming the first Latina elected to the California State Senate. As the chairwoman of the California Senate Industrial Relations Committee, she led the battle to increase the state's minimum wage from \$4.25 to \$5.75 an hour in 1996. She also authored a record seventeen state laws aimed at combating domestic violence. Solis graduated from California State Polytechnic University, Pomona, and earned a Master of Public Administration from the University of Southern California. A former federal employee, she worked in the Carter White House Office of Hispanic Affairs and was later appointed as a management analyst with the Office of Management and Budget in the Civil Rights Division. She was nominated by President Barack Obama to serve as Secretary of Labor on January 20, 2009.



Arne Duncan was named U.S. secretary of education by President Barack Obama and was confirmed by the U.S. Senate on Jan. 20, 2009. Prior to his appointment, Duncan served as the CEO of the Chicago Public Schools from June 2001 through December 2008, becoming the longest-serving big-city education superintendent in the country. Before joining the Chicago Public Schools, Duncan ran the Ariel Education Initiative (1992–1998), a nonprofit focused on advancing educational opportunities in economically disadvantaged areas. He has served on the boards of the Ariel Education Initiative, Chicago Cares, the Children’s Center, the Golden Apple Foundation, the Illinois Council Against Handgun Violence, Jobs for America’s Graduates, Junior Achievement, the Dean’s Advisory Board of the Kellogg School of Management, the National Association of Basketball Coaches Foundation, Renaissance Schools Fund, Scholarship Chicago and the South Side YMCA. He has also served on the Board of Overseers for Harvard College, the Visiting Committees for Harvard University’s Graduate School of Education and the University of Chicago’s School of Social Service Administration. From 1987 to 1991, Duncan played professional basketball in Australia, where he worked with children who were wards of the state. Duncan graduated magna cum laude from Harvard University in 1987. He is married to Karen Duncan and has two children, Claire, 7, and Ryan, 5.

MISTRESS OF CEREMONIES



Susan Kurland is the Assistant Secretary for Aviation and International Affairs of the Department of Transportation. As part of the Secretary of Transportation’s senior team, Kurland directs and implements economic and competition policy affecting the air transport industry as well as coordinates the Department’s international activities. Her responsibilities include directing the Department’s participation in international aviation negotiations throughout the world. She also serves as the Department decision maker in proceedings involving the allocation of international aviation route authority, licensing of air carriers, providing air services to rural communities, and grants of antitrust immunity for international aviation alliance activities

BEST PRACTICES IN LABOR AND MANAGEMENT RELATIONS PANEL



Randy Babbitt was sworn in as the FAA’s sixteenth administrator on June 1, 2009. Babbitt comes to the FAA from Oliver Wyman, an international management consulting firm where he served as partner. A veteran pilot and internationally recognized expert in aviation and labor relations, Babbitt is no stranger to the FAA. He has been a member of the agency’s Management Advisory Council since 2001. In that capacity, he provided guidance to the FAA Administrator on a variety of topics, ranging from air traffic modernization to regulatory policy. He was chairman of the council from 2004-06. He also was appointed by DOT Secretary Mary Peters to be a member of a special Internal Review Team to assess safety oversight within the airline industry and the FAA.



Paul Rinaldi began his three-year term as the sixth president of the National Air Traffic Controllers Association in October 2009. An 18-year veteran air traffic controller from Washington-Dulles Tower, Rinaldi served three years as executive vice president prior to being elected as union president. Rinaldi has served NATCA in a variety of roles since the beginning of his air traffic controller career. In 1991, Rinaldi was immediately drawn to representing the hard-working men and women at IAD. He was elected as vice president of the facility's local NATCA chapter in 1995 and became the facility representative a year later. In 2003, Rinaldi accepted the challenge to represent the entire Eastern Region and agreed to serve as the region's alternate vice president.

WORKFORCE MANAGEMENT PANEL



Moderator: J. David Grizzle, Chief Operating Officer, Federal Aviation Administration. He leads FAA's 35,000 controllers, technicians, engineers and support personnel whose responsibility is to keep air traffic moving safely and efficiently. For two years prior to being appointed to that position April 14, 2011, by Administrator Randy Babbitt, David served as FAA's Chief Counsel, leading the 300-person legal team responsible for agency

regulation, safety enforcement and compliance programs, airport and environmental matters, personnel and labor law. Before joining FAA, he was with Continental Airlines and its affiliates for 22 years, retiring in 2008 from the position of Senior Vice President — Customer Experience. In this role, he led Continental to address persistent deficits in product delivery, improving the total travel experience for Continental's customers by building a culture of honesty, caring and simplicity throughout Continental and creating a new type of relationship between Continental and its customers. Prior positions he held at Continental and its affiliates include General Counsel, Senior Vice President — Corporate Development and Marketing Strategy and Vice President of Legal Affairs. During a leave of absence from Continental starting in 2004, David served for 14 months with the U.S. Department of State in Kabul, Afghanistan as Attaché, Senior Advisor and Coordinator for Transportation and Infrastructure. In Kabul, he steered the American reconstruction effort in the areas of aviation, roads, power and communications. He advised the US Ambassador and four Afghan ministers and coordinated the efforts of the US Agency for International Development and other multilateral development banks. A major focus of his work was balancing the competing demand for immediate, visible results with the slower and less conspicuous process of developing Afghan human and institutional capacity necessary for sustainable progress. He witnessed first-hand the challenge of following good development theory in a highly politicized aid environment and was able to contrast the theory and practice of nation-building. David is a graduate of Harvard College and Harvard Law School. He is married to Anne Grizzle, a private family therapist, author, and poet. They have three sons.



Bryan Bedford, 47, has over 21 years' experience in the regional airline industry. Now in his 10th year at Republic, he joined the company in July of 1999 as its president and chief executive officer. Prior to joining Republic Airlines, he served as president and chief executive officer of Mesaba Holdings, Inc., (a Northwest Airlink carrier) from June 1995 to June 1999. He also served as president and CEO of Business Express Airlines, a New England based regional

air carrier, from February 1994 to May 1995. He has held senior executive positions at Express Airlines, Inc., Westair Holdings, Inc., Aspen Airways, Inc. and Continental Express, Inc. Republic Airways is the second largest regional airline in the United States with over 1,200 daily flights and more than 220 jet aircraft and is also the largest operator of Embraer's new E-jet family of aircraft in the world. The airline currently operates 130 E170/175 aircraft for its major airline partners and in the summer of 2009 introduced new E190 aircraft service for its wholly owned subsidiary Midwest Airlines. Republic flies for six network airline partners and employs more than 4,500 skilled aviation professionals. It is celebrating its 35th anniversary of commercial airline service in August 2009. In 2008, Republic earned net income of \$85 million on revenues of \$1.5 billion and flew nearly 19 million passengers. Bedford is currently serving on the board of directors of the Regional Airline Association (RAA). From 1998 through 1999, Bedford served as the chairman of the board of the RAA and has served on the RAA board of directors from 1995 to 1999 and again from 2001 to the present. Bedford also serves on the board of St. Theodore Guerin High School in Noblesville, Indiana. Bedford holds a BS in Accounting and Finance from the Florida State University and received his MBA from the University of South Florida. He is also a certified public accountant. He also holds commercial, multi-engine and instrument flight ratings. He is married to Maria (19 years) and has 8 children, ages 1 to 16 years. He is an active member of Our Lady of Mount Carmel Catholic Church and currently resides in Carmel, Indiana. Republic Airways is headquartered in Indianapolis, Indiana.



John M. Conley, International Administrative Vice President - Transport Workers Union of America, AFL – CIO. John has been a member of the TWU's Air Transport Division since 1981, for almost three decades. He has served as a TWU Officer in various capacities for approximately 23 years. Other positions held also include: Shop Steward, Chief Steward, Section Chairman, Vice President and President of Local 505, San Francisco, American Airlines System Coordinator, and, most recently, Air Transport Division Director. John's responsibilities also encompass Chief Spokesman and Spokesman in multiple Contract Negotiations, Horizon Air, Air Cal, American Airlines and American Eagle, as well as Integration Negotiations for Air Cal, Reno Air and TWA. John has served as the Principle Advocate for the Union in multiple Arbitration Hearings, including contract dispute and interpretation, and discharge appeal cases. He has been Lead Advocate for System General Board and discharge cases with system impact implications and has served as a Union Board Member for both Area and General Board Hearings. As the ATD Director, John oversaw multiple contract groups for the 50,000 members of the Air Transport Division. John currently serves on the International Administrative Committee, in addition to overseeing International Policy and Procedures, OPEIU/Internal TWU HR issues, and collaborating with all external affiliations on aviation related matters in coordination with the ATD.



Larry Gibbons joined the Board in September, 1997 as a Senior Mediator. Currently, Mr. Gibbons is the Director of Mediation and has overall responsibility for the administration and management of mediation cases in the airline and railroad industries as well as the Agency's Alternate Dispute Resolution Program. Mr. Gibbons brought to the Board 25 years of experience in personnel and labor relations, practicing under both the NLRA and RLA. Immediately prior to joining the NMB, he headed Human Resources and Labor Relations with ABX Air, Inc. (Airborne Express) for 12 years and for two years was an independent labor relations consultant. He is a past President

and Member of the AIRCON Executive Board. Mr. Gibbons was also actively involved in community activities including serving on a Board of Directors for the United Way and an Adult Rehabilitation Workshop. Mr. Gibbons earned a Bachelor of Science degree in Journalism from Ohio University, and he served as an officer in the United States Army.



Joe Harris, Senior Labor Counsel, Southwest Airlines Co. Joe is responsible for advising senior management with regard to federal labor law, and for providing labor relations guidance and assistance. Prior to joining Southwest, Joe was a practicing attorney specializing in labor and employment law. Joe began his legal career as a trial attorney with the 16th Region of the National Labor Relations Board in 1967. He entered private practice in 1972, representing management. He is Board certified in Labor and Employment Law by the Texas Board of Legal Specialization, is a Member of the American Bar Association Committee On Railway and Airline Labor Law, is listed in The Best Lawyers in America, was selected by Texas Monthly as a Texas Super Lawyer, and is a Fellow in the College of Labor and Employment Lawyers. Joe's official start date was December 30, 2005. However, he began representing Southwest Airlines in labor and employment matters in May of 1972. Joe received his Bachelor of Arts degree from Baylor University in 1963, majoring in History and English. He received his Juris Doctor degree from Baylor Law School in 1966.



Captain Lee Moak is the ninth president of the Air Line Pilots Association, International (ALPA). He was elected by the union's Board of Directors on Oct. 13, 2010, and began his four-year term on Jan. 1, 2011. "Our union has faced many challenges throughout its long history," said Captain Moak. "Our successes have been most evident when we have worked together for the common good. I look forward to working with the many talented ALPA pilots and union staff as we proactively engage with each and every party that has the potential to influence the careers and professional lives of the pilots we represent." As ALPA's chief executive and administrative officer, Captain Moak oversees daily operations of the Association and presides over the meetings of ALPA's governing bodies, which set policy for the organization. He is also the chief spokesman for the union, advancing pilots' views in the airline industry, before Congress, Parliament, government agencies, and the news media. As the ALPA president, Captain Moak is a member of the Executive Committee of the Transportation Trades Department, AFL-CIO. He serves on the FAA NextGen Advisory Committee (NAC), which is made up of industry decision makers tasked with advising the administration on key-decision gates with regard to improving and modernizing the nation's aviation infrastructure.

STEM PANEL



Moderator: Portia Wu is Senior Policy Advisor for Mobility and Opportunity at the White House Domestic Policy Council, where she focuses on labor, employment and workforce issues. Prior to joining the White House she was a Vice President at the National Partnership for Women & Families where she oversaw the Work-Family and Workplace Fairness Programs. Wu also has legislative policy-making experience: she served for several years on the staff of the Senate HELP Committee, under Senator Edward M. Kennedy and then under Senator Tom Harkin. She held

several positions on the Committee staff, including that of Labor Policy Director/General Counsel. While there, she oversaw work on numerous pieces of legislation including the Lilly Ledbetter Fair Pay Act, the first major piece of legislation signed by President Obama. Prior to working at the Senate, Wu was an attorney at Bredhoff & Kaiser, PLLC. She also clerked for Judge Richard A. Paez at the Central District of California District Court and she is a graduate of Yale Law School.



Thella F. Bowens, President/CEO, San Diego County Regional Airport Authority. In March 2003, Thella F. Bowens was appointed President/CEO of the San Diego County Regional Airport Authority, the owner and operator of San Diego International Airport as of January 1, 2003. As President/CEO, Ms. Bowens is responsible for management oversight of the Authority, the Authority's \$145.0 million annual budget and approximately 380 employees.

Prior to 2003, when the San Diego Unified Port District operated the Airport, Ms. Bowens was the Port's Senior Director of Aviation for seven years. From September 2001 through December 2002, simultaneous with her position at the Port, she wore the hat of Interim Executive Director/President of the new Authority as required by State legislation which created the San Diego County Regional Airport Authority. In that role, she performed the monumental task of planning the transfer of the Airport. Prior to coming to San Diego, Ms. Bowens served as the Deputy Executive Director of Kansas City's Aviation Department which included Kansas City International Airport and the city's two general aviation airports. She previously served as Budget Administrator for the Dallas/Ft. Worth International Airport in Texas. She has acquired 35 years of experience in public administration, with the last 21 years in the aviation field. Ms. Bowens holds a Bachelor of Arts degree from Barnard College of Columbia University and has done graduate work at the University of North Texas and University of Missouri-Kansas City. She is also a graduate of the Executive Leadership Institute sponsored by the National Forum for Black Public Administrators. In addition to her professional associations, Ms. Bowens is a member of the boards of the National Conflict Resolution Center, the World Trade Center San Diego, the San Diego Regional Economic Development Corporation, the San Diego Regional Chamber of Commerce, and the American Association of Airport Executives Policy Review Committee. In 2007, she completed a second three-year term on the board of Airports Council International - North America, and also previously served on the boards of the San Diego United Way and the San Diego Symphony.



James T. Brough, National Aviation and Space Education Program Manager. James Brough is the FAA's National Aviation and Space Education Program Manager. Jim provides national leadership to strengthen the foundation of science, technology, engineering, and mathematics (STEM) in students to prepare them to enter the aviation and space industries workforce. Mr. Brough was an educator for 21 years. During that time he taught at the elementary,

middle, and high school levels as well as developing and teaching numerous undergraduate and graduate courses. In 1997, he received a master's degree in education, that same year he was inducted into Phi Delta Kappa in recognition of his educational efforts. Jim joined the Federal Aviation Administration in 2008. Jim is also a private pilot and aircraft owner, which brings a unique perspective to his position as the National AVSED Program Manager. This background allows a better understanding of the issues and the problems faced by both the educational and aerospace communities. He has received recognition and numerous awards for his aerospace

education initiatives including, the Christa McAuliffe Sabbatical Award and an Excellence in Education Award (“ED”ies) by the state of New Hampshire. In 2001 Jim was inducted into the New Hampshire Teacher’s Hall of Fame. Jim is a member of EAA, AOPA, WAI, and AFA. Jim has made numerous presentations to such organizations as the National Science Teachers Conference, Women in Aviation, International, OshKosh AirVenture Educator Workshop, and the Tri-Region State Director’s Workshop. As the Federal Aviation Administration’s Aviation and Space Education Program Manager, Jim continues to reach out to industry leaders, government agencies, and private organizations to ensure America remains the world leader in aerospace education.



Frank Chong, Ed. D., Deputy Assistant Secretary for Community Colleges, U.S. Department of Education, Office of Vocational and Adult Education.

Dr. Chong began his duties as Deputy Assistant Secretary for Community Colleges in the U.S. Department of Education, Office of Vocational and Adult Education, in January, 2010. Prior to coming to Washington, D.C., Dr. Chong served as president of Laney College. At Laney, Dr. Chong oversaw a comprehensive renovation of college facilities and dramatically expanded community partnerships and entrepreneurial opportunities. Under his leadership, Laney College received a full accreditation and clean bill of health. Prior to assuming the Laney College presidency, he served as president of Mission College in Santa Clara CA and Dean of Student Affairs at City College of San Francisco. He was an appointed member of the San Francisco Children and Families Commission, and was elected to the San Francisco Board of Education in 1998. From 1987 to 1991, he served as special assistant to Willie L. Brown, Jr., the Speaker of the California State Assembly. Dr. Chong has served on numerous boards focused on higher education, including the Chief Executive Officers Board of the California Community Colleges and the American Council on Education Commission on Advancement of Racial and Ethnic Equity. He is the former president and founding member of Asian Pacific Americans in Higher Education (APAHE), a national advocacy organization. Chong received a B.A. degree in Social Welfare and Asian American Studies from the University of California, Berkeley and a Master’s Degree in Public Administration from the John F. Kennedy School of Government at Harvard University. He also completed the Institute of Educational Management at Harvard’s Graduate School of Education, and earned his Doctorate in Educational Administration, Leadership and Technology from Dowling College in Oakdale, NY. Dr. Chong is an accomplished public speaker whose guest lecture credits include San Francisco State University, Harvard University and the University of California, Berkeley.



Dr. Ralph K. Coppola, Ed. D., Director, Real World Design Challenge & Senior Director of Government & Strategic Education Programs, Parametric Technology Corporation (PTC). Dr. Coppola is currently Director, Real World Design Challenge & Senior Director of Government & Strategic Education Programs at Parametric Technology Corporation (PTC). In this role he is

responsible for identifying and implementing strategic educational opportunities, and building and shaping the next generation of customers by helping to develop the technology and engineering workforce of the future. He received FAA’s National Aviation and Space Education Leadership Award for his creation, development, and implementation of the Real World Design Challenge. When he was Executive Director of the Space Day Foundation he administered Space Day, a massive grassroots effort, implemented by partners in business,

government and education, dedicated to the achievements, benefits and opportunities in the exploration and use of space program. As Chief Educator, at The GLOBE Program, Dr. Coppola was on assignment to the Executive Office of the President of the United States. He was a faculty member at the College of William and Mary, worked at the National Science Foundation and the University Corporation for Atmospheric Research during his tenure at GLOBE. At GLOBE, he provided overall direction of all education activities associated with the development of The GLOBE Program, including the long and short range planning and oversight of the program implementation, both domestically and internationally, and the coordination of all education related activities of The GLOBE Program as they were carried out by individual Federal agencies, including NSF, NASA, NOAA and the EPA. Dr. Coppola coordinated all of the education related activities of The GLOBE Program that involved national and international science education organizations, as well as activities of other countries and their governments. As Executive Director, Institute for Environmental Policy and Education at Saginaw Valley State University, he designed educational projects that used telecommunications and information technology to transfer environmental knowledge. As Associate Executive Director of the Institute for Humanist Studies he designed educational projects focused on enhancing the quality of life through education and the use of technology. Dr. Coppola taught at the Graduate School of Education, at Rutgers University and served as a teacher at Malcolm X Shabazz High School in Newark New Jersey. He received his doctoral degree from Rutgers University in education.



Jane Oates, Assistant Secretary of Employment and Training Administration. Jane Oates was nominated by President Barack Obama to join Secretary of Labor Hilda L. Solis' leadership team at the Department of Labor in April, 2009. Confirmed as Assistant Secretary for Employment and Training on June 19, 2009, she now leads the Employment and Training Administration (ETA) in its mission to design and deliver high-quality training and employment

programs for our nation's workers. Working with States and territories, municipalities, labor management organizations, employers, educational institutions, fellow Federal agencies, and other partners, ETA strives to assist workers in gaining the skills and credentials needed to enter careers that pay family supporting wages and offer opportunities for advancement. With a nationwide reach and focus on good jobs in promising industries, ETA programs are designed to serve every American who aspires to career success. Prior to her appointment, Ms. Oates served as Executive Director of the New Jersey Commission on Higher Education and Senior Advisor to Governor Jon S. Corzine. In that position Oates worked to strengthen the connections among high school, post-secondary education and the workforce. Ms. Oates served for nearly a decade as Senior Policy Advisor for Massachusetts Senator Edward M. Kennedy. She worked closely with the Senator on a variety of education, workforce and national service legislative initiatives, including the Workforce Investment Act of 1998. Ms. Oates began her career as a teacher in the Boston and Philadelphia public schools and later as a field researcher at Temple University's Center for Research in Human Development and Education. She received her BA in Education from Boston College, and an M. Ed in Reading from Arcadia University.

APPENDIX B—CONFERENCE AGENDA

9:30 a.m. **Opening Remarks**—The Honorable Susan Kurland, Assistant Secretary for Aviation and International Affairs

Welcoming Remarks—The Honorable Ray LaHood, Secretary of Transportation

Secretarial Fireside Chat

The Honorable Ray LaHood, Secretary of Transportation

The Honorable Hilda L. Solis, Secretary of Labor

The Honorable Arne Duncan, Secretary of Education

Signing of Memorandum of Understanding

Question and Answer Session

10:15 a.m. **Introduction of Panel**—Susan Kurland

Best Practices in Labor Management Relations

Panel Members:

The Honorable Randy Babbitt, Administrator, FAA

Mr. Paul Rinaldi, President, NATCA

Question and Answer Session

10:50 a.m. Break

11:00 a.m. **Introduction of Panel**—Susan Kurland

Building an Architecture of Cooperation and Continuing the Dialogue

Moderator:

Mr. David Grizzle, Chief Operating Officer for the Air Traffic Organization,
FAA

Panel Members

Mr. Bryan Bedford, President and CEO, Republic Airways Holding, Inc., and
FAAC Member

Mr. John Conley, International Administrative Vice President, TWU,
AFL–CIO, and FAAC Member

Mr. Larry Gibbons, Director of Mediation Services, NMB

Mr. Joe Harris, Senior Labor Counsel, Southwest Airlines

Captain Lee Moak, President, ALPA

Question and Answer Session

11:40 a.m. **Introduction of Panel**—Susan Kurland

Discussion of STEM Initiatives

Moderator:

Ms. Portia Wu, Senior Advisor for Mobility and Opportunity Policy with the
White House Domestic Policy Council

Panel Members:

Ms. Thella F. Bowens, President and CEO, San Diego Airport Authority and
FAAC Member

Mr. James T. Brough, National Aviation and Space Education Program, FAA

Dr. Frank Chong, Deputy Assistant Secretary for Community Colleges,
Office of Vocational and Adult Education, ED

Dr. Ralph K. Coppola, Director, Real World Design Challenge and Senior
Director of Government & Strategic Education Programs, Parametric
Technology Corporation

The Honorable Jane Oates, Assistant Secretary Employment Training,
Department of Labor

Question and Answer Session

12:25 p.m. **Closing Remarks**— Secretary LaHood

APPENDIX C—CONFERENCE SUPPORT STAFF

Susan Kurland, Assistant Secretary for Aviation and International Affairs, DOT

Bob Goldner, Special Assistant to the Assistant Secretary for Aviation and International Affairs, DOT

Bonnie M. Gray, Logistics Conference Coordinator, FAA

Maria Fernandez-Greczmiel, Executive Director, the Accountability Board and Executive Conference Coordinator, FAA

Shelia Helton-Ingram, Senior Advisor to the Assistant Secretary for Aviation and International Affairs, DOT

Bob Letteney, Deputy Assistant Secretary for Aviation and International Affairs, DOT

Rick Pittaway, Transportation Industry Analyst, DOT

Marlise Streitmatter, Deputy Chief of Staff, DOT

Anthony Willett, Director, FAAC Implementation, DOT

APPENDIX D—MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING
Among the
UNITED STATES DEPARTMENT OF TRANSPORTATION
And
UNITED STATES DEPARTMENT OF EDUCATION
And
UNITED STATES DEPARTMENT OF LABOR
To
PROMOTE AVIATION AND SPACE EDUCATION AND AEROSPACE
WORKFORCE DEVELOPMENT

Purpose:

This Memorandum of Understanding (MOU) establishes a collaborative effort between and among the Department of Transportation (DOT), the Department of Education (ED), and the Department of Labor (DOL) to foster the development of a skilled workforce through science, technology, engineering, and mathematics (STEM) programs and initiatives relating to aerospace workforce development. DOT, ED, and DOL share a common goal of promoting and developing a skilled workforce that can meet the Nation's demands for the 21st century. The purpose of this MOU is to improve collaboration and inter-departmental support among DOT, ED, and DOL in furtherance of that goal and in accordance with the following department missions:

- DOT:
 - Serve the United States by ensuring a fast, safe, efficient, accessible, and convenient aerospace system that meets our vital national interests and enhances the quality of life of the American people, today and into the future;
- ED:
 - Promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access;
- DOL:
 - Foster, promote, and develop the welfare of the wage earners, job seekers, and retirees of the United States; and
 - Advance opportunities for profitable employment.

This MOU establishes a mechanism for inter-departmental collaboration for the purpose of developing and implementing strategies and activities for using STEM education to develop a workforce that is highly qualified to work in the aerospace industry. Under this MOU, each department will seek to leverage existing resources and increase coordination of activities in support of aerospace workforce development, including through industry collaboration and by increasing internship, apprenticeship, mentoring, and volunteering opportunities in STEM fields. This MOU will support programs promoting learning, workforce development, and teacher training relating to skill development for STEM fields, including mathematical reasoning, scientific inquiry, and problem-solving skills. This MOU promotes joint endeavors by the departments that motivate students and help

them develop STEM skills leading to careers that benefit the Nation's workforce and address growing needs within the aerospace industry.

Background:

In April 2010, the Future of Aviation Advisory Committee (FAAC) was established by DOT to provide information, advice, and recommendations to the Secretary of Transportation on ensuring the competitiveness of the U.S. aviation industry and its capability to address the evolving transportation needs, challenges, and opportunities of the global economy. The FAAC's final report contained the following:

"The Secretary of Transportation should work with the Secretary of Labor ... to implement a national strategy focused on recruiting, training, and cultivating the aerospace workforce.... Additionally, the Secretary of Transportation should work with the Department of Education to provide resources that would create state-of-the-art STEM elementary and secondary educational facilities."

This recommendation followed up on the finding of DOL's Interagency Aerospace Revitalization Task Force, in February 2008, (*Report of Interagency Aerospace Revitalization Task Force*) on the importance of STEM education. In that report, the Task Force found that "... there is significant concern that students who are participating in K-12, postsecondary, apprenticeships, and/or career and technical education are not adequately prepared for employment in STEM careers."

In September 2010, the President's Council of Advisors on Science and Technology published a report (*Prepare and Inspire, K-12 Education in Science, Technology, Engineering, and Math (STEM) for America's Future*). The committee concluded:

"To meet our needs for a STEM-capable citizenry, a STEM-proficient workforce, and future STEM experts, the Nation must focus on two complementary goals: We must prepare all students, including girls and minorities who are underrepresented in these fields, to be proficient in STEM subjects. In addition, we must inspire all students to learn STEM and, in the process, motivate many of them to pursue STEM careers."

The report went on to state:

"Over the past few decades, a diversity of Federal projects and approaches to K-12 STEM education across multiple agencies appears to have emerged largely without a coherent vision and without careful oversight of goals and outcomes. In addition, relatively little Federal funding has historically been targeted toward catalytic efforts with the potential to transform STEM education, too little attention has been paid to replication and scale-up to disseminate proven programs widely, and too little capacity at key agencies has been devoted to strategy and coordination."

DOT's strategic plan notes that developing human capital through workforce planning is important to identifying mission and workforce trends, to assessing mission-critical core competencies, and to implementing plans to close workforce gaps through vigorous learning and knowledge management approaches, targeted recruitment, and succession planning. The DOT/FAA's Aviation and Space Education (AVSED) program is uniquely situated to provide resources and expertise to address the concern about the future workforce needs of the aerospace community. With DOT's mission in mind, the AVSED program is committed to ensuring a dependable supply of qualified workforce professionals by supporting educators and engaging students through exciting and high-quality aerospace thematic STEM programs, including many aspects of STEM education, in order to ensure a dependable supply of qualified workforce professionals. The AVSED program strives to ensure a steady entrance of diverse, qualified STEM experts into our country's air transportation and aerospace industry.

Intent:

The aim of this MOU is to facilitate increased collaboration and coordination of information by and among DOT, ED, and DOL in order to share information more efficiently and more effectively target the appropriate audience. By informing decisions on each Department's allocation of resources in the development of a skilled professional workforce through quality STEM programs, the three departments can better fulfill our Nation's aerospace workforce needs.

As a key part of this effort, DOT, through the AVSED program, will provide training and support for educators, work with local educational agencies and state educational agencies to thoughtfully connect aviation and aerospace-related instructional materials to existing curriculum, and disseminate information about activities, projects, youth events, and aviation career guidance. To the extent possible, ED will assist with the collection of information relating to STEM education and its dissemination to state and local educational agencies, provide information regarding internships, apprenticeships, and grant opportunities, and promote educator development opportunities as they relate to this MOU. DOL will support the public workforce system's efforts to coordinate with industry, share grant information related to STEM career pathways initiatives with partner agencies and their stakeholders, and disseminate information on educational initiatives and workforce development as it relates to this agreement.

It is understood and agreed by DOT, ED, and DOL that the intent of this MOU is to state shared goals and to establish and maintain cooperation and collaboration towards meeting these shared goals. This MOU does not create any binding obligation, contractual, financial, or otherwise, for any party. This MOU also does not serve to obligate any funds of the participating agencies nor to authorize the transfer of funds between the participating agencies of this agreement. Each department agrees to conduct its respective activities in a coordinated and mutually beneficial manner. DOT, ED, and DOL will evaluate their respective participation in any specific event on a case-by-case basis, in accordance with relevant law and regulations. Pursuant to this MOU, DOT, ED, and DOL agree to establish a partnership that will develop and coordinate activities that address, but not necessarily be limited to addressing, the following objectives:

1. Collaboration

- Participating jointly in the Administration's strategic planning and design of projects and activities that advance transportation workforce development in STEM fields;
- Serving as a resource for communities exploring alternative methods for the delivery of aerospace educational services; and
- Continuing to encourage department personnel to support existing internship, apprenticeship, mentoring, and volunteering opportunities in order to create a consistent national effort.

2. Focal Areas

- Reviewing new and existing programs to identify opportunities for collaboration in instances where programs directly complement or supplement one another;
- Involving or partnering with non-federal stakeholders, including schools and state and local decision-makers;
- Working with educational organizations, both formal and informal, to provide support and assistance where practical, beneficial, and applicable to the focus of this MOU;
- Engaging industry partners and workforce stakeholders to align Federal efforts with industry's projected needs;
- Designing program collaboration in a manner that capitalizes on the relative strengths and expertise of each department and reflects department missions; and
- Aligning program collaboration to capitalize on the relative strengths, expertise, and mission of each department.

3. Coordination

- Sharing information and/or supporting joint efforts in the following areas: K-12 program partnerships; workforce services, including training for workers (both incumbent and unemployed); and leveraging internet resources, including social media;
- Setting program priorities and ensuring alignment to achieve common goals and objectives; and
- Promoting mentoring and volunteering opportunities.

4. Strengthening the knowledge base by sharing intellectual expertise

- Exchanging information on pending legislation related to STEM education;
- Sharing information on legislative initiatives, regulatory and non-regulatory issues, and administrative actions originating from DOT, ED, and DOL that may affect aerospace workforce development;
- Reviewing proposed legislation to identify common issues, as well as to assess the potential impact on department programs and the relationship of proposed initiatives to department strategies and priorities;
- Sharing of information relating to aerospace workforce development and STEM education; and

- Identifying common issues and strategies to maximize allocation of resources and attainment of common goals.
5. *Leadership Support and Accountability*
- Developing a formal process to improve communication and coordination between departments regarding aerospace workforce development efforts;
 - Exploring and developing a collaborative communications strategy designed to increase public awareness and visibility regarding STEM education and aerospace workforce development;
 - Supporting designated staff as points of contact to enable them to carry out the purposes and scope of the MOU;
 - Identifying the highest-priority joint actions along with timelines for implementation; and
 - Developing performance measures to track progress of this MOU.

Effective Date and Termination:

This MOU takes effect when signed below and shall remain in effect for a period of three (3) years. DOT, ED, and DOL agree to review this MOU annually to determine whether it should be revised, renewed, or terminated. Notice of termination shall be served on all other parties at least ninety (90) days prior to the effective date of that termination unless all parties consent to an earlier termination date. Only the signatories or their successors and designees may terminate this MOU.

DOT enters into this agreement pursuant to its authority under 49 U.S.C. § 301 and § 322(c).

ED enters into this MOU under the authority to enter into agreements in section 415 of the Department of Education Organization Act (DEOA) (20 U.S.C. § 3475), and consistent with the purposes set forth in section 102(4), (5), and (6) of the DEOA (20 U.S.C. § 3402(4), (5), and (6)).

DOL enters into this MOU under the authority under 29 U.S.C. § 551 and also under the Workforce Investment Act, section 189(c) [29 U.S.C. § 2939(c)].

Agreed By:



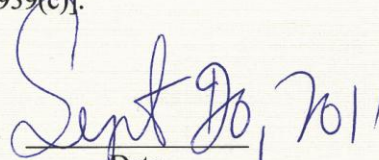
Secretary of Transportation

Secretary of Education



Secretary of Education

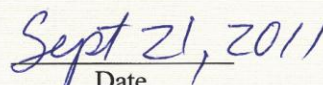
Secretary of Labor



Date



Date



Date

“Continuing the Dialogue”



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