

Intercom

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A Newsletter of the FAA's William J. Hughes Technical Center

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Shaping aviation's future -
Creating possibilities and
Providing integrated solutions

Human Capital Strategies Newest Member



Terry DiPompo, the new program director for the Office of Human Capital Strategies, came to the William J. Hughes Technical Center looking for change. However, she may not have expected it as quickly as it came.

Having been in her position for less than one month, DiPompo's department was involved in a restructuring at the Technical Center that brought her new responsibilities and challenges. The entire Communications Staff, formerly under the direction of Kaye Jackson was moved to DiPompo's area when Jackson was named Chief-of-Staff under Technical Center Director Dr. Anne Harlan, effective November 17.

While many persons might have been taken aback by such a dramatic change, DiPompo sees it as an opportunity and embraces the new challenges. "The reassignment of the communications department, under the Office of Human Capital

-continued next page

Center Director Names New Chief of Staff

Dear Members of the Technical Center Family,

I am happy to announce the appointment of **Kaye Dove Jackson** as Chief of Staff, and I am delighted that Kaye accepted this new challenge. The management team and I will benefit greatly from her 23 years of service to the Technical Center and from her wise counsel. Kaye's appointment was effective November 17.

As Chief of Staff, Kaye will monitor the full range of programs and activities at the Technical Center. She will oversee special programs and projects, and provide congressional liaison services. She will also provide an executive link between senior management and Center organizations, FAA organizations, collective bargaining units, and local and state government officials.

Kaye has worked at the Technical Center since 1979, when she came on board as a Contracting Officer. More recently, Kaye was the Manager of the Communications Staff. She also served at the Technical Center as the Manager of Appraisal and Planning, and as the Deputy Assistant Chief Counsel. Prior to working for the FAA, she had a private legal practice in Elizabeth, New Jersey. Kaye earned a bachelor's degree and a law degree at North Carolina Central University.

Please join me in wishing Kaye all the best in her new position.

Sincerely,

Anne Harlan

Intercom can be found on-line at: <http://www.tc.faa.gov/intercom/intercom.htm>
The printed version of this publication has been temporarily suspended until the Department of Transportation's Fiscal Year 2003 Appropriations Bill is passed.

Human Capital Strategies...continued from front cover

Strategies, provides us with the ability to influence communications and develop appropriate communication mechanisms to assist us in creating a high performing culture and model work environment that attracts and retains highly-talented employees and encourages and fosters employee development and growth," said DiPompo. "It will enhance our ability to create a common understanding of the mission, vision and values that all employees are being asked to work together as a team to achieve."

The message so far from the newest program director is change is good and should be embraced. After all, as a technical organization, change is inevitable and is a measure of our success.■

STARS

Preparing for Tomorrow

Throughout the summer and fall of 2002, a cross organizational effort took place, which ultimately resulted in the successful implementation of the STARS FS2+ at Philadelphia Tower on the morning of November 17, 2002.

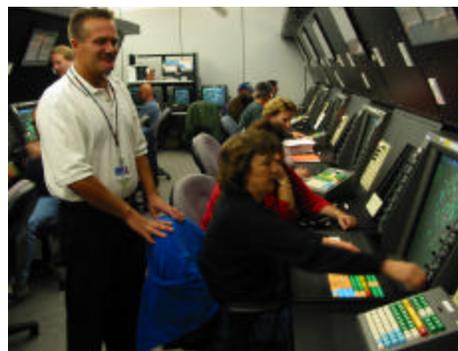
Starting in July, employees from the Terminal Business Unit, the Air Traffic Training Office, NATCA, Eastern Region ATD, Raytheon, the Air Traffic Domain Director, Philadelphia Tower, and ACB-3 planned for a training course which would train over 100 controllers from Philadelphia Tower in the Air Traffic Labs of the Tech Center. Adam Greco, Air Traffic Domain Director (ACB-3) coordinated all of the activities between the various parties at the Center.

The training consisted of a combination of 60 hours of Computer Base Instruction, classroom training in the STARS String 3 lab, consisting of ATCoach scenarios with a live radar feed from PHL, and culminating in performance evaluations through human-in-the loop simulations at the conclusion of the training week to certify that the controllers had mastered the curriculum. The process consisted of training 11 controllers per week for nine consecutive weeks. In November, two representatives from Miami Tower were invited to observe the training since Miami is expected to implement the STARS in July, 2003.

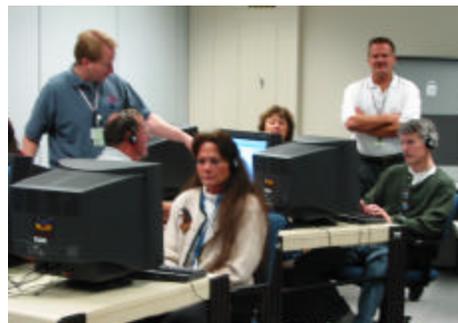
Because the controller training was completed on November 1, the opportunity to train Airways Facilities technicians from PHL Tower at the Tech Center labs emerged and they were provided with three weeks of lab time to conduct training and perform-

ance validation for STARS. During the week of November 4, a group consisting of the National STARS Training team and Raytheon met at the Center to validate the training process and materials for the PHL STARS course.■

At Right:
Instructor
Rick Heckman
monitoring PHL
controllers.



At Right:
PHL controllers
performing self
study in the STARS
Computer lab.



Changes on the Horizon

Human Factors for Evolving Environments: Key FAA/NASA Activity

In September 1995, the FAA and NASA strengthened their partnership by forming the FAA/NASA Interagency Air Traffic Management Integrated Product Team (IAIPT). The mission of the IAIPT is to plan and conduct integrated research related to both air-based and ground-based air traffic control (ATC) and air traffic management (ATM) decision support tools and procedures. Oversight for IAIPT activities is provided by the FAA's Research, Engineering & Development (R,E&D) Advisory Committee and NASA's Aeronautics and Space Transportation Technology Advisory Committee.

Technical Information Meetings (TIMs) are an important way for IAIPT members to exchange information and perspectives. Recently, team members Paul Krois (AAR-100), **Jacqueline Rehmman** (ASD-100), and Richard Mogford, (NASA Ames), co-hosted an IAIPT Human Factors TIM in Washington, DC. The focus of the two day meeting, held November 19-20, was to discuss the role of human factors in progressing capabilities through research and development (R&D) to acquisition and deployment.

Meeting participants came from the FAA and NASA Ames and Langley, MITRE CAASD, the aviation industry, and academia. Participants discussed the important contribution of human factors in transitioning research concepts and products through the R&D pipeline to acquisition and fielded systems. The meeting focused on developing human factors guidance for transitioning

research capabilities across Technology Readiness Levels (TRLs). TRLs are the basis for coordinating various activities, roles, and expectations among research organizations and the FAA. The TRL model allows the research organization, independent of FAA, to describe, develop, and perform limited testing of its proposed concept. The TRL model represents a phased approach toward R&D.

Meeting participants agreed that transitioning research concepts from exploration to development and onward to acquisition products and fielded systems should be accompanied by increasingly detailed assessments of information requirements, display management/integration, human centered automation, and human performance measures, such as workload, situation awareness, communications, and human error.

Presentations focused on identifying and discussing human factors and human performance issues across different levels of capability maturity.

Output from the TIM includes preparation of human factors guidance for IAIPT members in the form of principles, methods, and metrics that can be used to guide human factors research through the R&D pipeline.

For more information, contact jacqueline.rehmann@faa.gov or call 609-485-4739. ■

NEXCOM

Taking Communication into the Future

The Center recently held demonstrations of the technology that will power the U.S. next generation air-ground communications system. Dubbed NEXCOM, this system will move air traffic control air/ground communications from the current analog voice only to the future digital voice and data. The system will ultimately replace all of the over 40,000 FAA ground radios and transmitters. A similar replacement will occur on the airborne side with the eventual full participation of over 200,000 U.S. aircraft with eventual international participation. The prototype demonstration was the first of three planned demonstrations that will culminate in 2004 with a demonstration of a fully developed prototype ground delivery system and certificated NEXCOM (VDL Mode 3) avionics.

The first demonstration involved a simulated air traffic control facility and three aircraft. The facility was operated by air traffic controllers assisted by project personnel at the NEXCOM lab located within the Technical Center's ATC lab facility. Two of the three participating aircraft, a Lear Jet (430) and the Center's Convair 580, were located at the Technical Center's hangar and ramp, respectively. The third aircraft, N40, the Center's Boeing 727, traveled at approximately 16 - 20,000 feet on a race track pattern between the Technical Center and Snow Hill, MD. The demonstration displayed several of NEXCOM's key features which included: a comparison between the analog and digital voice capabilities of the new system; Controller Override: the ability for the controller to immediately take control of the channel when needed; Urgent Downlink Request: the ability of the pilot to notify the controller of his urgent need to speak immediately; Stuck Mike Resolution, the ability of the system to prevent a stuck mike from blocking the channel; Digital Data Link: the ability to



Above: Nexcom in action.

send digital text and graphical data; and Multi-channel operation: the ability to simultaneously send two completely independent voice and two independent data links on the same 25 kHz channel; Next Channel Uplink: the ability to uplink the next frequency directly to the aircraft radio; and Anti-Blocking: the ability of the system to prevent the channel degrading condition which occurs one or more aircraft transmits while a transmission is already in progress.

In 2005, after successful completion of the 2004 demonstration, a Notice of Proposed Rulemaking will be issued notifying the Public of the FAA's intention to transition to NEXCOM over a period that will probably span a decade. If all goes as planned, owners can expect to begin equipping their aircraft and using the new services around 2010. ■

Follow the Yellow Brick Road?

The Quest for ISO 9001:2000 Registration

What is ISO registration?

ISO is the International Organization for Standardization. It is a proactive quality assurance mechanism which promotes continuous quality improvement through the documentation of approved processes. It establishes a registration process that an organization or agency is independently audited for compliance with the applicable standard.

Now that we have a better understanding of what it is, let's follow one ACT division's journey through registration.

The First to Register

The Facilities Services and Engineering Division (FSED), ACX-40 has achieved ISO 9001:2000 registration of its Quality Management System. FSED is the first organization within the office of Operations, Technology and Acquisition ACX to be ISO registered.

How it Began

In June 2000, **Basilyn Bunting**, then ACT-400 Manager, **Alex Storoz**, **Beth Burkett**, **Beverly Hite**, **Don Marple**, **Michele Holmes**, **Paul Simon**, along with **Wayne Marks**, then ACT-600, visited NASA AMES to study its registration to the ISO 9000:1994 standard.

ACT-600, now ACX-40, began its quest to ISO registration in March 2001. The timeline for registration was March 2002. Workload demand after September 11, combined with a need to modify all documents as a result of the Center reorganization, necessitated the milestone be delayed until September 2002.

The Bumpy Road

The original ISO team was composed of **Frank Seman**, ISO Management Representative, **Al Lisicki**, Audit Manager, and **Wayne Marks**, Document Manager. As a result of September 11, Frank and Al were reassigned to other duties. **Ken Dobis** became the Management Representative and Audit Manager. Three months prior to the registration audit, Ken was hospitalized. In anticipation of Ken's leave, **Carolyn McKinney-Bobo** (ACB-3) volunteered to act as Audit Manager. Carolyn put together an audit team consisting of **Wanda Harris** (ACB-3) **Natalie Reed** (ACB-3), and **Maudie Powell** (ACF-1).

This team, along with FSED's internal auditors **Jill Sharra**, **Donna Taylor**, **Eugene Hidalgo**, **Reynold McPherson**, and **Brian Allen**, completed the internal audits and documentation required for registration. During Ken's absence, **Wayne Marks** was appointed Management Representative.

Our Strong Support Teams

The recent FSED reorganization was tailored to customer focus, a key ISO requirement, with each of the five groups in FSED specializing in specific customer groups.

ACX-41, managed by **Ray Dumas**, is the Facility Engineering and Operations Group that assigns work to all FSED organizations and our support contractors through the Trouble Desk.

ACX-42, managed by **Howard Kimpton**, Environmental Engineering Group, receives work orders from the trouble desk involving environmental and safety issues, in addition to their normal environmental and safety work throughout the Technical Center.

ACX-43, managed by **Mike Beres**, NAS A&E Group is the focal point for all Engineering/Design work requested from the following organizations: ACB, ATQ, AOS, and ATB. This consists of Architectural and Engineering (A&E) design, Engineering Consultation, Planning & Estimating and construction.

ACX-44, managed by **Frank Seman**, Technical Center A&E Group, is the focal point for all Engineering/Design work requested from the following organizations: ACF, ACT, ACH, ACK, and ACX. This consists of A&E design, Engineering Consultation, Planning & Estimating and construction.

ACX-45, managed by **Dave Dando**, Aviation Safety & Security A&E Group, is the focal point for all Engineering/Design work requested from the following organizations: AAR-400, TSA, Coast Guard, Air National Guard, SJTA, AEA, AVN, and FIFO. This consists of A&E design, Engineering Consultation, Planning & Estimating and construction.

"The Quality Policy comes from Management; the Quality Product comes from the Workers," explains Gary Poulsen.

The Intranet

Keeping the user interface for our ISO documentation simple was one of the goals. The team felt that this would be key to having employees understand and follow the ISO procedures without intensive and recurring training on finding information. The FSED's ISO documentation can be found on FAA intrawebsite at <http://plant.act.faa.gov/iso/>.

Our View on Quality

The Facilities Services and Engineering Division is committed to consistently providing high quality professional services responsive to customer requirements and continually improving the Quality Management System.

Staying Informed

The ISO process can only be implemented with the cooperation of all members of the Division. To achieve that cooperation, each employee must be fully informed of their responsibilities and given periodic progress reports to keep abreast of the latest advancement towards our goal. This was accomplished by having a number of all hands meetings, as well as ISO training conducted by the ISO management office and each employee's group manager. A periodic newsletter was also generated and available on the web to publicize current issues.

Consultant and Registrar

The FSED's ISO consultant is David Lambertson of Qualitec Consulting. Dave has guided the team through the ISO process with expertise, patience, and a steadfast commitment to our goal of ISO 9001:2000 Registration. Among Dave's other accomplishments is his role as the NASA Headquarters ISO consultant.

FSED selected QMI of Springfield, PA, and Mississauga, Ontario, Canada, as the registrar. This is the same registrar that was selected by ACB-800, formerly ACT-400, for ISO 9000:1994 and AAR-500 for ISO 9001:2000.

QMI conducted its pre-assessment audit in August. This pre-assessment was to determine if the team was ready for the registration audit scheduled for late September. They were given a thumbs up, with a total of eight minor non-conformances that were addressed immediately.

The registration audit was conducted in late September. The findings from that audit were:

Major Nonconformance's: None

Minor Nonconformance's: None

Opportunities for Improvement: One

QMI's report stated:

"The results of this Initial Registration Audit indicate that the Quality Management System of the FAA Facilities Services and Engineering Division, ACX-40, is found to be suitable and effective, and will be recommended for registration to the ISO 9001:2000 standard."

Management Commitment

The number one ingredient to ISO success is management commitment. Without it you will be doomed to failure. Once the employees see that management is serious about process improvement, their resistance to change is greatly diminished. This commitment also dispels the perception that ISO is the flavor of the month and will disappear as quickly as TQM and other "quality" systems that have been tried over the years.

The Road to OZ

As Dorothy found out, the solution to a problem is not managed by others, but rather in our own hearts. The same is true with ISO. Without 100% commitment, you will not achieve what you desire.

Did you ever wonder why the good witch didn't tell Dorothy the power of the shoes at the beginning of the movie and save all that trouble? ■

Meeting the Standards

Core Processes of the Explosives Program Recommended for ISO 9001:2000 Registration

A thank you note from AAR-500's John Tye.

I'm delighted to announce that on October 31, 2002, after two days of intense scrutiny by the Quality Management Institute (QMI) auditor Mr. Wayne Blazek, our Explosives Program has formally been recommended for registration. The purpose of this audit was to evaluate the suitability, adequacy and effectiveness of the organization's Quality Management System (QMS) with regard to the Explosives Program in meeting the requirements of the ISO 9001:2000 Standard, and the laboratory's Quality Management System documentation, for the declared scope of registration.

During the audit procedure one nonconformance regarding the approved vendors list was identified. This minor nonconformance was resolved by the process improvement team/explosives program team, verified by the auditor and closed during the audit. The registration audit report has been submitted to QMI Headquarters for processing of the



formal certificate. We expect to receive the official Certificate of Registration by mid November.

I would like to congratulate the Explosives Program Team as well as the ISO Process Improvement Team for the support and cooperation provided during the audit. This was a significant accomplishment that was completed in record breaking time due to the hard work of the dedicated people involved in this endeavor. Thank you for your help. ■

Just for Fun:



Here is a little humor to ease the woes of your quest for ISO registration...

The Facilities Services and Engineering Division (FSED), ACX-40, has planned a special ISO celebration and has invited dignitaries past and present.

The following are the RSVP's we have received so far:

"Ampere was worried he wasn't current.
Audubon said he'd have to wing it.
Boyle said he was under too much pressure.
Darwin waited to see what evolved.

Dr Jekyll declined - said he hadn't been feeling himself lately.
Edison thought it would be illuminating.
Einstein thought it would be relatively easy to attend.
Gauss was asked to attend for his magnetic personality.
Hawking tried to string enough time together to make space in his schedule.
Hertz said in the future he planned to attend with greater frequency.
Morse's reply: 'I'll be there on the dot. Can't stop now, must dash.'
Newton planned to drop in.
Ohm resisted the idea.
Pavlov was drooling at the thought.
Pierre and Marie Curie were radiating enthusiasm.
Volta was electrified, and Archimedes buoyant at the thought.
Watt reckoned it would be a good way to let off steam.
Wilbur Wright accepted, provided he and Orville could get a flight.
U.S. Track team came down with athletes foot.
John Glenn suffered from missile toe." ■

Girls In Technology

"It's Cool to be Smart!"

"It's Cool to be Smart!" was the theme of the Girls in Technology II program. This program, developed a few years ago by **Carleen Genna** (ACT-4) and **Chinita Roundtree-Coleman** (ACB-3), encourages middle school girls to become more involved in math, science & technology.

Why are girls the focus of this innovative program? It's simple; girls start to fall further behind their counter parts during the middle school years in technological areas according to recent studies. To remedy this, girls from various school districts join together to actively participate in workshops that increase their knowledge and skills in areas of technology.

This year, approximately 50 young ladies from three different school districts were selected. PleasanTech Academy (Pleasantville), Bethel Christian (Port Republic), and Egg Harbor Township Middle School took part in this educational experience.

The program began with a welcome by **Annie Clark**, Program Director of Enterprise Performance, followed by the Honorable Frank LoBiondo, 2nd Congressional District of New Jersey, who emphasized the importance of getting involved in technology careers and following your dream.

The workshops consisted of interactive presentations, such as Computers Come Alive, a hands-on opportunity for the young ladies to dissect a computer to explore the internal workings of the equipment. This was taught by **Magda Colón** (ACB-540). Pilots **Jill Eichner** (Titan), **Barbara Para** (ACB-860) and **Lorry Faber** (ACB-870) shared their many experiences, the education requirements, how women progressed in their fields, and what they had to overcome to achieve their goals. Thanks to ACB-860's **Al Rehmann**, **George Bollenbach**, and **Mike Cullum** the girls were able to fly The General Aviation Trainer.

Additionally, they were able to learn about Advanced Imaging Technology to see the application of technology and computers in the graphic arts, audio-visual and film industries with **Verna Artis** (ACX-60), and **Laurie Zaleski-Johnson** (ART-Z-Graphics). The Community Outreach, Aviation Education Program at the Tech Center and the Atlantic County Advisory Commission on Women sponsored the program. Supporting organizations were the National Black Coalition of Federal

Aviation Employees, and the National Hispanic Coalition of Federal Aviation Employees. Teamwork is the key to success.

Thanks to all the individuals who gave of their time and effort to make this program a success. We know the girls had a great time! ■



Above: The young ladies dissect a CPU.



Above some of the contributors to the program: Ken Hitchens, Leona Wilkes, Jill Eichner, Barbara Para, Carleen Genna, The Honorable Frank LoBiondo, Air Bear (Rosanne Weiss), Cheryl Wilkes, ChinitaRoundtree-Coleman, Magda Colón.

Contributors:

Program Director of Enterprise Performance, Annie Clark; Atlantic County Director of Administrative Services, Diana Rutala; Communications Staff Manager, Kaye Jackson, ACT-4; John Wiley, ACB-1; Holly Baker, ACT-5; Lana Haug, ACT-4; Pete Castellano, ACT-4; Butch Dansby, ACX-60; Paul D'Ambr, ACX-53; Linda Hinckley & Rob Geist, Congressman LoBiondo's Staff; Ginger Cairnes, ACT-4, Michael Cefaretti, ACX-53; Laurie Zaleski, ART-Z-Graphics; Verna Artis, ACX-60, Ernie Pappas, ACX-60; Advanced Imaging Technology staff; Annette Harrell, ACX-60; Bob Marks, ACX-60; Pat King, ACB-700; Mike Cullum, Lorry Faber, ACB-870; Beverly Hite, Donna Young, ACT-10; Lucia Van Pelt, AOS-21; Linda Stanton, Dynamic Security Concepts Inc.; Eduardo Colón-Madera, ACB-540; Stacie Graves, Donna Kaiser, Hi-Tech; Lillian Anderson, Northrup Grumman; Paul Hodson & Colleen Berger, Wackenhut Security; Walt Vernon, Al Lisicki; Rick Page, Business Development Director, Maria Lemmetti-Fane, ACX-41; Jason Shaw, Nobil Food Services; Atlantic County Transportation, J.A. Jones Roads and Grounds, Commissioners from the Atlantic County Advisory Commission on Women, Paula K-Merrill, Erica Thomas, Jennifer Bailey, NBCFAE, NHCFAE, Monica Macie, Atlantic County Vocational Technical School; Jim Taggart, Assistant Professor Computer Information Systems, Atlantic Cape Community College; Linda Jenkins & Ms. Rosado, PleasanTech Academy; Paul Champion & Jennifer Bailey, Bethel Christian; Jill A. Pappas, Patti Deegler, Lori Blake, Jerry Goldman, Marge Fopeano, Egg Harbor Township Middle School, and Cathy Jaggard.

Providing a Better Understanding

Tech Center Employees Tour Their Facilities

New hires and co-ops at the Technical Center recently participated in a Tech Center site tour and briefings provided by several of our expert personnel.

Familiarity with the work that is being done here is important in providing employees with an overall picture of what we are doing within the FAA. It helps them realize that a job goes far beyond the area in which they work.

The facilities visited were: Airway Facilities Tower Integration Laboratory (AFTIL); Research, Development, Human Factors Laboratory (RDHFL); National Satellite Test Bed & Wide Area Augmentation System; Weather & Radar Processor (WARP); Display System Replacement (DSR); Crashworthiness, National Airport Pavement Test Facility; and the High Performance Rescue Vehicle (HPRV).

The attendees included: **Roshanda Busby, Teresa Fortson, Kris Gigliotti, Melissa King, Ginny Kisby, Ann Maseli, Anila Pastakia, Rosemarie Perri, Jim Petrousky, Madeline Strano, Maria Torres, Kimberly Tweedle, and Lee Williams.**

Special thanks go to: **Bill Vaughan, John Wilks, John Aschenbach, Rodger Bawgus, Earl Stein, Tom Dehel, Bill Wanner, William Brown, Matthew Printy, Shellie Price, Al Abramowitz, Keith Bagot, Steve Murphy, and Ryan Rutter** for introducing the group to some of the many programs taking place at the Technical Center.

The Visitor Program realizes the on-going need for these tours and will be scheduling more of them within the next few months. ■



Above: Attendees tour the Airway Facilities Tower Integration Laboratory (AFTIL).
Below: The William J. Hughes Technical Center's new hires and co-ops.



Tech Tidbits:

Did you know? The William J. Hughes Technical Center is known as the national scientific test bed for the FAA. It provides numerous specialized simulation and testing facilities that support a vast number of research, development, and acquisition programs.

ICAO Goes to New Jersey

International Civil Aviation Organization (ICAO) Visit



The International Civil Aviation Organization (ICAO) Air Navigation Commission visited the Tech Center in late September. The commission, chaired by Frank Price, Deputy U.S. Rep to ICAO, consists of a group of 15 individual experts from different countries who provide technical advice and direction to the ICAO for the development of international aviation standards. The group usually visits one or more segments of the aviation industry each year to get a first hand look at the most recent developments in civil aviation. Countries included in this visit were: Argentina, Australia, Belgium, Canada, Denmark, France, Germany, Japan, Spain, Uruguay, and the USA.

The two-day visit to the Technical Center included tours and briefings on various projects that are supporting the development of new standards or the implementation of recently promulgated ICAO standards. The briefings and presentations included were: Integration & Interoperability; VDL Mode 3 digital voice and data link communications; Global Navigations Satellite Systems; ADS-B; GPS Outage En Route Simulation; separation standards, Airport Pavement and Airport Lighting testing; Next Generation Air-Ground Communications; Fire Safety; High Performance Rescue Vehicle; Airborne Laboratory testing; Aging Aircraft, Human Factors issues and operations; and Aviation Security.



At the conclusion of this visit, the experts returned to their respective countries with the latest research developments that will enable them to compile updated standards for now and into the air navigation future. ■



Top: The commission members see the Tech Center facilities in action.
Middle: Some of the commission members gather in front of the Tech Centers' fire research vehicle.
Bottom: Tech Center personnel describe the research conducted at this facility.

A Work of Art

A Diversity Masterpiece

If the old adage that a picture is worth a thousand words is true then come January 24, 2003, the Cultural Diversity Committee will be speaking in volumes! It's on that date that the Cultural Diversity Committee will be sponsoring the Center's first ever Cultural Diversity Art/Photo Contest. The purpose of the contest is to illustrate through art, the abstract, the sublime, the colorful, the subjective, the graceful, and many other illustrative characteristics that make up the Center's work environment.

With January 24th as the target date, we need you to submit a picture or photo for display in what we hope will be a grand opening of Culturally Diverse Art in the Atrium. Whether you're an accomplished artist, an amateur photographer or somewhere in between your creativity and artistic talents are needed to make our art contest a success. So get the camera ready, pull out the pen and paper, or at the very least get your thinking caps on! We don't need you to be a Rembrandt, just someone who has an interest in making diversity a picture of success at the Technical Center.

From a cultural artistic perspective, Diversity is like fine art, as its always changing yet it never goes out of style! So make plans to enter our art contest by picking up an entry form from your organizations diversity representative or visit the cultural diversity website.

Collaborative Efforts

Technical Center Establishes Joint Icing Research Agreement



The Tech Center has an interagency agreement to develop a collaborative icing research program with NASA Glenn Research Center, of Cleveland. The five-year agreement has an estimated ceiling value of more than \$1.12 million.

In the agreement, AAR-400 and NASA will develop icing engineering tools focusing on super-cooled large droplet conditions. These are particularly hazardous icing conditions, now thought to be more common than once believed. The conditions include freezing drizzle and freezing rain, which can be encountered while an aircraft is flying in the clouds, as well as

below the clouds. Super-cooled large droplet conditions are not within current icing certification envelopes. The FAA is considering expanding the current certification requirements to include these conditions.

The agencies will study methods for scaling ice shapes; develop test techniques using the NASA Icing Research Tunnel and Droplet Imaging Flow Tunnel; and develop a project plan to simulate super-cooled large droplet conditions in a test facility. ■

A Visit to CAMI

A Rewarding Experience

*Anne Harlan, Director of the WJH Tech Center
shares a note with the editor.*

Dear Terry:

I recently had the opportunity to tour CAMI and see some of the critical human factors and aeromedical work being done there. Both CAMI and the Tech Center support the agency in safety and human factors, so I wanted to see what types of projects they were working on and if there were things we could collaborate on or share. I knew several members of staff, but didn't know everyone, so for me it was a great trip.

I was impressed with all their research efforts, from the aircraft evacuation and survival, to the ATC selection, to the employee attitude survey, and I was really intrigued by the work they are doing with commercial space. CAMI's director, Dr. Antunano, and I have talked about a team from CAMI visiting the Tech Center and I have asked him when he does come, to be one of our first technical symposia speakers describing the work they are doing with Commercial Space. It was a really great trip!

I stayed an extra day in Ok City, so I could visit Norm Bowles at the Logistics Center to understand how the franchise operation is working. I also spent some time with Lindy Ritz and Dick Rodine talking about the Aero Center in general. The two centers are alike in many ways and share several concerns and issues that don't impact the rest of FAA.

Regards,

Anne

At the Top: Dr. Antunano shows Anne Harlan CAMI's research capabilities.

Middle: Anne Harlan takes part in an aircraft evacuation test.

Bottom: Norm Bowles and his staff show Anne Harlan the research efforts at CAMI's Logistics Center.



Diversity in Review

ARA Diversity Advocates: Looking Back Over a First Term



A little more than two years ago, the Associate Administrator for Research and Acquisitions demonstrated his commitment to diversity by establishing the ARA Diversity Advocates Program. The program was designed to support the ARA Diversity Officer, Kathy Randall. Employees applied and were selected for a two-year term during which they would serve on a collateral basis. Twelve advocates spent the next two years helping provide a focused, accountable, and structured approach to diversity in ARA. As their two-year term winds down, advocates have spent some time taking stock of where they have achieved results and where their successors will need to focus. The next ARA Diversity Advocates vacancies will be advertised in the November/December time frame. One of the advocates' positions will be a full time outreach/recruitment position while the remaining positions will be collateral duty (10%).

All advocates could work on all initiatives. However, selected advocates took the lead in specific areas.

Among their accomplishments, Diversity Advocates participated in 11 career fairs in a variety of venues. Their participation in the career fairs was part of an overall recruitment program, led by Sabrina Saunders-Hodge, with major assistance from Pat Weaver, that has resulted in a new portable recruitment board and a recruitment brochure (just published). Beverly Bond coordinated activities to support the People with Disabilities program, including recruitment, training, and equipment.

Helen Woodland led the Advocates' training initiative, resulting in at least one diversity/MWE training session per month in headquarters. The training events covered such areas as MWE awareness, disability awareness, stress management, diversity panels, and financial planning, among other topics. **Rodger Mingo**, Jack Jackson, and Viscount Thurston conducted many of the training events personally, and did an excellent job. The sessions were very well attended and received positive reviews.

In three instances, Rodger, together with **Jacqueline Rehmman**, worked with management and employees to resolve issues that were hampering organizations' ability to get the job done. **Rosanne Weiss** and **Ray Stover** conducted an analysis of exit interview data to determine why employees leave ARA. The analysis correlated highly with the FAA employee attitude survey and ARA 2001 culture survey data and helped point the

ARA management team to areas where additional attention was needed. Jack assisted in the preparation of analysis also and briefed the ARA Management Team.

Pat Weaver, was instrumental in establishing the ARA Diversity website. She currently maintains the site as well.

Sharon McMillan developed a data base of developmental courses, which outlined the requirements and schedules for specific developmental programs. She also managed the process of soliciting and submitting ARA nominations to the appropriate sources. This data base is helpful in getting a head start on canvassing the workplace and selecting the best qualified employees to participate in the developmental opportunities.

Vincent Nguyen managed the ARA Intern Program. He was responsible for soliciting the organization for the intern requirements and working with the FAA Intern Program Managers to ensure that we were able to place interns throughout ARA. We hired 40 interns in FY-01, and 32 interns in FY-02.

Vincent, Rosanne, Sabrina, Jack, Sharon, Beverly, Helen, and Pat conducted MWE/diversity interviews of ARA office managers in July 2002 to help identify areas where we had been successful and areas where we needed to do additional work. The results of the survey will be used to shape this year's ARA Diversity Advocates program.

ARA Diversity Advocates have something in common and that is a passion for what they do. Many have had years of the experience in the field, and all are grateful for the opportunity to serve their organization. They take diversity and MWE initiatives to another level in ARA and work across the entire organization. They differ from diversity council members in that council members focus on specific directorates. Diversity Advocates are intended to supplement and expand upon Diversity/MWE Council efforts.

If you want to have a role in creating a productive and hospitable workforce that reflects the Nation's diversity, perhaps this is the job for you! Look for the ARA Diversity Advocates announcement coming soon and consider applying. ■

In the Spotlight

We Welcome a New Employee

James A. Petrousky reported aboard the Transportation Security Agency (TSA) at the Transportation Security Laboratory effective September 22, 2002. His assignments relate to explosives detection in Research & Development.

For the past 3 years, Jim has been a member of the staff at the White House Office of National Drug Control Policy (ONDCP) in the Counterdrug Technology Assessment Center. Prior to this he served 10 years at the DOD Office of Special Technology, Fort Washington, MD, as Program Manager for the counterterrorism technology and as technical agent for Non-Intrusive Inspection -DOD Counterdrug systems such as: Neutron Interrogation/PFNA; fixed and mobile radiography for baggage and trailer size cargo containers; backscatter and gamma ray imaging; vapor/trace particle detectors; substance detection canines; science; and applications.

Jim worked for over 20 years in R&D at the Naval EOD Technology Center, Indian Head, MD, in the development of special tools and techniques to detect and "render safe" military ordnance and Improvised Explosive Devices/terrorist-type bombs including nuclear/radiation dispersal devices; and was a co-recipient of two US Patents for bomb disruption. He was recognized for assisting FBI & the UK for forensics support related to the PanAm 103 Lockerbie bombing.

Jim received a BS in Chemical Engineering from the University of Massachusetts. He was on active duty in the U.S. Marine Corps from August 1964-August 1967, and served a 13-month tour in Vietnam. ■



Is anyone listening, reading, or watching ?

The VOICE web site offers FAA and other aviation related information that will keep you current on the latest happenings. To get to the VOICE site, use one of these addresses: <http://voice.faa.gov> (Internet) or <http://intranet.faa.gov/voice> (Intranet).

Also, check out **VOICELive**, a "Larry King type" interview show **hosted by Jerry Lavey** (AOA Highlights.). You can find archived VOICELive programs at <http://videoontheweb.faa.gov>. Past shows have featured Administrator Marion Blakey, John Thornton, Peggy Gilligan, Bill Peacock, and a host of others.

Remember ? VOICE puts information at your fingertips!
And, don't forget to call the VOICE Toll-Free Number at 1-877-888-4325
to get the latest FAA information.

The message is updated weekly on Wednesdays

A Profile of Excellence

Chris Seher is Awarded



Chris Seher is currently the Manager of the FAA's Office of Aviation Research Airport and Aircraft Safety R&D Division. Prior to this SES appointment, he served as a Manager in the Airworthiness Assurance R&D Branch from October 1990 to October 1996; he served as a Program Manager for Explosive Detection in the FAA's then Aviation Security Branch from

October 1979 to October 1990. Chris started his FAA career as a co-op student back in 1967 working at the Technical Center's Standards and Calibration Laboratories Facility.

He has received countless awards and recognition. This past year he received the Associate Administrator for Research and Acquisitions Special Achievement Award. In 2001 he received the Administrator's Historically Black Colleges and Universities Program Manager of the Year Award, and was the recipient of the 1997 William J. Hughes Technical Center Outstanding Leadership Award. He was also recognized in 1996 in Aviation Week and Space Technology Magazine, as the recipient of the Laurels Award for Outstanding Achievement in the Field of Aeronautics and Propulsion.

Chris holds a Masters in Aviation Management from Embry-Riddle Aeronautical University, Daytona, Florida, and a B.S. in Physics from Drexel University, Philadelphia, PA.

Chris and his wife have four children, all currently in or recently graduated from college and since 1997 have been active foster parents. They have been "Mom and Dad" to four girls and one boy during that period, raising them each from birth until they could be placed for permanent adoption. They are always willing to open both their home and hearts to a child in need. The shortest stay has been three months and the longest, two and a half years!

In addition to his foster parent role, Mr. Seher participates in a number of other community volunteer activities. He has been a basketball coach for his children's grammar school and high school basketball teams. He referees for both basketball and baseball in Absecon and surrounding areas where he is a registered referee and umpire with the New Jersey State Interscholastic Athletic Association.

He also has volunteered his time for 30 years as a member and current Chairman of his local zoning board. He has served a five-year appointment to the New Jersey Expressway Authority, serving two years as Chairman under Governors Kean and Florio. Chris is serving his tenth year as a member of the Atlantic County Utilities Authority (ACUA). He is currently Vice-Chairman of the ACUA which is responsible for enhancing the quality of life through the protection of waters and lands from pollution by providing responsible waste management services.

Chris Seher is not only an outstanding leader in his profession, but a shining example of an individual who makes a real difference in his community. ■

Recognition of Accomplishments

FAA Employees Receive High Honors

On November 14, Secretary of Transportation Norman Mineta awarded the following FAA employees for the Secretary's Honorary Awards. The Secretary presented the awards at the 35th Annual Awards Ceremony in Washington, DC, on November 14. Six of the 16 recipients reside here at the Technical Center, which is reflective of the excellence we bring to FAA. I know you will want to congratulate each of them on this honor.



Meritorious Achievement

Brian F. Colamosca (ACB-310)

Richard E. Lyon (AAR-440)

Christine M. Greco (Formerly ACT-10; now TSA)

Son V. Tran (ARA)

Jay Pardee (AVR)

Excellence

Lawrence B. Michael (ACX-54)

Terry Parker (ACX-54)

Patricia L. Calvert (AVR)

Linda G. Romero (ATS)

Barbara J. Connolly (AVR)

Cynthia T. Warfield (AHR)

Volunteer

Stacey M. Hamilton (ACB-250)

Partnering for Excellence

TSA Go Team 19 (AGC)

EEO/Affirmative Action

Gregory D. Burke (ARA)

Team

Aviation Insurance Team (API)

Valor

Allen J. Rotter (ATS)



The Accolades Continue

Center Employees are Recognized for ARA Excellence

Business Excellence ISO 9001:2000 Implementation	Business Excellence Display System Replacement (DSR)/User Request Evaluation Tool Service Management Team	Daniel McGovern ACB-710	Vanessa Lovelace AOS-350
Therese Brennan AAR-540		Patti Dee McNeil ACB-710	Maggie Lydon AOS-350
Sheldon Brunk AAR-520		Tauheedah Munir-Ali ACB-710	James Hunt AOS-350
Dave Fabry AAR-500	Walter Abilla ACB-710	Shellie Price ACB-710	Sheila Mathis AOS-350
Judy Huggard-Gallagher AAR-530	Phillip Askins ACB-710	Nancy Proctor ACB-710	Tuyen Ngo AOS-350
Lok Koo AAR-500	Blair Badger ACB-710	Christopher Raab ACB-710	Steven Oliver AOS-350
Skip Lane AAR-500	Carmalena Belton ACB-710	Joyce Robertson ACB-710	David Pew AOS-350
Theresa McGhee AAR-540	Marlene Clinkscale ACB-710	Thomas Rubino ACB-710	Lawrence Weisman AOS-350
Roberta Moncrief AAR-500	Vincent DelGuercio ACB-710	Scott Stemple ACB-710	John Young AOS-350
Sharon Moore AAR-540	David Dotsey ACB-710	Amy Transue ACB-710	Luan Jones AOS-350
Bill Petracci AAR-500	Jennifer Duffy ACB-710	Merkia Weathers ACB-710	Business Excellence ATCBI-6 Test Team
Ron Polillo AAR-500	Kahoya Gibson ACB-710	Carol Widerker ACB-710	Ray Alimenti ACB-530
Patty Reichenbach AAR-530	Rita Hanson ACB-710	Thomas Ackermann AOS-350	Andy Leone ACB-530
Donna Tropiano AAR-500	Philip Lui ACB-710	Craig Bates AOS-350	Preston Barber AOS-230
John Tye AAR-500	Tracey Madonna ACB-710	Frederick Breen AOS-350	Joe DeChristopher ATB-450

Efficiency of the NAS Integrated Terminal Weather System (ITWS) Test Team	Mike Coffelt ATX-100	Bob Fietkiewicz ACB-720	Magda Colon ACB-540
	Jesse DeHaven AOS-700	Mark Marchese ROCATCT	Nanette Gordner-Kalani ACB-630
Tom Weiss ACB-630	Patrick Sugrue MCO NATCA	Joyce Walden-Williams ASU-350	Stacie Graves AAR-421
Steve Viveiros ACB-630	Dennis Densmore MCO AT	Mission Excellence Traffic Information Service Broadcast Team	Beverly Hite ACB-830
Starr McGettigan ACB-630	Jim Woodruff PASS		Sandra Lopez AOS-550
Tom Carty ACB-630	Mary McGraph ASU-350	Michael McNeil ACB-410	Gayle Martin-Taylor ACX-1
William Benner ACB-630	Efficiency of the NAS Traffic Flow and Enterprise Management Team (TF&EM)	William Mateer ACB-410	Dana Picorale ACX-20
Benn Deans AUA-460		Chris Perone ACB-410	Carolyn Pokres ACX-20
William Hall AUA-460	Dan Gutwein AUA-700	Tuc Vu ACB-410	Model Workplace & Diversity
Raymond Moy AUA-460	Teri Bristol AUA-700	Mark Schoenthal ACB-530	Anthony Rodriguez ACB-820
Dan Strawbridge ARU-400	Mike Goldser AUA-700	Paul Quick ACB-420	Model Workplace & Diversity ARA Diversity Advocates
Bettie Loudenslager AOS-250	Bud Morgan AUA-700	Larry VanHoy ACB-870	
William Sotelo ANI-90	Daniel Horton AUA-700	Mark Ehrhart ACB-870	Catherine L. Randall ARA-3
Maureen Cedro AUA-430	Linda Labelle AUA-700	Keith Biehl ACB-870	Jack Jackson ABZ-200
Molly Vorce AUA-400	Jim Wetherly AUA-700	Fred Karl ACB-870	
Richard Larkins AFZ-100	Jim Weed AUA-700	Model Workplace & Diversity Federal Women's Program Delegates	Rosanne Weiss AAR-490
Vanestra Myers AOP-400	Tim Grovac ATT-200		Ray Stover ACH-1
Todd Pattison AOS-250	Chuck Vomacka ATT-200	Cathy Bigelow AAR-430	Jacqueline Rehmann ASD-100

Rodger Mingo ACH-1	Scott Dalaba ACX-21	William Dawson ACX-60	David Dando ACX-45
Helen Woodland ASU-530	Adrienne Calderone ACX-21	Frank Merlock ACX-60	Robert Heitsenrether ACX-40
Viscount Thurston AND-402	Ernie Seider ACX-22	Verna Artis ACX-60	Jeffrey Wolf ACX-45
Sabrina Saunders-Hodge AAR-200	Sue Lake ACX-20	Dale Dingler ACX-60	Ronald Heist ACX-43
Patricia Weaver AAR-210	Shelley Yak ACX-20	Sue Wall ACX-60	Ralph Stover ACX-45
Beverly Bond ASU-530	Melissa Passmore ACX-20	Ann Kertz ACX-60	John Nesbitt ACX-45
Vincent Nguyen AND-510	Robert Gross ACX-30	Linda Cassone ACX-52	Wayne Roller ACX-45
Sharon McMillan AUA-200	Joseph Martirone ACX-30	Kevin Dillon ACX-51	Mark Thyrring ACX-45
Safety and Security	Larry Barts ACX-32	Christopher Gallagher ACX-52	Nancy Davenport-Masi ACX-45
Robert Pappas AAR-480	Mike Chappine ACX-32	Deborah Germak ACX-51	Mary Lalasis ACX-40
Safety and Security	Glenn Hansen ACX-32	Doris Hemling ACX-51	Paul Chubb ACX-45
Starr McGettigan ACB-630	Karen Mercer ACX-32	Marilyn Knopp ACX-51	David Braccia ACX-45
Safety and Security Federal Air Marshal Support Team	Mary Storoz ACX-32	Robert Loftus ACX-50	Greg Falzetta ACX-42
Paula Nouragas ACB-3	Edward Harmelin ACX-31	Arlene Primo ACX-52	John Repko ACX-42
Joseph Salvatore ACB-3	Cheryl Stolfo ACX-32	Debra Stuart ACX-51	John Floyd USDA
Dennis Steelman ACB-720	Kimberly Knight ACX-32	Anne Marie Ternay ACX-51	Thomas Hupf ACX-42
Robert Fietkiewicz ACB-720	Robert Marks ACX-60	Brenda Wendling ACX-51	Stanley Wirpza ACX-45
	Michael Gross ACX-60	Laurel Wittman ACX-51	Dennis Olsen ACX-45
		Lewis Levy ACX-54	

Returning to their Roots

A Step Back in History as ATC Pioneers Reunite

Thank you to Ginger Cairnes for this article.

On November 8, a group of engineers who had done pioneering work in ATC simulation gathered at the Tech Center. The TRW/FAA group worked at NAFEC from 1959 till 1964 doing terminal area traffic control R&D under the direction of George Halverson. The group of visitors included: Steve Pardee; Ed and Bree Robin; Harold and Mona Ottoson; Don Scheffler; and Fred and Lois Holland. Jim Dugan, a retired FAA engineer who worked with TRW was unable to attend.

Their initial studies made use of the FAA analog pilot simulators, a small RW-300 drum machine and electronic tabulator displays. "A big ATC (man-machine) simulator used motorized projectors that displayed the ("rails in the sky") aircraft positions on a wall." The project then moved into the digital world. A new digital simulator was developed which allowed the "pilot" to simulate multiple aircraft movements and drive the air traffic displays to the controllers with whom they maintained radio contact.

Since a controller in those days could talk on only one channel, he would give commands to the "pilots" who would simulate multiple aircraft. An IBM 7090 computer provided the aircraft simulation, the air traffic control logic, and the generation of the controller's digital displays, the recording and analysis of the results. Real air traffic controllers sat at the digital displays and controlled traffic with assistance from the computer control logic. Several reports were written on the results of fast-time and real-time simulation results and new concepts for terminal area arrival and departure control. In those days it was called "metering and spacing."

It had been almost 40 years since most of the retirees had seen

Below: Group enjoys the Out the Tower View.



one another. Enthusiasm was at a peak as they arrived at the Security Operations Center (SOC) where each retiree attempted to get his "remember when" in. Where were these people when I was doing documentation for the Tech Center 40th Anniversary! Employees at the SOC listened intently as stories were swapped.

Although I did not work at "NAFEC," I had heard many amusing stories from my husband who had also worked in the "simulation" area in those days. Much of their conversation brought back fond memories. I racked my brain trying to answer their question regarding where the restaurant was "located off the circle" that served the best "mouth salivating" soup and sardine sandwiches. The answer to this question would have to wait until we got to the Airway Facilities Tower Integration Laboratory (AFTIL). Surely Bernie Garbowski would know. We arrived at the lab following a "rocky road trip" in which they wondered where I was leading them. I pressed Bernie's memory into action. Without blinking an eye he said, "Yeh, Dom Polski's" as they continued to share amusing events that occurred there. It took "friendly persuasion" to bring the visitors (and Bernie) back to "reality." The group was amazed as a full-scale mockup of Roanoke (ROA) stood before them.

Their enthusiasm was even more peaked in the next room, the Out the Tower Lab. Of course they had to see what drove the scenario to project onto the screens. "State-of-the-art" and "truly amazing" were remarks I would hear several times.

State-of-the-art in the old days" was the ATC man-machine" simulator that that used motorized light beam projectors displaying aircraft positions on a wall. An electronic system converted the picture captured by a video camera to a PPI (plan-position indicator) radar display for the controllers. "Shrimp boats" with paper slips were used to keep track of the "aircraft" on the display.

A former member of the group recalls, "We changed that machine with a minicomputer (what museum is that RW300 in now?) and a display that would be considered laughable in today's world appeared." He also chuckled over the fact that



Above: Group and wives board FAA test aircraft.

they "programmed a drum-type computer in machine code." These experiences were among the highlights in many of their careers. They had done "a lot of analytical work that was probably unappreciated at the time."

I briefly described the current system used for simulations by Air Traffic Assistants (formerly called "sim ops") from ACB-860. Clearances are entered into commercial grade computers software developed especially for Air Traffic Control Operations. These machines along with the Target Generator System ship the targets to the labs where the testing is being done. Also included is audio technology that allows conversations between sectors and the controllers.

Time beckoned us to board the bus for the remainder of the visit. We survived the trip back down "Old English Creek Road" and onto Tilton Road. As we passed the ANG base memories were triggered to the time, during the Cuban Missile Crisis, that a "swash-buckling" group of bomber pilots, complete with scarves "really shook up the female population." They joked about the birds used to simulate an object being ingested into the engines and bird strikes into the props.

In the 1960's, the road to the R&D area was aligned with woods. Our visitors were very impressed by the development that has taken place over the years, especially the National Airport Pavement Machine Facility. This was the next stop on the tour. There, Mike Murphy (Murph) explained some of projects maintained by AAR-410. Overwhelming gasps came from the group as they saw the pavement machine in the "3-football field's arena." One visitor remarked "it was great to see such a massive facility and hear that there was a close working relationship with Boeing Aircraft Operation."

The group was fascinated by the Airborne Laboratories, the tests conducted at the facility, the current projects maintained by

the test pilots from ACB-870 as described by Tom Grygotis, and the advancements made over the years. The group was amazed to "see that the FAA has gotten rid of their large DC-3 fleet and are now only one generation behind." The wives were impressed by the "corporate jet" grounded nearby.

A visit to the Display System Replacement (DSR) Labs was right up the group's alley since they were the "sim originators." They could scarcely believe that "everything was working based upon the Ada language." Tom Hahn has spent many years working in this area and was able to relate to the group, "I had a difficult time pulling them away from this area."

I gave them a copy of the Tech Center Overview Video and packets to enable them to get an even better appreciation of how far technology has advanced since their employment here.

Where Are They Now ?

Most of the group were software engineers. Since leaving NAFEC, Steve Pardee worked as a consultant for Arthur Andersen and returned to Bell Telephone Laboratories. Ed Robin worked for IBM and got involved in International ATC. Harold Ottoson worked for IT&T, PRC, and the military side of MITRE. Don Scheffler, who worked for FAA in 1959, later went to American Airlines to work on the SABRE reservation system. Don returned to NAFEC to work for TRW and with the end of the TRW contract returned to the FAA. Fred Holland went from NAFEC to the MITRE ATC group in Washington. Fred was responsible for writing the original NAS Stage A Enroute specification for the Radar Controller Inputs and Outputs. Fred later became the department head and project leader of a group of 64 MITRE professionals who supported the FAA's Office of Systems Engineering Management. His group were the original designers of the Collision Avoidance System, now known as TCAS, which is installed in every airliner today. Since September 11, 2001. Ed Robin has formed a non-profit: (www.allianceamerica.org) to assist municipalities with Homeland Security in carrying out President Bush's and the Federal Government security mandates, including work in airport security.

-continued next page

Below: The group poses after a tour at AFTIL.





Above: Observing the latest technology.

Camaraderie within the group was evident. They were an amazing pioneer team who should be proud of themselves and whom we should all respect.

I welcome the opportunity to host the group again. ■

Contributions for this article came from Ed Robin, Fred Holland, and Al Jackson. Al, renowned author, mentions the above years as well as work he has done within the FAA in several articles he has written. Some items referenced in this article can be described on the following web pages, "RW300": <http://niquette.com/books/squawk/rw300>; "Rails in the Sky": <http://niquette.com/books/squawk/rails.htm>; and "Man-Machine." <http://niquette.com/books/squawk/man-mach.htm>. These references are from the internet version of a book *SQUAWK 1200* by Paul Niquette (who formerly did some work with the FAA). Background and an introduction to this book can be viewed on <http://niquette.com/books/squawk1200/intro.htm>.

Take the Shuttle

New Tech Center Shuttle Service:

A new Air Shuttle Service contract has been awarded to the WJH Technical Center for service between ACY and DCA.

The new contractor is Corporate Flight Management (CFM) of Smyrna, TN. CFM has a fleet of seven British Aerospace Jetstream 31s and 32s, and is providing a 14-seat aircraft for the Tech Centers' transport. Initially, CFM began service on November 1, 2002.

Make reservations early!

Reserve your space online at: www.tc.faa.gov/shuttle,
or call (609) 485-6482.

News from Around the Center

What An Achievement!

Diane Wilson Master's Success

Diane Wilson, a computer scientist with the Transportation Security Laboratory (AAR-500), received a Master's Degree in Aeronautical Science, Aviation/Aerospace Administration from Embry-Riddle Aeronautical University, Daytona Beach, FL, on June 30, 2002, and a Master's Certificate in Project Management from the George Washington University School of Business and Public Management, Washington, DC, on September 26, 2002.

Diane currently works in the System Engineering Branch (AAR-510) Access Control & Analysis Technologies (ACAT) Program as the lead for Modeling & Simulation and Process Improvement - iCMM. Her other responsibilities include acting as a grant monitor and as a contracting officer technical representative (COTR) on a number of contracts awarded through the ACAT program.

In addition, she is a member of the Model Work Environment (MWE) Committee and supports the other programs that are a part of the research and development organization.

Diane Wilson presented a paper at the 36th Annual 2002 International Carnahan Conference on Security Technology on October 22, 2002, titled "Information Systems Security in an Airport Environment". The paper was one of 40 presented at the conference and one of eight selected to be published in the February 2003 issue of the IEEE Aerospace and Electronic Systems Magazine.

Diane is married, has 2 grown children and 3 grandchildren, and lives with her husband, Walter, and German Shepherd, "Lucky", in TownBank, Cape May, NJ. ■

Retirement at Last

Honoring Sterling Foxworth

"Truly great friends are hard to find, difficult to leave, and impossible to forget."

- G. Randolph-

In September 1999, **Sterling Foxworth**, a beloved friend and employee for almost 30 years, fell suddenly ill. Sterling, a "fighter" through many illnesses since youth, won this battle. Though unable to return to work, he has progressed remarkably since that time.

Myriad paperwork followed to enable the retirement process to be finalized. Retirement became a reality when Leon Bryant, a life-long friend, and former FAA employee, personally delivered Sterlings' retirement certificate to him.



There have been many inquiries regarding the status of Sterlings' health and how to contact him. Cards and letters can be sent to:

Sterling Foxworth
Sunbridge Care & Rehabilitation For Southern NJ
Two Cooper Plaza, Second Floor
Camden, NJ 08103

Plans are underway to reunite Sterling with his friends and colleagues as a "visitor" to the Tech Center. We are attempting to make this possible during one of the in-house holiday parties. If we are successful, employees will be notified and we can all give him the warm reception he so deserves. ■

FAA's Tech Center on Exhibit

Highlights from the 2002 ATCA Conference



Over 300 exhibitors participated in the 47th Annual Air Traffic Control Association (ATCA) Technical Program and Exhibits, November 3-7, 2002, in Washington, DC.

This conference is a unique opportunity for leaders in U.S. and international aviation organizations, airlines, military, airports, government and ATC industry to discuss the current challenges and new technologies facing the global air traffic control system; as well as demonstrate their newest technologies to enhance the global air system.

Since the events of September 11, 2001, there has been an ongoing commitment to assure the safety and security of the flying public. With the implementation of state-of-the-art security mechanisms and

a new screening process, confidence in air travel is steadily being restored. It is an ongoing process which is necessary to maintain safety, timeliness, and efficiency of the aviation system, which are the priorities of the FAA.

This year, aviation professionals engaged in an intensive forum on changes in air transportation, with discussions on new concepts, programs, and technologies that will promote a resurgence in the aviation community.

FAA's Tech Center was one of several exhibitors this year. Representatives from FAA Logistics Center, NASA, The Boeing Company, Lockheed Martin, Northrop Grumman, SAIC, National Airspace Redesign (NAR), NAV Canada, ITT Industries and Dyncorp, and many others had the opportunity to market their products and services to the most concentrated group of their peers.

Staff members of the Tech Center were in attendance to share with visitors the continued research efforts and advanced technologies that are being developed from our facility.

ATCA founded in 1956 is the oldest independent nonprofit professional society dedicated to advancement of the science of air traffic control and enhancement of the professions associated with the Air Traffic Control System. ■

FAA William J. Hughes Technical Center
"Shaping Aviation's Future."



Centers of Excellence

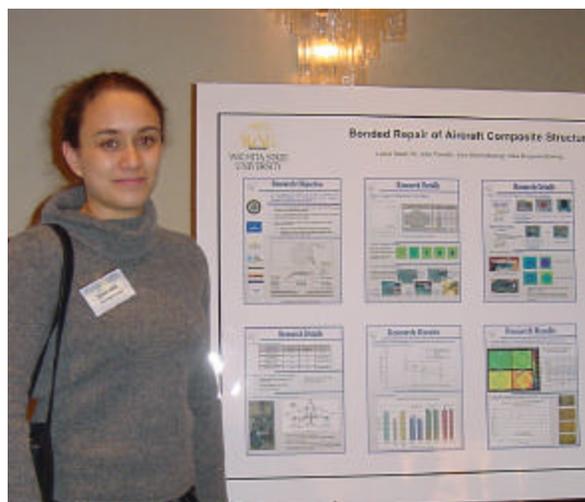
COE 2nd Joint Annual Meeting

FAA Centers of Excellence (COE) industry affiliates, The Boeing Company, Cessna, Bombardier-Learjet, and Raytheon, university partner, Wichita State University, the FAA Office of Airport and Aircraft Safety R&D, and the Central Region co-hosted the COE 2nd Annual Joint Meeting in Wichita, Kansas, October 21-24.

The event drew over 235 participants from across the nation. Guest speakers included CEOs and industry affiliates, FAA senior managers Norm Fujisaki and **Chris Seher**, and members of the COE for Airport Technology (formerly Airport Pavement), the COE for Airworthiness Assurance (AACE), the COE for General Aviation (CGAR), and the COE for Operations Research (NEX-TOR).

Manufacturing plant tours were conducted for more than 200 participants. Panel discussions among VPs, CEOs, industry co-hosts, and academic partners provided in-depth technical reviews during the breakout sessions.

Again this year, COE students presented their work at a poster session, and had the opportunity to meet with industry executives to discuss their research and career goals. Senior executives representing industry served as poster session evaluators and presented model airplanes to the top four students.



Above: A COE student displaying her work.

COE industry affiliates and academic partner, Wichita State University funded the event with the Airport and Aircraft Safety R&D Division (AAR-400). COE Program Managers, Technical Monitors, Principal Investigators, project sponsors, industry representatives and others interested in COE activities attended the 3-day event. Proceedings are being posted on the FAA Air Transportation Centers of Excellence website.

Embry-Riddle Aeronautical University and their industry affiliates is planning to co-host the COE 3rd Joint Meeting next November. Information and registration details will be available on the COE website.

For further information about the COE Program, contact **Patricia Watts**, FAA COE Program Director (AAR-400), patricia.watts@faa.gov, telephone: 609-485-5043, or visit the COE website at www.coe.faa.gov. ■

Process Improvement

A Center-Wide Accomplishment

The William J. Hughes Technical Center is continuing to demonstrate that it is a world leader in aviation technology. The proof was in the certifications. At a recent awards ceremony, held at the Technical Center and presided over by Maudie Powell of ACF, several organizations were recognized for their accomplishments in the area of process improvement.

"This is a great day and is a great opportunity to welcome and congratulate those people that have been involved in process improvement," said Dr. Anne Harlan. "This group, the Tech Center, has done a dynamite job in both process improvement and process re-engineering. This is ultimately going to help us provide better service, better customer support, and ultimately get more business, more jobs and more money into the Tech Center."

The first award went to the office of Operations, Technology and Acquisition's Facilities Service and Engineering Division. More than two years ago, this division embarked on a goal to become ISO 9000 certified by the end of fiscal year 2002. The division was successful in its planning and implementation of a quality system that met the criteria of the ISO 9000-2000 standard. The division passed its certification audit on September 25, 2002.

Another Center division, the Real and Virtual Environment Division, (ACX-800), had been certified ISO 9000-1994. It has unconditionally retained its certification.

One characteristic of process improvement is that an organization has choices. It may choose to use and adapt an established standard or model, or it can develop an approach and processes to meet its specific needs. The latter was the choice made by the Office of Technology and Acquisition. This organization developed the processes for providing support service and resources under the Technical Center's new organizational structure that was implemented in March. The organization developed a Service Liaison Agreement (SLA) between the OTA organization and the customers. The ceremony recognized the signing of the first two SLAs and the many employees who made the milestone possible. The signed agreements are with the Transportation Security Laboratory, (formerly AAR-500), and the Office of Innovation and Solutions, (ACB-1).

The other major achievement reached in process improvement was the result of efforts by the DSR and URET In-service

Management Team, working in concert with the AOS organization. The results of the October 2002 FAM Appraisal found the ISMT had achieved Maturity Level 3 as defined by the FAA iCMM. The milestone was reached two years after the appraisal at Maturity Level 2. Only one other FAA organization has reached this level against the FAA iCMM.

Other projects and organizations recognized for sustaining Capability Level 2 accomplishments against the FAA iCMM include:

- ATOP (ACB-650)
- CTAS (ACB-620)
- SMA (ACB-720)
- CPDLC (ACB-510)
- OASIS (ACB-700)
- Information Technology Division (ACX-20)
- Acquisition, Material and Grants Division (ACX-50) ■





Conversation Corner

We Want to Hear From You.

We are testing out a new design for *Intercom*. We are interested in what you think, not only about the new look, but about content, photos, etc.

Submit comments to Terry Kraus via email: terry.kraus@faa.gov.

Looking Forward

In the next issue:

Tech Center Events
News Around the Center
The CFC
Holiday Activities



A Newsletter of the FAA's
William J. Hughes Technical Center

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