



HORIZONS



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CSSI Welcomes, Promotes New Fellows in Program

CSSI recently expanded its innovative Fellows Program, welcoming several new members and promoting three others.

“Members of the CSSI Fellows Program are experts in their fields of study,” said Cindy Castillo, CSSI CEO. “They represent the knowledge and depth of expertise CSSI offers its partners and customers.”

The CSSI Fellows Program, developed as an adjunct to CSSI’s Research, Engineering, and Analysis Laboratory (REALab), is a corporate initiative that cultivates the intellectual capital and technical resources needed to challenge and expand the practical boundaries of existing technologies.

REALab focuses on knowledge creation, knowledge sharing, and attracting, growing, and retaining technical talent. The Fellows Program provides a unique opportunity for researchers, engineers, and analysts who wish to grow into externally-recognized experts in a domain of relevance to CSSI’s customers.

“This is a truly outstanding group of professionals,” said CSSI Chief Scientist Stéphane Mondoloni, Ph.D. Mondoloni, who leads the CSSI Fellows Program with Mark Rodgers, Ph.D., says the program enables CSSI to maintain a pool of renowned

experts while fostering its next generation of leaders. “We can recognize our employees at various phases of their careers,” he said.

“Members of the CSSI Fellows Program are experts in their fields of study.”

There are several career levels in the Fellows Program. **Fellows** are published, recognized industry research leaders who are relied upon to contribute their special expertise to enhance CSSI’s offerings and competitive strength. **Associate Fellows** are recognized by their peers as the resident authorities in their respective fields. They lead technical efforts, provide technical guidance, and are becoming recognized outside the company for their subject matter expertise. **Senior Researchers** have selected an area of specialization, lead tasks in that area, and are published authors in their specialized fields. They seek to develop their knowledge further through a combination of research and development, course work, and mentoring. **Researchers** are exposed to a variety of tasks, have not yet selected a field of specialization, and are beginning to share knowledge through publications and presentations.

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CEO's Message
Cindy Castillo
Chief Executive Officer

When I came to CSSI a little more than 15 years ago, I didn't know much about my father's business. I was five years graduated from college, born, raised, lived and worked in southern California, and was dealing with the recent death of my father, who founded CSSI 18 years ago.

Taking over the company was a challenge on all fronts. I was learning the ropes as I worked. We – all 10 of us employed by CSSI at the time – had a lot to manage with a new prime contract, staffing up and transitioning in the aftermath of the death of the principal. One thing for certain, we believed in what we were doing, we were eager and anxious to accept any challenge that presented itself and we did it together.

Today, 15 years later, the company and its leadership are considerably more experienced, and CSSI has certainly grown by leaps and bounds. We have a deep bench of experts who are truly the cream of the crop in air traffic management, and we hold contracts on cutting-edge projects with several government agencies. We've worked hard to gain recognition as the leader in our field and many consider us to be the go-to company that can help solve complex problems.

But we refuse to rest on our laurels. Even now, with more than 200 employees on dozens of projects, we maintain the entrepreneurial drive on which the company was founded 18 years ago. We still get excited about the opportunity to accept new challenges, and nothing thrills us more than unveiling a solution that will help our customers work more efficiently and cost-effectively.

As we move forward, we'll maintain the industrious attitude that brought us to this point. And as we congratulate and thank the employees who have been

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Letter from the President

When I began my career, companies devoted a vast amount of time and energy to internal development. Back then, it was expected that a 22-year-old would eventually retire from the company who hired him fresh out of college. Therefore, it made sense for companies to truly foster and develop talent, prepping the best people for executive-level positions.



Times have changed. Now it's common for people to hold 10 or even 20 jobs throughout their careers with many different companies. So it can be difficult for an organization to justify any investment in human capital. In fact, Harvard Business Review recently (and wryly) remarked that most companies are facing the talent-development challenge with a "pretty clean slate: Little in the way of talent management is actually going on in them." The article went on to cite one study's findings, which I found fascinating: fully two-thirds of U.S. employers are doing no workforce planning of any kind.

I found this statistic fascinating because CSSI devotes so much of its time and energy to employee development and workforce planning, evident in this issue of Horizons.

You'll see CSSI's devotion to developing its workforce in its Fellows Program, profiled on the cover page. The Fellows Program feeds our Research, Engineering, and Analysis Laboratory (REALab), a corporate initiative devoted to finding, cultivating and developing the intellectual capital and technical resources needed to challenge and expand the practical boundaries of global air traffic management technologies. These are the people on the cutting edge of the industry, dedicated to finding solutions to tomorrow's problems.

CSSI develops and invests in its workforce in other ways, too. CSSI encourages its employees to further their educations, subsidizing degrees. Additionally, CSSI executives regularly mentor employees, encouraging the next generation of leaders.

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An Annual Antarctic Expedition

Many people go “above and beyond” for their customers, doing things others might not normally do. CSSI employees take customer service to a whole new level by going down below—all the way to Antarctica—for several months each year.

For the past six years, CSSI employees from Charleston, SC have provided unique IT support to the Navy’s Space and Naval Warfare (SPAWAR) Office of Polar Programs (SOPP). The SOPP provides Network Engineering, Air Traffic Control, Weather Forecasting, and Ground Electronics Maintenance to the United States Antarctic Program at McMurdo Station and other parts of the continent. McMurdo Station is an Antarctic research center 2,200 miles due south of New Zealand. The station is the largest community in Antarctica.

The Antarctic expeditions are very cold, as one may imagine, however, on “warm” days, the temperature rises to almost 30 degrees—but it’s a “dry cold.”

In Antarctica, employees live in the bustling “city” of McMurdo, where the population grows to more than 1,000 people during the continent’s spring. Dorm-style housing is provided, and the station’s cafeteria provides breakfasts, lunches and dinners for the residents during their stay.



A CSSI employee was prepared for harsh conditions on his last trip to Antarctica.

A typical journey to the Antarctic lasts four or five months and staff is kept very busy with work typically comprising 10-plus hour days, six days a week. Employees are on call 24 hours a day and in their spare time, they can work out at the McMurdo gym or go bowling—the city actually has the oldest operational Brunswick Bowling lanes in the world. Employees also spend time with the strangers who soon become friends who represent nationalities from all over the world.

CSSI employees Cork Bower and Ryan Pearl will travel to Antarctica this coming season and stay for several months, but not until after they enjoy a warm South Carolina summer. □

Castillo Builds Homes for Habitat

CSSI CEO Cindy Castillo recently visited New Orleans with the Women Aviation Network (WAVNET) to build homes for Habitat for Humanity.

“It was fun, but definitely tough,” said Castillo, who spent several days hammering nails and constructing foundations with fellow members of WAVNET, a group of women executives in the aviation industry.

The group works together to promote women in all aspects of aviation while advancing them in leadership positions. They also regularly participate in charitable activities—like working for Habitat for Humanity in New Orleans.

“We left feeling really tired, but with a great sense that we truly made a difference,” concluded Castillo, of her experience. □



Castillo hard at work building houses in New Orleans with WAVNET.

Employee Spotlight

Capt. Mary McMillan
Vice President



From cook to cattle rancher to jumbo-jet pilot, one thing lies at the heart of Mary McMillan's journey through life: "I've loved everything I've done," she said. "My hobby's always been my job, and my job has always been my hobby."

That was especially true during her career in the airline industry, when "work never really felt like work."

And now, McMillan, a veteran flight captain and well-respected aviation safety expert, brings her 30-year love affair with the sky to CSSI.

McMillan joins CSSI as a vice president. Working with CSSI and the Air Traffic Organization (ATO), McMillan will provide an operational viewpoint of the processes, procedures and capabilities that NextGen and other new technology provide the aviation industry. "Pilots sit at the juncture of technology and operations, and their input is vital to helping us create efficiencies in an over-stretched system," McMillan said. "It's my hope to provide some of that perspective to FAA and the ATO."

Rich and Varied Experience

Few people—let alone few women—can claim experience as rich and varied as McMillan.

Born in Colorado, McMillan lived in California until age 12, when she returned to Colorado to live on the family cattle ranch. While she thought of pursuing a career in flying and perhaps even entering the Air Force Academy, she was ahead of her time. Women wouldn't be admitted to the academy for another six years.

Instead, she forged ahead in the work she knew best, moving to Wyoming to accept a position as a cook on

a ranch. From there, she worked her way up to camp tender, and finally as the overseer of the winter feed operations, responsible for over 16,000 head of sheep and 1,000 cattle.

She loved the work so much that she soon went into business for herself, buying a herd of sheep, horse and cattle and leasing a historic ranch right on the Oregon Trail. "I really thought that was what I'd do my whole life," she said.

Instead, in her extremely limited free time, she began taking flying lessons. She soon set an even loftier goal: to obtain a pilot's license. After all, it would be a great help at the ranch—she could fly to other ranches to inspect livestock for purchase.

But soon, flying part time wasn't enough. After flying as a private pilot for three years, "I woke up one day and knew I needed to try and make this my career," she said. "I didn't want to get to some point in my life and wonder what would have happened if I hadn't tried."

She sold her sheep, obtained advanced ratings, and got a job selling Cessnas for a Fixed Base Operator in Casper, Wyoming. "It wasn't what I envisioned, but it was something," she laughs. While the job was mostly on the sales floor, she had the opportunity to fly cargo planes on the weekend, and to occasionally demonstrate and deliver aircraft to their new owners.



McMillan at the controls of a plane

Soon enough, though, McMillan obtained the hours and the reputation to land a position at a small airline in Phoenix. She was hired as a first officer and became chief pilot within a year and a half.

From there, her ascent in the industry was fast. She worked her way up from ferrying small planes—she once flew a Piper six-seater, alone, from Arkansas to Australia—to piloting jumbo jets for United. She still smiles when she remembers the first time she flew a 747, and called the experience "fabulous."

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McMillan holds ATP and Commercial pilot's licenses, and maintains the distinction of being type-rated in nine different aircraft, including the B747, DC10, B767/B757, B737, Airbus 320 and four turbo-props.



McMillan stands with a United Boeing 757

She also maintains a passion for safety and standards. She was the first woman Standards Captain for United Airlines, a job that involves testing and evaluation of other pilots. She served as a Flight Operations Duty Manager, a position that is jointly responsible for the safe execution of United's worldwide operation. She also worked as the airline's Acting

Director of Flight Safety, and was tasked with writing the first United Airlines Flight Safety Manual.

In addition to positions with the airline, she was the Chairman of the Air Line Pilots Association, Interna-

tional Aviation Sustainability and the Environment Task Force, served on the Age 60 Blue Ribbon panel and fatigue working group, Chairman for the UAL Central Air Safety Committee and a safety representative to the Star Alliance Safety Advisory Group. At CSSI, she intends to put her safety and environmental experience to work, in particular for the FAA ATO-S and ATO-P.

McMillan joined CSSI because of its "attitude, motivation, standards, and the way it interacts with individuals, companies, and industry," she said. Working for CSSI will give her the opportunity to contribute to her profession on a national scale. "I'm very energized about what I'm about to do," she said. "It's very exciting and an invigorating opportunity for me to work within a group of highly motivated, intelligent and positive individuals. It is not only a company with a sterling reputation, but one with heart."

And working with heart, she noted—and well knows—is the most important thing.

For more information about McMillan's work with CSSI, please contact her at mmcmillan@cssiinc.com. □

CSSI, Inc. Supports 2008 Navy and Marine Corps Air Traffic Control Symposium

Representatives from CSSI recently demonstrated high-tech equipment at the 2008 Navy and Marine Corps Air Traffic Control Symposium in San Diego, California, enabling attendees to gain hands-on experience with the latest advances in the field.

The symposium is an annual event where Navy and Marine Corps air traffic controllers from around the world gather to hear motivational speeches and receive first-hand knowledge of the latest air traffic control technical advances. The event commemorated 65 years of the Navy Air Traffic Controller (ATC) rating, and the opening of the first Navy control tower on June 30, 1938, at then, Naval Air Station San Diego. This year's symposium drew over 450 participants.

Guest speakers for the event included top officials from the Navy and the air traffic control industry, to include Admiral Kilcline, Commander Naval Air Forces Pacific; Mr. Gerald F. Pease, Executive Director, DoD Policy Board on Federal Aviation and Mr. Pete Dumont, ATCA President.



Mike Griesman and Kirby Johnson in San Diego, CA.

Many industry partners sponsored exhibits which allowed sailors and Marines to obtain hands-on experience with the newest air traffic control equipment. The equipment ranged from high-definition Tower Simulators, to Multistatic Dependent Surveillance (MDS), to shipboard radar display consoles.

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Bridging the Gap: CSSI-Developed Site Helps FAA Manage Incidents During Emergencies

The Internet has revolutionized the way we share information. But government agencies must focus on their core missions, not developing and maintaining Web sites.

Enter CSSI. CSSI has helped many of its customers bridge the gap between hard-copy file systems and on-line portals by building and maintaining customized, secure Web sites—allowing them to share dynamic information vital to their missions.

Case in Point

Several CSSI professionals recently leveraged their Enterprise Architecture expertise to create a site that enables the FAA to store and manage the contingency plans it needs during critical events. The site—called the Automated Contingency Tool 2 (ACT2)—is an automated, digital library containing contingency plans, supporting documents, policies and implementation procedures. It also catalogs lessons learned from the actual execution of contingency plans.

“September 11th has driven many changes in the way the government handles emergencies,” said Bryan Anschuetz, CSSI SEAG Project Lead, of what pushed the need for the contingency plan site. “ACT2 ensures that plans are up to date, accurate and ready to go as soon as they’re needed,” said Don Embt, CSSI Enterprise Architecture Project Lead.

Something especially unique about ACT2, said Bob Showalter, CSSI SETA-II Program Manager, is how the system monitors information. “It tracks when someone updates facility information and ensures that all fields



Tim Link & Bryan Anschuetz at a customer site.

are populated,” he said. If someone forgets to enter a certain piece of information, the system prompts them to do so. This way, should the FAA ever need to execute a specific contingency plan, “there aren’t any questions,” Showalter said.

FAA employees also log information into the site when a plan is put into action, allowing the agency to immediately track and review what occurs during a critical event. “It allows access to the information necessary to ensure events are handled properly and promptly,” said Anschuetz.

Results

The FAA has leveraged ACT2 on several occasions, including an ATC Zero event in Salt Lake City. Because the system logs information, management had a full report on the incident almost immediately.

“We’re pleased we can offer our customers the tools and technology they need to execute their mission-critical activities,” said Cynthia Castillo, CSSI CEO. □

CSSI Bids Farewell to Chief Scientist

CSSI, Inc. bids farewell to Chief Scientist Stéphane Mondoloni, Ph.D.

Stéphane was a loyal part of the CSSI family for 14 years. Through his dedication and efforts, CSSI was able to grow into a true “Research to Reality” organization, proactive and attentive to customers’ present and future needs. Through his efforts, the CSSI Fellows Program and REALab were born, helping to make CSSI a well-known firm that proactively researches issues, addressing some of our customers’ most difficult con-

cerns. His expertise and knowledge is well-recognized in the aviation research community, and CSSI is proud to have been associated with him for 14 years.

“We wish Stéphane luck as he enters this new phase of his career,” said Al Tiedman, CSSI President. “We know he will be successful in all of his endeavors.” □

Call for Articles

If you would like to submit an article or want us to write about something (or someone), please contact Dawn Hatterer at dhatterer@cssiinc.com. Articles often benefit by adding photos or other images.

CSSI Welcomes, Promotes New Fellows to Program *continued from cover page*

The 2008 Fellows and their areas of expertise are as follows:

- ✦ **Souad Benromdhane, Ph.D.** – Air Quality Impact Assessment: A subject matter expert in the field of environmental health risk assessment (specifically air quality health impacts), Benromdhane has authored more than 20 publications and a book chapter.
- ✦ **Panta Lucic, Ph.D.** – Transportation Engineering: A multiprocessor with many skills, Lucic has worked on AEDT/EDMS, the NASA dynamic airspace configuration NRA, and has produced a preliminary design for a new FAA airport capacity model (promoted from Associate Fellow).
- ✦ **Brian Colamosca** – Airspace Separation Reduction: An internationally recognized leader in airspace separation reduction analysis, Colamosca is the recipient of multiple awards, including the DOT Secretary award.
- ✦ **Bennett Flax** – Collision Risk Modeling: An expert in collision risk modeling and lateral separation by means of collision risk modeling, Flax has more than 30 years' experience in quantitative analyses of multiple areas of air traffic control.

The following CSSI employees have been named Senior Researchers:

- ✦ **Donghai He, Ph.D.** – Stochastic Simulation
- ✦ **Stephen Amato** – Enterprise Architecture
- ✦ **Alfredo Colón** – Aviation Safety
- ✦ **Ashley Nunes, Ph.D.** – Human Factors
- ✦ **Melissa Ohsfeldt** – Transportation Policy
(promoted from Researcher)
- ✦ **Richard Western** – Software Engineering
(promoted from Researcher) ■

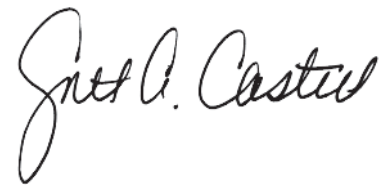
Letter from the President *continued from page 2*

While CSSI executives realize that it's hard to put a hard return on investment on these investments because talent can, in fact, walk out the door, we're willing to take that risk. It's what's best for our employees and our customers, and we look forward to continuing to invest in our people well into the future. ■

CEO's Message continued from page 2

with us for the long haul and who have made CSSI what it stands for today – see the story on the cover – we'll continue to strengthen and grow our impressive team through a number of initiatives like the Fellows Program, the Great Places to Work Committee and others.

My father believed the most important things were: never stop growing, personally and professionally; do what you love and have fun; and surround yourself with people who share the same values. I believe we've achieved this; we're a company that cares passionately about its customers, people and projects. I know my father would be proud.



CSSI Supports 2008 Navy & Marine Corps ATC Symposium *continued from page 5*

Space and Naval Warfare (SPAWAR) Systems Center Charleston, Aviation Command and Control (C2) Engineering Division, displayed equipment installed as a part of the joint DoD/FAA effort to modernize the nation's ATC system, National Airspace Modernization Program (NAS Mod). This year's exhibit displayed the Standard Automation Replacement System (STARS), the Enhanced Terminal Voice Switching System (ETVS), and the Visual Information Display System (VIDS). Air Traffic Control Specialists, Mike Griesman and Kirby Johnson, CSSI employees from Charleston provided onsite training for the stations receiving the NAS Mod upgrades. Griesman and Johnson also provided demonstrations and conducted customer surveys on recent changes to VIDS.

In addition to this support, CSSI is developing the first interactive computer based training for air traffic control operations supporting the U.S. Antarctica Program, providing VIDS Operator training for the Army and developing training requirements for SPAWAR equipment supporting U.S. Air Forces Central Command.

The symposium concluded with an appreciation event (Luau) sponsored by CSSI, ARINC, and SRC for the men and women serving as air traffic controllers in the U.S. Navy and U.S. Marine Corps. ■

CSSI Recognizes Its Long-Term Employees

CSSI recently thanked its long-term employees at a reception, saluting its first-ever 15-year veterans.

“It was really exciting to recognize the people who have been here with us since we started,” said Castillo, CSSI CEO. “These are the people who have made CSSI what it is today.”

The employees recognized at the event included:


15 Years

Chris Blackshear, Mike Broglio, F. Roger Greenawalt, Joe Williams, Tom Mitchell

10 Years

Bob Miller, Jr., Danette Warren

5 Years

Steve Amato, Bryan Anschuetz, Riley Downing, Ron Forde, Noella Gordon, Roy Grimes, Sylvia Hill-Atkins, Stuart Jaeger, Tim Link, Panta Lucic, Ph.D., Betty Pyle, Bill Reed, Kim Tate, Almira Williams, Bobbie Williams 

CSSI is a dynamic engineering, IT, and applied research company providing innovative solutions to very tough and high-consequence problems facing our government customers. What sets us apart from other small businesses is our ongoing investment in technology and an uncommon commitment to truly understand our customers’ needs. With an in-house think tank and a high-level technical team that includes a Chief Scientist, CTO, and CIO, we are moving research to reality, making our tagline very real and part of our overall mission.

CEO Cynthia Castillo

President Allen J. Tiedman

Editor Meg Jones

Publisher Carl Williams

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