Florida Tech TODAY A magazine for Alumni and Friends of Florida Institute of Technology

A ROCKET RENAISSANCE ON THE SPACE COAST | AERO ALTRUISM | SEAWORTHY: A TALE OF TWO SHIPBUILDERS



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COVER PHOTO:

A United Launch Alliance Atlas V rocket launched Jan. 19, 2018 from Cape Canaveral Air Force Station. Photo taken from Panther Plaza on the Florida Tech campus by Mike Brown.

Florida Institute of Technology President Dwayne McCay and First Lady Mary Helen McCay were among dozens of visitors to a new research vessel that will help faculty and students conduct marine research and tackle some of the state's most vexing ecological issues, from hurricane erosion and oil spills to red tide. The R/V W. T. Hogarth visited Ocean Club Marina in Port Canaveral on Jan. 22, the second of 10 visits planned at ports around Florida. Named after William Hogarth, the marine research scientist who served as director of the Florida Institute of Oceanography (FIO) from 2011 to 2016 and was former dean of the University of South Florida College of Marine Science, the \$6 million, 78-foot, coastalclass ship was built at Duckworth Steel Boats in Tarpon Springs. It was launched May 23 and is sponsored in part by Florida Tech. As many as 800 principal investigators from Florida Tech and 30 other Florida universities and institutions that comprise FIO will utilize the Hogarth for data collection, observations and research.

Florida TechTODAY

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PRESIDENT

Dwayne McCay, Ph.D.

VICE PRESIDENT FOR MARKETING AND COMMUNICATIONS Wesley D. Sumner

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PRESIDENT'S MESSAGE



Dear Alumni and Friends,

As most of you know, I'm a self-described old rocket scientist. That's why it has been particularly thrilling to see the resurgence in activity at nearby Kennedy Space Center as private rocketry is getting off the ground in new and exciting ways. From Blue Origin to SpaceX, the future of commercial space flight looks very bright indeed.

No recent activity at the space center better encapsulates this future than Elon Musk's successful

Falcon Heavy test launch Feb. 6, where the most powerful rocket currently in use lifted a Tesla roadster into space as proof of the new system's ability to carry heavy payloads into Earth orbit and beyond. Nothing like the liftoff rumble reverberating from the Falcon Heavy's 27 engines and 5.13 million pounds of thrust has been felt along the Space Coast since the 1970s and the Apollo program's glory days.

This bold era of commercial spaceflight is particularly exciting for Florida Tech, as faculty and student research intersects with this new activity. Our alumni, too, are contributing in meaningful ways to success at Blue Origin, SpaceX, NASA and other areas of this brave endeavor.

The Florida Tech family is proud to be a part of spaceflight's future. We have rocket fuel in our veins. Our motto "To the stars through science" describes who we've always been, and who we remain.



A successful Falcon Heavy test launch took place on Feb. 6.

Sincerely,

Dwayne McCay, Ph.D.

Dwayn**e**/McCay, Ph President



Bino Campanini, Kendall T. Moore, Carl Finerson and President Dwayne McCay

Celebrating the life and achievements of the Rev. Dr. Martin Luther King Jr.

Kendall T. Moore received the Rev. Harvey L. Riley Bridge Builder Award, which recognizes success in community activism and improvement. A Brevard County native and former Rockledge City Council member, Moore has crafted a distinguished legal career.

Carl Finerson was the recipient of the Pioneer Award, named for Florida Tech's first African-American student. A St. Louis, Missouri, native now living in West Melbourne, Finerson served as president of the South Brevard Branch of the NAACP for 14 years.



Florida Institute of Technology conferred nearly 1,000 degrees for its fall commencement ceremonies.

President Dwayne McCay conferred two honorary doctoral degrees. One went to Marilyn Link, who has been a visionary presence on Florida Tech's board of trustees since 1984, where she currently serves as a trustee emerita.

The other honorary degree was conferred on Lawrence Mertens, Ph.D., formerly the chief scientist at RCA and a close associate of Jerome Keuper, Florida Tech's founder. Mertens' son, Thomas, accepted the degree on his father's behalf.



A festive dinner at the Taste of the Season event was followed by our own board of trustees caroling to end the evening.



President Dwayne McCay and First Lady Mary Helen McCay take a closer look at research equipment on the *R/V W. T. Hogarth* during its visit to the Ocean Club Marina in Port Canaveral.

Florida Tech Receives \$246M Siemens Technology Grant

Software Crucial for Developing Advanced Manufacturing Workforce

Siemens has provided Florida Tech with an in-kind software grant that will enable the university to offer students powerful, hands-on learning experiences to better equip them for future STEM careers.

The in-kind grant has a commercial value of more than \$246 million. It is centered on Siemens' industry-leading product lifecycle management (PLM) software, which is used by more than 150,000 companies around the world in the aerospace, automotive, medical device, machinery, shipbuilding and high-tech electronics sectors. More than 75 companies in Florida use the software, including Northrop



At the grant announcement event in October were, from left, Jeff Grant, sector vice president and general manager of space systems at Northrop Grumman; Michael Grieves, research professor and executive director of Florida Tech's Center for Advanced Manufacturing and Innovative Design; President Dwayne McCay; and Tony Hemmelgarn, president and CEO of Siemens PLM Software.

Grumman, whose Manned Aircraft Design Center of Excellence is based in Melbourne.

These companies use Siemens' PLM software—including Simcenter™ and NX[™] software, the Teamcenter® portfolio and the Tecnomatix® portfolio—to design, develop and manufacture some of the world's most sophisticated products, and Florida Tech students across the university's colleges and programs will now be able to use the same programs. "Software is at the core of an ongoing digital transformation that is changing the way our customers approach the manufacturing process, from design to production into service," said Tony Hemmelgarn, president and CEO of Siemens PLM Software. "Through our partnership with Florida Tech, we are helping empower the next generation of digital talent with access to valuable hands-on training with both software and hardware tools. This real-world, project-based learning will offer students the STEM skills they need to succeed in the digital future."

• One of our core values is to prepare students for a lifetime of success, and this grant will offer them the opportunity to learn the cutting-edge skills that will be essential for success in advanced manufacturing.

—President Dwayne McCay

"This is huge," said **PRESIDENT DWAYNE MCCAY**. "One of our core values is to prepare students for a lifetime of success, and this grant will offer them the opportunity to learn the cutting-edge skills that will be essential for success in advanced manufacturing."

The software will be incorporated into student course work and projects related to computer-aided design, engineering simulation, industrial design, digital manufacturing and manufacturing management at Florida Tech's Center for Advanced Manufacturing and Innovative Design (CAMID). Students in the College of Engineering & Computing and the College of Science will also use the PLM software for senior design projects, which simulate real-world applications of design and engineering principles.

Siemens' PLM software will help students collaborate and realize their ideas by supplying accurate information as they move from design through performance engineering and manufacturing. Access to the software, combined with the mentoring offered by Northrop Grumman engineers, will provide students with invaluable learning experiences which could help enable them to tackle the most challenging projects with skill and confidence on "day one" of their first engineering job. The software will benefit students at both the undergraduate and graduate levels. At the College of Engineering & Computing, for example, the software will be used in junior- and senior-level classes in mechanical engineering and bioengineering, as well as by student design teams such as Formula SAE. At the graduate level, the software will be used in the automotive engineering department.

"Having been an industry executive, I am keenly aware that industry needs graduates who are educated using the latest, sophisticated tools and methodologies so that these new employees can be immediately productive," said Michael Grieves, executive director of CAMID and a university research professor. "This software grant will help make Florida Tech graduates highly attractive and move their résumés to the top of an employer's list."

Siemens has nearly 5,200 employees in the state of Florida spanning power generation, transmission and distribution, energy efficient buildings and infrastructure, medical imaging and health care diagnostics technologies. The company's software and hardware solutions have helped automate processes and increase efficiency in areas ranging from manufacturing to city infrastructure, and even theme parks.

ON CAMPUS

SAVOIE READERS

Several alumni wrote in to correct the caption about the Fall 2017 issue cover photo. The diver is wearing a Savoie helmet, not a Miller helmet.

"Love the stories about the Jensen Beach campus and UT program. I'm proud to be part of it! I loved my days at FITJBC. I worked 20+ years as a commercial diver. Left the business 15 years ago to work in local

government and recently retired. One small correction, the guy on the cover is wearing a Savoie, not a Miller."

—Roy Duffield '79

Stephen Nippert '81, the diver in the photo, also wrote in about the helmet. "The Savoie helmet was my favorite. It was cool looking and had great visibility. I sold the wetsuit back in the late '80s. I still have the pocket knife and weight belt that I was wearing that day. I bought the weight belt in Louisiana when I was working for Ocean Tech in Morgan City."



FIT ALUMNI AT THE 147TH ANNUAL MEETING OF THE AMERICAN FISHERIES SOCIETY





Richard Turner (left) with Eric Reyier 'OS Ph.D., Fisheries Biologist, KSC Ecological Program and Integrated Mission Support Services, Kennedy Space Center, Florida

Professor Emeritus Richard Turner and Associate Professor Jonathan Shenker met with several alumni at the event, which was held in Tampa.

- Martha Bademan Guyas '09 M.S., biologist with the Division of Marine Fisheries Management, Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida
- Jesse Blanchard '09, '12 M.S., Ph.D. Candidate, Wetland and Fish Ecology Lab, Florida International University, Miami, Florida Anthony Cianciatto '14. '17 M.S., Research As-
- sociate, Department of Biological Sciences, FIT Jynessa Dutka-Gianelli '10 Ph.D., Postdoctoral Research Associate, Fisheries and Aquatic Sciences Program, School of Forest Resources and Conservation, University of Florida, Gainesville, Florida

Kelli O'Donnell '03, Fishery Biologist, Gulf Fisheries Operations Branch, National Marine Fisheries Service, St. Petersburg, Florida Mark Peterson '81 M.S., Professor, Department of Coastal Sciences and Gulf Coast Research Laboratory, University of Southerm Mississippi,

- Ocean Springs, Mississippi Patrick Pitts '81 M.S. (right), Fish and Wildlife Biologist, Everglades Restoration, South Florida Ecological Services Field Office, U.S. Fish and Wildlife Service, Vero Beach, Florida with Douglas Scheidt
- Jake Rennert '17 M.S. Tomena Scholze '14, Biological Scientist I, Molluscan Fisheries Group, Fish and Wildlife Research Institute, Florida Fish and Wildlife Conservation Commission, Apalachicola, Florida, and Cheree Steward '05 M.S., Fisheries Biologist, Florida Fish and Wildlife Conservation Commission, Bryan, Texas

Swanns Receive Philanthropy Award

Florida Tech Trustee ELIZABETH J. SWANN and her husband JIM SWANN received The Bjorg and Bjornar Hermansen Legacy Award for a lifetime of philanthropy at *Florida Today*'s Volunteer Recognition Awards on Nov. 16.

The award, in its inaugural year, is named in part for another Florida Tech trustee, Bjornar Hermansen, who passed away in 2015. It recognizes those who have demonstrated a lifetime of legacy giving, leadership and support of the Brevard County community.

Elizabeth Swann, known as Jonnie, was named a Florida Tech



Jim Swann and Elizabeth J. (Jonnie) Swann

trustee in 2003. With Jim Swann, she has been instrumental in improving the university and the community for many years. Their numerous philanthropic accomplishments include helping to build the Brevard Zoo and supporting the United Way of Brevard and Cocoa Village Playhouse.



Members of the George Skurla family at the October event, from left, Skurla's widow, Marie Skurla, and their sons George Jr., James and Marty with President Dwayne McCay.

Grumman Retirees Honor Skurla, Florida Tech

Retirees from Grumman Aerospace gathered on campus in October to acknowledge the contributions of their former CEO, **GEORGE SKURLA**, and to honor Florida Tech. Led by Bob Watkins, retired Grumman vice president and assistant to Skurla, the retirees made several gifts to the university, including photographs and paintings chronicling the history of Grumman. One gift was a replica of the plaque that was left on the moon as part of the Apollo 11 mission. The retirees also gifted the university with \$1,000 earmarked for the purchase of Grumman memorabilia to be displayed on campus.

Attending from the Skurla family were Marie Skurla, George Skurla's widow, and sons George Jr., Marty, James and Tommy. The reception was held in Skurla Hall, named in honor of George Skurla, and home to the College of Aeronautics. Skurla was a longtime supporter of Florida Tech, serving on the board of trustees from 1979 until his passing in 2001.

Ask the Archivist

Did you know the Evans Library has six changing exhibit spaces and one permanent exhibit?

Displays are decided through an exhibit committee of library faculty and staff, with input from the rest of the library and through partnerships with the broader campus community. We try to plan roughly a year out but remain flexible to respond to contemporary topics of relevance and interest. Each exhibit has a theme, addresses a point of interest, ties into an event or library-supported initiative, showcases a collection, or highlights work produced by the campus or community. For the exhibits featuring archival material, some collection items lend themselves better to exhibition (items with more color, 3-D items or artifacts, photographs), while others may be more accessible in an online exhibit where people can take the time to explore the content and text of the items. The goal of our exhibits is not only to educate but to raise awareness and engage the viewer. We ask ourselves: is the exhibit interesting, relevant, visually appealing, well-researched? Did the viewer learn something new? Does it tell part of a story that needed to be told? Does it make the viewer think more deeply about the items or topic? We also try to include interactive or multimedia components that invite people to engage with the exhibits and collections in different ways. Fall semester exhibits in Evans Library all centered around sustainability, with the university archives exhibit showcasing the Hydrospace Technical Institute and Jensen Beach Campus featured in the Fall 2017 Special Edition of Florida Tech Today.

ON CAMPUS

Mary Helen McCay Named NAI Fellow

Mary Helen McCay, university research professor, director of Florida Tech's National Center for Hydrogen Research, NASA astronaut alternate and holder of two dozen patents, has been named a Fellow of the National Academy of Inventors (NAI).

McCay, the founding president of Florida Tech's National Academy of Inventors local chapter and an inductee into the Florida Inventors Hall of Fame this year, joins a 2017 class of 155 others from top universities and research agencies worldwide, including CalTech, Massachusetts Institute of Technology, NASA Jet Propulsion Lab and Oak Ridge National Laboratory.

Election to NAI Fellow status is a high professional distinction accorded to academic inventors who have demonstrated a prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development and the welfare of society. I am honored to be named a Fellow with such a distinguished group of women and men. Together the class of 2017 and all past NAI Fellows highlight the far-reaching and positive impact scientists and researchers can have, and I look forward to helping the next generation of pioneers continue to explore and illuminate our world in important ways.



FLORIDA TODAY/Malcolm Denema

I want to help build policy to make cities and/or states, or even at the federal level, more sustainable and more resilient to climate change.

Zach Eichholz '16, a master's student in interdisciplinary science and intern with the City of Satellite Beach, is helping implement the city's sustainability plan, a 49-page document featuring 20 green-achievement target goals for municipal operations over the next five years that he co-authored. Initiatives include solar panels powering City Hall, low-irrigation xeriscaping, electric vehicle charging stations and a community garden—something Eichholz spearheaded at Florida Tech in 2017.

Enriching Research

3-D PRINTED LIGAMENTS FOR INJURED KNEES

MICHAEL FENN, assistant professor of biomedical engineering, and **VIPUIL KISHORE**, assistant professor of chemical engineering, are dual principal investigators on a new National Institutes of Health grant that aims to produce a Bioglass-based material called BioGIMs made by using Raman spectroscopy data translated into a 3-D printed construct that compositionally, mechanically and biologically mimics the ACL connective tissue, which ranges from ligament to bone.



DA

ORS

AME

Mary Helen McCay

SHARING CHEMISTRY RESEARCH ACROSS CONTINENTS

Chemistry Professor **NASRI NESNAS** was invited to give 10 lectures across multiple continents and 15 time zones this summer including destinations in Europe, the Middle East and China. Nesnas shared his work on topics such as how molecules can help explain the way humans think and see, and the ability of light to control brain function. His research on developing light responsive molecules for brain studies is funded by the National Institutes of Health (NIH).



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EXPERT ADVICE: Lobster Season

Florida Spiny Lobster season runs Aug. 6 through March 31, so it's not too late to make your catch. Lobster enthusiast John Brady, chemistry laboratory manager, offers these tips for bagging your bugs

Find them.

You have to find lobster before you can catch them. Being primarily nocturnal, lobster normally hide under ledges during the day. With a good light, search carefully under the ledges, slowly panning the light to expose every nook and cranny. Lobster can hide in crevices only six inches tall. Look for the antennae of spiny lobster, as this is the easiest part to spot.

Choose a technique: Grab, Loop or Tickle.

Once you've spotted the lobster, decide how to capture it. If the ledge is very shallow, and you are absolutely sure the lobster can't back out of reach, simply grasp the lobster anywhere from the base of the antennae to the tail. Never clutch at the antennae themselves, as they break off very easily and the lobster will likely escape. A lobster standing in the open may be snagged with a tail loop, while a tickle stick can be used to coax a lobster to move to where you want them.

Think about strategy.

Many ledges are so deep you can't reach the lobster without a long tickle stick. When you see a lobster in a deep opening, study the ledge to decide where to move the bug to capture it more easily. Maneuver the curved end of the tickle stick behind the tail without touching the lobster, if possible. Move it forward slowly to touch the back of the tail, and the lobster should move forward. Try to do this without stirring up the bottom, or the bug may become hidden in the resulting murk. You can then attempt to move it to an area of the ledge where it will be easier to capture using one of the other techniques.

Confirm it's a keeper.

All lobster must be checked on the underside of the abdomen for eggs and with a carapace gauge



to ensure they meet the minimum legal size requirement immediately after catching them. Place small part of the gauge past the opening on it on the ridge between the eyes. The other end of the opening on the gauge must not extend past the edge of the carapace. If it does, the lobster is too small and must be released. Any bugs which have eggs or are undersized should be placed back under the ledge as carefully as possible to try to avoid injuring them.

Bag basics.

Once you've caught the lobster, keep a firm grip on it. Lobster are very strong for their size and can escape if you relax your grasp for an instant. After spending several minutes catching a lobster, it's very annoying to lose it when trying to place it in the catch bag. If it is a large lobster, turn its legs away from you. Check the bag well before each trip to ensure it is in good condition. A lobster's spines can poke holes in even the toughest material and may cause tears. The handles may also become bent severely enough to prevent them from being closed easily.

A TOP GLOBAL UNIVERSITY

Florida Tech is in the top 3 percent of more than 27,700 degreegranting institutions of higher education worldwide, according to the 2017 World University Rankings. The comprehensive rankings from the Center for World **University Rankings** measure the quality of education and training of students as well as the prestige of the faculty members and the quality of their research-without relying on surveys and university data submissions.

PROTECTING FISHERIES WITH MARINE RESERVES

Five new federal reef fish spawning reserves were enacted from Florida through North Carolina this summer to protect economically important grouper and snapper fisheries. **KEN LINDEMAN**, professor of education and interdisciplinary studies, has spent 15 years on diverse federal and international advisory panels to design these and other reserves while co-authoring research articles to justify protection of spawning areas in the U.S. and Greater Caribbean.



SHARK BIOLOGIST PROMOTES CONSERVATION

TOBY DALY-ENGEL, assistant professor of biological sciences, joined the College of Science faculty this fall from the University of West Florida in Pensacola to focus on research studying shark ecology and how they have changed over the 450 million years they've been on Earth. Through research and outreach, Daly-Engel hopes to raise awareness about these highly evolved animals and their important contribution to ocean ecology. Her expertise and enthusiasm for sharks of all kinds has led to partnerships with television shows produced by National Geographic and Discovery.

ON CAMPUS

Making Mathematical Models for All Things Porous

Recently named a Fellow of the American Institute of Chemical Engineers, Manolis Tomadakis helps propel technology from fuel cells to textiles forward.

MANOLIS TOMADAKIS, head of the chemical engineering department, says the most satisfying part of his research is seeing other scientists and engineers use the mathematical models he created to make improvements to technology in many areas ranging from aerospace to biotechnology.

His work is the fundamental research that forms the underpinnings of applied research in, as he says, "anything porous." And a lot more is porous than might first be imagined. Tomadakis, who was named a fellow of the American Institute of Chemical Engineers this summer, builds advanced computer code. He develops mathematical models, computer simulation



Manolis Tomadakis

methods and algorithms for estimating mass and energy transport, reaction and the nuclear magnetic resonance properties of porous, fibrous and composite materials. We encounter these in a variety of modern technology applications and biological systems.

Mathematical modeling helps to understand in more depth why something happens as it does. It creates the root of a process to guide researchers in the right direction for their experiments. "Most rewarding is when my work is applied in various R&D studies that contribute to technological advances and make a positive impact on our lives," Tomadakis says.

Tomadakis has witnessed his models and simulations tested, validated and applied by many other scientists around the world. He has seen applications in the U.S. space program, automobile industry, geochemistry, radiation oncology, biology, medicine and biotechnology. The definitive honor for him is citations. When other scientists apply his research to their projects and credit his published work, he knows that "what we discovered on the computer is valuable and helps technology move forward." Tomadakis has earned hundreds of citations from other researchers. He has had feedback from NASA, crediting him with positively affecting the properties of space shuttle tiles, made of fiberreinforced composites.

His work has also advanced nuclear magnetic resonance applications in oil extraction—assessing in real-time the feasibility of extracting oil from porous rock. Creating reliable models saves time and money, eliminating the need for extensive experimentation. The ability to understand and predict the molecular transport and surface interactions in fibrous porous materials is valuable to the broader fields of textiles, filtration, paper, fuel cells and tissue engineering, for example.

Today, hundreds of fuel cell researchers, including General Motors, use Tomadakis' models for the transport properties of fuel cell gas diffusion media in hybrid cars and other alternative energy systems. The models he and his graduate students create, however, can only be known and used if they are published. It is his challenge to make time for that, while also meeting the day-to-day demands of heading one of the university's fastest-growing departments.

"As much as I love the educational and leadership aspects of my job, I cannot imagine my professional life without research."

Campus Highlights

LOW-DEBT LEADER

Florida Tech is the top private university in Florida and among the highest ranked private institutions in the country for the low amount of federal loan debt accrued by its students, according to a new list from *Forbes* magazine.

A FAST-GROWING U

Florida Tech is ranked No. 11 of the 20 fastest-growing U.S. colleges in *The Chronicle of Higher Education Almanac 2017*. The ranking is based on 2005–2015 enrollment data collected from private nonprofit doctoral institutions. The listing notes that Florida Tech had a fall 2005 enrollment of 4,745 and a fall 2015 enrollment of 6,631, a 39.8 percent increase.

A CLOSER LOOK AT

Last year, Florida Tech, the Brevard Zoo and Brevard County partnered to create the Living Shoreline project in an effort to restore oyster beds to the Indian River Lagoon. The research project was funded by the State of Florida Department of Economic Opportunity (DEO_ Grant #HL037).

Over the years, over-harvesting, pollution and coastal construction have wiped out huge numbers of oyster beds, which act as natural reefs that help block wave energy and prevent shoreline erosion. Oysters themselves act as living filters, removing impurities from the water naturally, efficiently and constantly.

The first Living Shoreline project was established along a section of the lagoon in Indialantic, which will serve as the model for future oyster reef build-outs in other parts of the estuary. Here is a closer look at the project:



Living Shoreline Research

MODELING & SIMULATION

Robert Weaver, associate professor of ocean engineering (second from left), and his students perform physical model simulations of oyster reef breakwaters and revetments at Florida Tech's Coastal Engineering Lab to establish the design and performance of the engineered structures. The reefs are made from long, aquaculture-grade mesh bags filled with real oyster shells that attract oyster larva to attach and make a home there.







Volunteers turn bags of oyster shells into a structure engineered by Florida Tech to lure oyster larva and serve as a barrier to shore erosion.



CONSTRUCTION & DEPLOYMENT

Last summer, volunteers placed the engineered breakwaters and revetments into the lagoon near the shoreline where they should collect enough living oysters and other creatures to help prevent further erosion along the banks. The oyster reefs work by dissipating incoming waves and diminishing the waves' power to pull sediment from the shore.

"The installation was a great opportunity to see coastal engineering and community engagement in action," said Weaver.

ON CAMPUS



Remembering Harry Weber

HARRY WEBER, professor emeritus and longtime university advocate, passed away on Nov. 11, 2017.

He arrived at Florida Institute of Technology (then, Brevard Engineering College) in 1966 to head the department of electrical engineering. Among his numerous university accomplishments are winning accreditation for electrical engineering and acquiring a \$250,000 National Science Foundation grant that enhanced laboratory and classroom space on campus. Within a decade of his arrival, he was serving as dean of both Florida Tech's graduate school and its School of Sciences and Engineering, and in 1980 he was named vice president of academic affairs.

"Harry Weber's vision, intelligence and zeal contributed much to transforming a fledgling college into a world-class university," said university historian **GORDON PATTERSON**.

After his retirement, Weber devoted countless hours of service to the university. He was the force behind the creation of the Florida Institute of Technology Professors Emeriti and worked tirelessly to preserve the university's history. The Harry P. Weber University Archives, opened in 2014, was named in his honor.

"He was more than the namesake for the archives he was an ally, an advocate and a friend. We will all miss him very much. His unfailing cheerfulness, his indomitable spirit and his passion for the history of Florida Tech will continue to inspire us as we work to preserve the memories he left us," said university archivist **ERIN MAHANEY**.

Faculty Member Honors Wife with Study Abroad Endowment

WILLIAM GABRENYA,

a professor in the School of Psychology, has established an endowment to support students wishing to study in Taiwan.

The Yue-Eng Gail Wang Study Abroad in Taiwan Fund honors Gabrenya's wife, who passed away in 2011. It was established in hopes of increasing American students' knowledge of Taiwan by encouraging them to study abroad there at any of several universities. Gabrenya said he hopes the fund will foster a greater appreciation of Taiwanese

society and culture in its future beneficiaries while also providing them an opportunity to learn its languages and develop

enduring friendships and connections.

"We are honored that Dr. Gabrenya has chosen to recognize his wife, a Florida Tech alumna, in this special way," said **PRESIDENT DWAYNE MCCAY**. "What is particularly wonderful about this fund is that it builds on Florida Tech's place as a national leader in international education while also building on the university's early connection with Taiwan that was established by our founding president, Jerome Keuper."

Born in Taipei, Taiwan, YUE-ENG graduated first in her class in history at National Taiwan University in 1970. In 1979, she earned a Ph.D. in cultural anthropology from the University of Missouri-Columbia. She received a master's degree in computer science from Florida Tech in 1987 and had a successful, 17-year career at Harris Corp. as a software engineer before retiring in 2010.



The Yue-Eng Gail Wang Study Abroad in Taiwan Fund will launch this year. Students interested

in the program may contact Heather Wautlet, director of study abroad, at hcudmore@fit.edu.

Those interested in contributing to the fund may contact Gary Grant, vice president for development, at ggrant@fit.edu or visit give.fit.edu/pantherfund and designate the "Wang Taiwan Study Abroad Fund."

ON CAMPUS



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Crossword Clue Reboot

Florida Tech yet-again graced the *New York Times* crossword puzzle. Cited on the paper's "Crosswords & Games" blog among the "Tricky Clues" section, the correct answer to 33 Across "University in Melbourne" did not involve the country of Australia, but our very own Florida Tech.

Panthers Pledge for Day of Giving

More than 1,700 Florida Tech alumni from around the world donated toward the university's 3rd annual Day of Giving on Nov. 28.

STEM Schools We Love" section.

Donors from 53 countries pledged more than \$149,000 during the 24-hour fundraising event, held in conjunction with the international effort known as Giving Tuesday. Introduced in the United States in 2012, Giving Tuesday, which follows Black Friday and Cyber Monday, is a day of international philanthropy benefiting nonprofit organizations.

The leading recipient at Florida Tech was the Athletics Department, which had 821 donors and \$78,000 in gifts. Other recipients included the university's five colleges, the Panther Fund, Evans Library, WFIT FM-89.5, the Botanical Garden, University Museums and weVENTURE.



The money raised will support Florida Tech's greatest needs, including financial aid, research and student activities.

The importance of participation goes beyond any particular amount of money raised. No matter the size of individual donations, the level of alumni participation overall is a key factor in how organizations, including the influential ranking publication *U.S. News & World Report*, perceive the success of a university and how they ultimately rank it.

"We asked our global network of Florida Tech Panthers to step up, and they did in a major way," said **BINO CAMPANINI**, vice president of alumni affairs. "We are so thankful for their generosity and so proud to have alumni who value their alma mater and appreciate the impact it had on their lives and the impact it will have on so many future lives."



Florida Tech seniors Evan Enders and Jan Hlavica were named CoSIDA Second Team Academic All-Americans, becoming just the second and third men's soccer players, and third and fourth male student-athletes to receive the honor. FIT has now produced eight Academic All-Americans in the school's 60-year history. Enders holds a 3.93 GPA in electrical engineering, while Hlavica, a business administration and management major and a member of the Delta Mu Delta Business Honor Society, is one of 13 men's soccer Academic All-Americans maintaining a perfect 4.0 GPA.





Florida Tech reached a historic milestone for the women's soccer program, as the Panthers were crowned Sunshine State Conference Champions after a battle that endured until the shootouts. FIT clawed the title with a 4-2 victory over the Tampa Spartans. The win marked the programs first-ever conference title and granted FIT an automatic bid to the NCAA Division II South Regional Tournament. It was the fifth NCAA appearance for the Crimson and Gray within the past 10 years.

After finishing fourth overall at the NCAA South/SE Super Regional, the FIT Men's Golf team qualified for the NCAA National Championship for the first time in program history. Playing the national championship at the Reunion Resort in Kissimmee, Florida, the Panthers sat in fifth after three rounds of stroke play and earned the chance to compete for the NCAA Title in match play. The men's golf team faced SSC rival Lynn in the quarterfinals of match play but was unable to knock off the eventual national runner-up, falling to the Fighting Knights 3-1-1. Two golfers, Max O'Hagan and Shanren Brienen, were recognized as All-Americans at the conclusion of the season.



FLORIDATECHSPORTS.COM



As the No. 1 ranked team in the nation, Florida Tech took home both the Varsity Eight and Sunshine State Conference Team Championship. The Panthers completed the day with an accumulation of 16 points, besting their closest competitor by four. In the Varsity Eight event, the Panthers' shell flew through the finish line with a time of 6:40.57, pacing at a comfortable 34 stokes per minute most of the way. With the victory, the Panthers earned their program's sixth SSC Championship, with the last time occurring in 2005.

After an impressive 2017 campaign, Florida Tech's Varsity Eight received an at-large bid to the 2017 NCAA DII Women's Rowing Championship. The Crimson and Gray took the No. 3 seed in the NCAA Championships. During the Grand Final of the 2017 NCAA DII Women's Rowing Championship, Florida Tech finished in third place in a regatta that hosted top competitors Central Oklahoma, Western Washington and Mercyhurst. Florida Tech finished the 2000-meter course with a time of 7:04.88 to earn the bronze medal.



Recent FIT graduate Brittany LaPadula had a remarkable run into and during the 2017 NCAA Women's Golf Championships in spring 2017. The All-Sunshine State Conference First Team selection finished second overall at the NCAA South Super Regional Championship and earned a spot in the national championship at Findlay Country Club in Findlay, Ohio. Sitting at 20th on the leaderboard after the first two rounds of the championship, the senior posted the best score over the final two rounds and finished seventh overall. LaPadula was named a First Team All-American following the conclusion of the national championship. After recording a program-best 13-3 regular season record in 2017, the Florida Tech women's lacrosse received its first-ever NCAA Tournament bid as the No. 6 team in the south region. Guided by SSC Coach of the Year, Corinne Desrosiers, the FIT picked up its first NCAA Tournament victory defeating No. 3 seed East Stroudsburg 17-10. After taking down the Warriors, the Panthers fell to No. 2 Florida Southern in the quarterfinals, ending their postseason run. After leading Florida Tech in its historic



season, Sara Grenier and Allie Modica were named All-Americans. Grenier earned Second Team All-American honors, while Modica became the first player in program history to be named a First Team All-American.



HOSTED BY: Florida Tech Women in STEM Group

Girls in Engineering, Mathematics & Science CAMP

Encouraging and inspiring the next generation of female STEM professionals



July 9–13, 2018

A HANDS-ON STEM SUMMER CAMP FOR:

Female students entering 7th–8th grade (Group 1) and 9th–12th grade (Group 2)

CAMP FEE:

- Commuters: \$400
- Non-commuters: \$1,200

Campers will be exposed to cutting-edge applied research in areas such as:

- Marine Science and Coastal Engineering
 Chemical Engineering and Systems
- Electrical and Computer Engineering
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- Mechanical and Aerospace Engineering
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 & Aviation

Students will engage with a broad range of STEM topics, including jet engines, programming, coastal sampling, graph theory, applied statistics and mathematical modeling, as well as lab experiments and field trips.

FOR MORE INFORMATION:

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ONE BIG QUESTION with Lisa Steelman

Do we need more leaders?

Maybe you have heard it. There is a shortage of leaders. The baby-boomer generation is retiring, and the younger generations are ill equipped to fill vacant leader positions. These reports imply that what companies need are a few superheroes to fill the top positions. However, we don't need more leaders to fill top positions, what we DO need is more leadership throughout our organizations and within our communities.

Leadership is about behavior, regardless of a person's title or where they fall in the company hierarchy. As organizations face new and unfamiliar challenges, success depends on increasing the frequency of leadership behavior from individuals and teams across the organization. So, instead of isolating a small group of superheroes, the challenge is to understand and unleash the largest source of leadership potential—the entire workforce of heroes.

Successful organizations do this by developing current employees rather than recruiting leaders from the outside. Companies can deploy a variety of approaches to increase the leadership skills of rising talent including proactive coaching and mentoring, seminars and skill development projects (aka "stretch" assignments). In fact, research shows that the most effective leadership development occurs from participating in challenging work assignments. Companies that are willing to absorb some risk by offering challenging on-the-job learning opportunities reap the benefits of leadership growth, employee engagement and retention of top performers.

Our research reveals some compelling numbers. We found that only 25 percent of respondents from over 200 organizations worldwide believe the overall quality of leadership in their organization is high. Leadership skills commonly identified as business critical by organizational leaders include retaining and developing talent, managing complexity, leading change, and having an entrepreneurial mind-set. In our research, we find that fewer than 50 percent of organizational members felt "very prepared" to address any of these challenges. Employees are not confident in their leadership skills. Even more compelling, women report significantly lower confidence in most leadership skills than do

men.

Formal training and development programs start employees on the path to develop these skills, but on-the-job learning opportunities ultimately solidify and refine the skills. When combined with feedback, coaching and mentoring, on-the-job learning will activate and accelerate leadership potential in individuals and within teams. This will fill a company's pipeline with "ready now" leaders.

The lessons are clear, successful organizations don't hire a few superheroes to fill leadership positions, they unleash leadership heroes across their entire workforce through challenging job assignments coupled with feedback and coaching. We don't need more leaders, we need more leadership!

> Lisa A. Steelman is a professor of industrial/organizational psychology and senior associate dean in the College of Psychology & Liberal Arts. The college offers a master's degree in organizational leadership. Her research interests include feedback processes, employee engagement and women's leadership.



A Rocket Renaissance on the Space Coast

A renewed spirit of interstellar discovery is taking shape on the Space Coast—a growing energy toward commercial space innovation and entrepreneurialism that is being fueled in part by the work of Scott Henderson '88 M.S., orbital launch director for Blue Origin. The private company is developing reusable rocket engines and launch vehicles that will dramatically lower the cost of access to space to support a vision where millions of people are living and working in space.

Beginning in 2014, Henderson led Blue Origin's site search for its orbital launch complex, which would serve as the home to its orbital launch pad and a 21st-century manufacturing facility. After a two-year, multi-state evaluation process, the company landed on the Space Coast.

"There's a certain cache about the Space Coast and its historical gravitas," explains Henderson. "It's where space happens in the U.S."

Indeed, there's something poetic about the next chapter of space innovation launching from the very foundations of its early explorers. Blue Origin's New Glenn rocket, named for pioneering astronaut John Glenn, the first American to orbit the Earth, will launch from a pad erected at the site of three former Atlas launch pads at Cape

Canaveral Air Force Station.

Blue Origin's 750,000-square-foot rocket factory is located just outside the gates of the Kennedy Space Center (KSC) in Exploration Park. Production of New Glenn will take place in this stateof-the-art manufacturing facility, with a first launch targeted for 2020.

While other rockets that launch from Cape Canaveral are built elsewhere, Blue Origin's orbital launch operations—everything from manufacturing to launch and recovery—are all

on the Space Coast, producing, partnering and launching a new era of space commercialization in Brevard County.

"Similar to the way Silicon Valley is the core for all things internet, Brevard County could be the nexus for the future of commercial space," says Henderson. "Where everybody goes because it's where the talent is, it's where the creativity is, it's where modern manufacturing is taking hold, it's where the regulatory environment is good, and it's a place where people want to live."

Henderson himself has enjoyed a prestigious, multisector career on the Space Coast. After earning his undergraduate degree in astronautical engineering from the U.S. Air Force Academy, he spent 26 years in the military. His stint culminated as the commander of the 45th Launch Group at Cape Canaveral Air Force Station where he led the team responsible for assembly, integration, test and launch of all Air Force and national security satellites. He transitioned that expertise into civilian space systems development at SpaceX and Raytheon before joining Blue Origin.

It was at KSC that Henderson learned about Florida Institute of Technology (FIT) and began his graduate studies in engineering management in the late '80s.

"FIT is known for its high-quality technical education, and I chose the university because of that technical depth," says Henderson. "Plus, there was a tight linkage between FIT and the Space Center, so it was kind of a natural choice."

That technical prowess and industry connectivity has forged another natural collaboration between Henderson and Florida Tech. Through growing partnerships with FIT's Center for Advanced Manufacturing and Innovative Design

Similar to the way Silicon Valley is the core for all things internet, Brevard County could be the nexus for the future of commercial space.

orbital launch director for Blue Origin

(CAMID) and other university programs, Blue Origin hopes to complement its workforce and technology development initiatives.

CAMID helps U.S. companies advance their capabilities in globally competitive manufacturing methods while ensuring students are exposed to next-generation technology and ideas. CAMID's applied research initiatives include implementation of the Digital Twin, design for quality/cost in additive manufacturing, development of secure IOT

communication and the incorporation of augmented/virtual reality into design and production processes.

"We've reached out to the university as a partner to ensure that we communicate to the best and brightest," says Henderson. "I fully expect we're going to have FIT interns at Blue Origin very soon."

Henderson's Panther pride also runs in his family. His son, Will, earned his undergraduate degree in chemistry in 2016 and is currently pursuing a Ph.D. in chemistry at the University of Florida. In his spare time, Henderson can be found at the Merritt Island Airport assisting his wife Sarah, a former Air Force pilot, who is building an experimental aircraft.

"It really feels like a new sense of energy," he says. "Blue Origin is proud to help rekindle the excitement that was here back in the space heyday. If I can pass on that sense of wonder and pride of working in the space community to FIT students and graduates, then I am doing my part as an alumnus."

—Christena Callahan



Devastation on the outskirts of San Juan on approach to the airport.

Aero Altruism Alumni Collaborate for Puerto Rican Relief Efforts

n late September, Hurricane Maria hammered Puerto Rico at nearly Category 5 strength. With maximum sustained winds of 155 mph, it was the most powerful storm to strike the island since 1932. For more than 30 hours, the gales lashed the island—snapping trees, toppling buildings and destroying already battered and delicate infrastructure. It plowed ashore near the southeastern town of Yabucoa and traversed to the northwest, sparing nothing in its path.

In the face of such largescale destruction, traditional logistics-interior roadways, the island's two international airports and communication channels in general-were in chaos. MIGUEL ESTREMERA '98, a native of Puerto Rico with many family members on the island, learned from JEFF CIARCIA '11 that air traffic controllers in San Juan, among them former classmate TONY BAEZ, were living at the ATC facility because their homes were destroyed. Their generator had exploded, crippling an

already precarious operation to safely navigate relief efforts into the area. And food and water were dwindling.

Determined to help bridge the gap and get resources and medical supplies to those in need, Estremera, a Newarkbased United Airlines pilot, sparked a humanitarian effort that inspired not just the Florida Tech community but the larger Melbourne area as a whole.

The effort began by mobilizing his College of Aeronautics (COA) family.



Mike Antalffy, Issac Silver, Miguel Estremera, Victoria Dunbar and Fin Bonset

(Far right-top)

President McCay works with volunteers to load the Citation jet during the first relief mission.

(Far right–bottom)

Student volunteers from the Caribbean Students Association, Collegiate Aviation Business Executives and Falcons Flight Team





Volunteers line up to load supplies aboard the private jet of actor/comedian Tyler Perry, who donated his aircraft to help during the second mission.

FINDING AN AIRCRAFT

One of Estremera's first calls was to friend and fellow alumna **JO DAMATO** '97, who put him in touch with the PALS Sky Hope Disaster Relief Program.

Damato was a founding member of Sky Hope, which formed in 2010 to help connect business aviation with humanitarian relief efforts. The organization had recently merged with PALS, or Patient AirLift Services, to form a more comprehensive network dedicated to providing support during emergencies and urgent situations.

"PALS Sky Hope had some assets they were trying to get to Puerto Rico, but they were in need of supplies to put on the airplane," said Damato. "Miguel had a lot of supplies that needed transport, plus first-hand knowledge of the needs through his family and other personal contacts."

Through her position with the National Business Aviation Association, Damato has many contacts in the industry.

"A lot of what I try to do is be a matchmaker," said Damato. "In business aviation frequently, we have airplanes operating empty on one of their legs. Any time we can take advantage of an airplane that might have unused capacity and the owner/operator is willing, especially for charitable purposes, it's really great to help people—who couldn't find each other otherwise—be able to start collaborating and do amazing things, like what Miguel did."

COORDINATING THE CARGO

With a Citation jet and pilot secured, through the partnership of PALS Sky Hope, Estremera got on the phone with more COA friends. **MIKE ANTALFFY** '01, who lives in Houston, agreed to donate \$30,000 toward the purchase of generators and supplies for the mission, but the team needed ground support.

Enter **FIN BONSET** '96, '99 M.S.A., College of Aeronautics Alumni Association (COAAA) president.

At daybreak on Sept. 27, while at the beach for an early morning surf, Bonset answered the call.

"Miguel said he had a flight coming in to Melbourne at 12:30 p.m., but we needed to get supplies to load up the plane," said Bonset. "'Can you rally the COAAA troops and see who can help?'"

So Bonset alerted the COAAA network, through a combination of social media and a good old-fashioned phone tree, who responded in force.

"We all went and plundered Walmart at 9 a.m.," said Bonset. "We had 10 carts full of supplies, from diapers to water to generators."

The excitement was tangible; the benevolence contagious. Staff at Walmart donated a gift card toward the purchases, while other shoppers spontaneously pitched in too.

After a second stop at Causeway Mowers for more generators, the caravan arrived at Orlando Melbourne International Airport (MLB) with nearly 4,000 pounds of supplies. Loaded down and fueled up—with jet fuel donated by the Florida Tech College of Aeronautics—Estremera and pilot/aircraft owner Paul Weissman set course for San Juan.

With additional COAAA support—thanks to connections made by **MILTON ALVIRA** '16 and **MICHAEL SANTANA** '16, '17 M.S.A.—they received the necessary ground clearance, a challenge for a civil flight in a disaster area, and arrived in San Juan by 3:30 p.m.

"This flight was crucial in the beginning of the overall Puerto Rico relief effort," said Bonset. "By getting needed supplies to air traffic controllers in San Juan, they were able to maintain open airwaves for safely handling aircraft in and out of San Juan's airspace."

The support could not have come a moment too soon.

Estremera was shocked at the situation he encountered when he arrived.

"Buildings knocked down, hangars knocked down, the FBO itself looked like what I would describe as the fall of Saigon," he said. "There were probably 250 people in a building designed to hold maybe 30 to 40. People just trying to get out. Families, children, the elderly the line wrapped around the building."

EXPANDING THE MISSION

As word spread about the success of the first mission out of Melbourne, Estremera *Continued on page 22*

Continued from page 21

received a call a few days later from representatives for actor/ comedian Tyler Perry, who wanted to donate his private jet toward the cause.

In the meantime, **CARLOS CEREZO** '96, a JetBlue pilot who had weathered the storm at his home in Aguadilla in western Puerto Rico, had safety evacuated to Palm Bay the following week and had donated generously to the first mission, was eager to funnel additional relief to Aguadilla.

"I knew the local hospital was in dire need of supplies," said Cerezo. "They were pretty much in shut-down mode."

A friend, the president of the hospital's board of directors, was able to put Cerezo in touch with the facility's medical director who provided a list of needs. The effort required a lot of

phone calls and a little luck.

"Honestly, it was an ordeal to try to get ahold of them," explained Cerezo. "Cell phones weren't working. There was only one functioning landline at the hospital, in the ER. It was really a challenge. If they were close to the wifi antenna, I could reach them then."

With his local connections, Cerezo assumed the role of Aguadilla ground coordinator, while Estremera managed the flight logistics and Bonset arranged another supply run in Melbourne.

Tyler Perry's jet, an Embraer 190, 90-passenger converted private jet—a much larger aircraft than the Citation used on the first mission—was scheduled to arrive at MLB on Sept. 29. Bonset alerted **GREG DONOVAN** '91, MLB executive director, who pledged the full support of his staff and facilities.

"Our airport has extensive capabilities, including the runway length and specialized equipment to facilitate the largest cargo aircraft flying today, so MLB is fully dedicated toward helping the ongoing disaster relief efforts from the air for the people of Puerto Rico," said Donovan. "Teaming up with FIT students, alumni and staff to make things happen and provide logistical support shows how we can quickly come together to provide for others."

By that afternoon, nearly 100 volunteers were stationed at the Atlantic Jet Center—including president **DWAYNE MCCAY**, COA student groups, faculty, staff and alumni—to help load nearly 7,000 pounds of relief supplies bound for Aguadilla and San Juan. The flight also transported a team of doctors to the area, while helping other ill and elderly Puerto Ricans return to the continental United States for medical care.

Overall, Bonset explained, it was a collection of great people who came together to make a real difference. Something Dean **KORHAN OYMAN** says is unique to the College of Aeronautics.

AN EXTENDED FAMILY

"Activities like this only happen in the College of Aeronautics," Oyman says. "We are the only college on campus to have our own alumni association. Our alumni are very active."

Assistant Dean **VICTORIA DUNBAR** '15 Ph.D. concurs. "It sounds cheesy, but we are like a family," she says. "It's a culture, and our students see it. They see the faculty working together. They see the connection. When they graduate, they want to participate."

And participate they do. Each member of the mission agrees.

"The really neat thing about the College of Aeronautics is it celebrates the multigenerational nature of our alumni legacy," says Damato. "There's nobody I've encountered—from back in the late '70s graduates to now who doesn't feel like they're a part of that thread."

"Aviation professionals, who are also FIT alumni, are in key positions at major airlines, airports and other responsible roles necessary for completing





(Top) Fin Bonset, president of the College of Aeronautics Alumni Association, and Greg Donovan, MLB executive director

(*Middle*) Carlos Cerezo speaks with a CNN reporter about the mission. (*Bottom*) Air traffic control families evacuated from San Juan to Fort Lauderdale on the return leg of the first mission.



Sept. 20 Hurricane Maria hits Puerto Rico.

<u>Sept.</u> 25

Miguel Estremera, through the help of Jo Damato, connects with the PALS Sky Hope Disaster Relief Program to secure an aircraft for a relief flight.

Sept. 27

6:30 a.m. Estremera calls Fin Bonset to rally ground support for a relief flight coming in to Orlando Melbourne International Airport (MLB).

9 a.m.

Bonset, along with student groups and community volunteers,

"We all have a common thread—a quality education that taught us at the beginning of our careers to lead when called upon—and now we are putting it into action."

Greg Donovan '91, MLB executive director



missions such as this," says Donavan. "We all have a common thread—a quality education that taught us at the beginning of our careers to lead when called upon—and now we are putting it into action."

The outcome has been as heartwarming for the volunteers as it was for the beneficiaries.

"I'm very proud to be a part of the alumni association, and I'm very thankful for these relief flights that helped my island," says Cerezo, who returned to his home in Aguadilla two months after evacuating. He says things are getting better, slowly but surely. At the time of this writing, the local hospital was still operating at half-capacity due to the extensive storm damage, and Cerezo's home was still without power.

"It was an honor and a privilege to help," says Bonset. "The experience was incredible, and I just can't thank people enough."

EVER-READY TO AID

Since these initial missions, Estremera has coordinated several others, primarily out of West Palm Beach or the New England area. He has volunteered as PALS Sky Hope's mission coordinator on a total of seven flights to aid Puerto Rico. As the pace of recovery has improved, ongoing missions have focused primarily on medical evacuation for critically ill Puerto Ricans. While Estremera has no longer needed direct involvement from his COA family, he knows they are just a phone call away.

"If I called them up and said, 'hey, a day from now, I'm running a mission out of Melbourne' or 'I need you to do x, y and z,' they would do it without thinking twice," he says. "I think that's the important piece to the Florida Tech saga. The network is ongoing. Whatever it may be—from a hurricane relief effort to something much smaller—that aero network comes together to make it happen."

Christena Callahan

Special Thanks

Alumni, faculty, students and community members who supported the effort included:

Milton Alvira '16 Mike Antalffy '01 Millie Bee Fin Bonset '96, '99 M.S.A. Kim Brose of Atlantic Jet Center Carlos Cerezo '96 **Causeway Mowers** Jeff Ciarcia '11 Jake Cooper '96, '99 M.S.A. Michelle Cooper '99 Ishmael Cremer, '09, '15 Ph.D., COA assistant dean Cari and David Curri of Curri-Kirschner Properties Jo Damato '97 Greg Donovan '91 Victoria Dunbar, '15 Ph.D., COA associate dean Maarten Edwards '17 Miguel Estremera '98 Falcons Flight Team Florida Tech Caribbean Students Association Florida Tech Collegiate Aviation Business Executives Florida Tech Women in Aviation Cliff Graham Joe Harris and the staff of Morgan Financial Rob Himler '14, '15 M.S.A. Nicole Himmelroeder of Coconut Cafe Dwayne McCay, Florida Tech president Pauline O'Connor '04, '06 MBA Orlando Melbourne International Airport Korhan Oyman, COA dean Michael Santana '16, '17 M.S.A. Rori Shonk '04 Issac Silver, '06, '13 Ph.D., deputy executive director of FIT Aviation **Ben Siwinski** '95 Stephanie Siwinski '96 Walmart in Indian Harbour Beach Milo Zonka '95

gets supplies and generators from Walmart and Causeway Mowers. Funds are donated by Mike Antalffy, alumni, local businesses and community members.

12:30 p.m.

Estremera arrives with pilot/aircraft owner Paul Weissman in a Citation jet (10–12 passenger capacity). Alumni, student and community volunteers load nearly 4,000 pounds of supplies, and the College of Aeronautics donates the jet fuel for the mission.

3:30 p.m.

Estremera and Weissman arrive in San Juan (SJU).

Sept. 29

Morning Word spread through PALS Sky Hope of the success of the first Melbourne mission, prompting a call from Tyler Perry's representatives offering his private jet.

Evening

Estremera alerts Bonset who alerts the COAAA network and coordinates a supply run to Sam's Club.

Sept. 30

2 p.m. Tyler Perry's plane, an Embraer 190, 90-passenger converted private jet, arrives at MLB.

More than 100 volunteers including President McCay, COA faculty and staff, student groups and alumni—load more than 7,000 pounds of cargo. The event is covered by *Florida Today* and CNN's Anderson Cooper program.

5 p.m.

The second mission arrives safely in Aguadilla, a hard-hit community of the western side of Puerto Rico in dire need of medical supplies for the local hospital. The mission then continues to San Juan.







The CVN 80 is named the Enterprise, which is neat because it's the namesake of the CVN 65, which was the first nuclear aircraft carrier that we built.

—Mike Shawcross

Seaworthy: A Tale of Two Shipbuilders

Two ocean engineering majors, Mike Shawcross '80 and Rolf Bartschi '81, had friends in common when they were students at Florida Tech, but Shawcross, a rower, and Bartschi, a baseball player, never really crossed paths on campus. It wasn't until they both had graduated and were in a Sears Roebuck store in Newport News, Virginia, that they recognized each other as fellow Panthers. They became roommates at the beginning of what would become long and impressive careers for both men building nuclear-powered submarines and aircraft carriers for the U.S. Navy at Newport News Shipbuilding.



Mike Shawcross

When it came time to choose a college, Mike Shawcross was certain he wanted to be a marine biologist. Growing up in Coventry, Connecticut, he was close to the water, and like many in his generation, he was inspired by the adventures of Jacques Cousteau. A friend showed him a brochure from Florida Tech, which offered a program in marine biology, and he was pretty much sold. But while touring the school, a student guide asked if Shawcross wanted to sit in on an ocean engineering class with Professor **JACK**

SCHWALBE. A vision of being an underwater explorer was soon replaced by an interest in working in a shipyard.

Soon after graduation, Shawcross landed at Newport News Shipbuilding. His first job was in nuclear testing where he worked on the reactor and propulsion plant that brought the Navy's Los Angeles class fast-attack submarines to life. While there, he became interested in the design of the components and working with vendors on various pieces such as turbines, engines and pumps.

"I really got hooked on that, and eventually I was sent to Washington for a special project that was the precursor to the Seawolf submarine," he said.

He steadily moved into leadership roles in nearly every facet of the company from engineering and design to program management and business development.

Since 2005 he has been vice president in the Ford-class program. The Ford is the first ship in a new class of nuclear powered aircraft carries for the U.S. Navy. In this capacity, Shawcross has led the design, planning and construction efforts of these ships. His current role includes planning and construction of the CVN 80 and future ships.

"The CVN 80 is named the *Enterprise*, which is neat because it's the namesake of the CVN 65, which was the first nuclear aircraft carrier that we built," Shawcross said. "We just decommissioned it after over 50 years of service. Some of the steel from the CVN 65 will be melted down and reused for the new *Enterprise 80*, which is pretty cool."

Shawcross credits rowing coach **BILL JURGENS** for developing the leadership skills he took with him to Newport News. He also thanks Professor Schwalbe, who "wanted nothing less than perfection. Seemed like a pain in the neck then, but he was instilling an engineering discipline I absolutely appreciate now. Florida Tech gave me a good foundation for the rest of my life."





Rolf Bartschi

As a freshman from Lagrangeville, New York, Rolf Bartschi's first idea for a major at Florida Tech was oceanography. But just like Shawcross, his true calling was ocean engineering. By late summer in 1981, Bartschi was among the bustle of 30,000 other shipbuilders at Newport News Shipbuilding making nuclear-powered vessels.

"The shipyard offered field engineering jobs in the nuclear test department to new graduates like me, which provided great hands-on experience," he said. "I really enjoyed it."

Bartschi started as a mechanical test engineer in the Los Angeles class fast attack submarine division and held positions of increasing responsibility over the next 13 years. The nuclear submarine division was fast paced and submarines were delivered to the Navy every six months.

"A highlight at this point in my career was being on the sea trial test team," Bartschi said. "Our team went on each sea trial to fully test these new submarines under fully operational conditions."

He then transferred over to the new carrier construction division where he managed the nuclear construction of the entire *Harry S. Truman* aircraft carrier series. In a few years, he was promoted to vice president of the nuclear engineering division, where he led the engineering division through submarine construction, aircraft carrier construction and refueling and overhaul of in-service aircraft carriers.

He returned to the construction management division in 2010 to lead construction of the first class aircraft carrier, the *Gerald R. Ford* until he retired in 2017.

"Given the responsibility to construct, test and deliver the *Gerald R. Ford* was a great honor and a humbling experience," Bartschi said. "Learning about President Ford, his leadership and legacy, building this ship named after him made our whole construction team very proud. Having the opportunity to meet and work with the ship's sponsor, Susan Ford Bales, who supported so many of the ship's construction events and the shipbuilders who built and tested the ship was incredible."

Looking back at his Florida Tech education, which was the first step in becoming an ocean engineer, Bartschi said he appreciated the skills and support the university offered.

"All the professors I came across really provided a good, balanced education for us and were really insightful about how to approach a career."

As for advice for students interested in shipbuilding, he said. "You really need to know the fundamentals of engineering. You can go into management or business aspects of shipbuilding, but you really need to know the technical side of the business first, and that's the kind of foundation I got from FIT." Shelley Preston



Given the responsibility to construct, test and deliver the *Gerald R. Ford* was a great honor and a humbling experience.

—Rolf Bartschi



Vito Kaminskas: Nuclear Power Executive

When I was in the 9th grade, my friends and I would go to a park in Staten Island to shoot off model rockets. I always knew I wanted to be a part of the space program.

DEGREE: '73, B.S. Physics

/ J, B.J. PIIY

FAMILY: Son, John, 32; daughter, Kristine, 29; daughter, Carol, 26

HOBBIES:

Traveling, visiting old friends, attending alumni fraternity events, fishing, boating and playing golf

FUN FACT:

One of my goals in life is to visit all 50 states. I have currently been to 40 of them. Next state to cross off the list: Arizona.

PROUD CAREER MOMENT:

Obtaining my Senior Reactor Operating license from the Nuclear Regulatory Commission which allowed me to supervise control room activities.

BEST PART ABOUT BEING A FLORIDA TECH ALUMNUS:

Pride and Community. FIT provided me with an exceptional education that I was able to use throughout my 40+ year career. As an alumnus, I enjoy giving back to FIT by attending school and sporting events and remaining active with the Pi Kappa Alpha brotherhood on campus and across the country. S o when it was time to start researching colleges, I went to the library and looked up technical majors that could help me achieve my goal of building real rockets—the ones that could reach the moon. I ended up picking FIT for its proximity to Cape Canaveral and started out my freshman year as a space technology major. I soon joined a fraternity, Pi Kappa Alpha, and from our fraternity house on the Indian River, you could see those very same rockets I wanted to build light up the night sky.

Unfortunately, the space program started a major downturn in the early 1970s with launches being canceled and the space shuttle program still years away. Space technology no longer seemed like a viable option for me, so I ended up changing my major to physics. I graduated on time, moved back to my hometown in New Jersey and took a job in an unrelated field—medical sales. I did not enjoy being a salesman, but there was one man I worked with who could sell anything to anyone. I asked him how he did it and he simply said, "Everybody is a salesman; you just haven't found your product yet."

I eventually started looking for a new field where I could apply the skills I learned from my degree at FIT. Nuclear power was a new and exciting field and it was being called the "fuel of the future." I knew I wanted to get involved and applied to 54 different utilities. I remembered a Pi Kappa Alpha brother of mine, **ROGER RYALL** '72, was working at a nuclear plant south of Miami and I reached out to him for advice. He told me it was a rewarding career and a great place to work. Four months later, I started working at Turkey Point Nuclear Plant in the Reactor Engineering Department as an engineer trainee.

On my first day of work, I was shown the control room and was immediately impressed by it. It was like being on the bridge in the Star Ship *Enterprise*. The first job I had to complete was to calculate the reactor power and calibrate the nuclear instruments that the operators use to control power in the plant. I used what I learned in thermodynamics classes to complete these tasks. My FIT education was brought to life.

I moved into management after roughly 10 years in engineering. Using the experiences and skills I learned at FIT, I was able to advance to the highest levels of management. In my 40-plus years in nuclear power, I have held almost every management position in the plant, including engineering director, plant manager and vice president. During my career, I worked at five different utilities and six nuclear plants across the country. One of the more interesting assignments I completed was to represent my plant and company at an international plant managers conference in Prague, Czech Republic. I had the opportunity to meet many plant managers from around the world and share ideas. Thinking back to my first post-graduation job in sales,



Trustee Joseph Caruso, '73 and Vito Kaminskas

nuclear power became my product and I could sell it to anyone. In 2013, I retired as the vice president of the Perry Nuclear Power Plant just east of Cleveland, Ohio. Nuclear power has been a very rewarding career that I would recommend to anyone.

FIT has been an integral part of my life since I set foot on campus in the fall of 1969. In 1976, I met my wife Lynn in Melbourne, and we were married two years later in the Botanical Garden at FIT. Together, we have three adult children who have been visiting Melbourne since they were born. My son, John, has followed in my footsteps and works as a supervisor in nuclear power in Pittsburgh. My daughter, Kristine, is a physician living and practicing in Philadelphia. My youngest daughter, Carol, is a personal trainer based in New York City. My wife, who I shared 39 beautiful years with, passed away from cancer earlier this year. We spent our winters on the beach in Indialantic and our summers in Ohio boating on Lake Erie. I remain active as an FIT alumnus throughout the year and have maintained lifelong friendships with my Pi Kappa Alpha fraternity brothers.



FIT has been an integral part of my life since I set foot on campus in the fall of 1969. In 1976, I met my wife Lynn in Melbourne, and we were married two years later in the Botanical Garden at FIT. My wife, who I shared 39 beautiful years with, passed away from cancer earlier this year. We spent our winters on the beach in Indialantic and our summers in Ohio boating on Lake Erie.



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ALUMNI NEWS

News from the desk of Andy Kirbach '90

Florida Tech Alumni Association President

DEAR ALUMNI, STUDENTS, PARENTS AND FRIENDS,

It's a great time to be a Florida Tech Panther! This last year has set the bar yet even higher for events, accomplishments and activities. We are an awesome community dedicated to growth, exciting innovation, support and of course—fun!

My enthusiasm and Panther Pride continues to grow! I will say it again, Panther Pride is a real movement and participation is its own reward. 2017 Homecoming weekend was jam-packed with students, families and alumni in greater numbers than ever before. Our hearts swelled with gratitude on our all-time most successful Day of Giving in November. We celebrated at yet another fun-filled, standing room only. Grad Bash gathering. The Florida Tech Alumni Association (FTAA) continues to work on strategic activities that closely align alumni goals with those of the university. We strive to continually add value to the student experience and also contribute to the important culture of philanthropy.

Watching and participating in such impressive events makes it is clear that alumni and students alike are dedicated to elevating Florida Tech and our Panther community to new heights. We are collectively working to be raise that bar and the results show that individually we are displaying our personal best!

If you have not visited campus lately, I invite you to visit. It will be immediately apparent to you that we have cultivated a very high quality university experience. There is something in the air here, and it is exciting!

Plan your trip now! One of the best times to visit is during Homecoming. This year's celebration will kick off with the Downtown Homecoming 5K on Thursday, October 11, followed by the Homecoming Fest on Friday—a free concert in beautiful Downtown Melbourne. Of course our big Homecoming 2018 football game is a huge crowd-pleaser and takes place on Saturday before our amazing Homecoming Gala. The gala celebrates our outstanding alumni from each college and the prestigious Jerome P. Keuper Distinguished Alumni Award honoree.

There are many ways to be active—please take a moment to like and follow our alumni Facebook page and share posts, join our LinkedIn alumni group, submit your latest achievement to alumni@fit.edu or donate.

Committed to increasing the value of our degrees! #PantherPride

Go Panthers! Andy Kirbach '90

YOUR ALUMNI ASSOCIATION OFFICERS

Andy Kirbach '90 | President | Melbourne, FL | akirbach@gmail.com Kim Bozik '87 | Vice President | Chandler, AZ | kim.b.bozik@intel.com Rhodie Humbert '82 MBA | Secretary | Melbourne FL | rhodiehumbert@aol.com Brian Stahl '86, '88 M.S. | Treasurer | Satellite Beach, FL | brainmstahl@gmail.com David Murphy '91, '01 M.S. | Member-at-Large | Winter Garden, FL | davemurphyrr@hotmail.com Al Hagopian '89, '94 MBA | Member-at-Large | Indialantic, FL | Al.Hagopian@hds.com

Submit your AlumNotes to alumni@fit.edu

1970s

BERNIE FUCHS '70 participated in the Head of the Charles Race.

GEORGE MORSTATT '72, CHARLIE CHEDO and VITO KAMINSKAS '73 were recently reunited with a visit to Lake Erie.

LEONARD WHITLOCK '73 welcomes his third grandchild, Huntley Curran Whitlock.

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Calling All Panther Cubs! Congratulations! If you've recently welcomed a Panther Cub to your family, contact us for your free Panther Cub apparel item. Choose from a T-shirt, bib or onesie. Then send us a photo of your child in their Panther swag, and an AlumNote about yourself. We will proudly display it in *Florida Tech Today*.

For details, email alumnotes@fit.edu

KENT CARPENTER '75 has recently been awarded a \$4.6 million NSF grant to study the genetic differences between fish preserved from the 1890s and from today's waters. Working hand-in-hand with Philippine scientists, Carpenter is poised to reveal the effects of more than a century of fishing and pollution and steer future sustainability efforts.

After working for highly successful corporations such as Cloudistics, Nutanix, Arrow Electronics, Sequoia, InScope International and Exodus Communications, **STEVEN CONN** '75 returns to Florida Tech to complete an MBA.

University Press of Kentucky recently released a book by DAVID T. ZABECKI '76 M.S. titled Lossberg's War: The World War I Memoirs of a German Chief of Staff.

1980s

STEVEN MCLAUGHLIN '83 was recently elected as Rennesselaer County Executive after successful careers in the airline and mortgage banking industries. His new public service position will allow him to shape the future of Rennesselaer County, New York.

Working on the cutting edge of genetics, **BRYAN HALL** '86 has spent more than 30 years working with techniques such as gene mapping and large-insert clone propagation and manipulation. He is currently technical director at TriCore Reference Labortory in Albuquerque, NM.

THOMAS WARD '87 MBA has been selected to serve as the honorary chair of logistics studies at the U.S. Army Command and General Staff College. He has built a strong career as the associate professor of force projection and sustainment operations.

Leading the field in aquaculture, **REBECCA LOCHMANN**, Ph.D., '88 M.S., has broken ground on the efficacy of alternative dietary additives for multiple species of farmed fish. Being recently named as one of five Arkansas Research Alliance Fellows, she is committed to finding better and more competitive fish rations for farmers across the globe.

After 44 years of service in the U.S. Coast Guard and as an executive at the Coast Guard Headquarters, **CURTIS ODOM** '89 MBA is retiring. He is the recipient of two Legions of Merit and two Meritorious Service Medals.

JOHN AITKEN '90 was recently appointed the new director of aviation at the San Jose International Airport, America's fastest growing airport. He worked his way from refueling aircraft to an executive position over the course of 24 years.

CHRIS PAYNE '91, a member of the 1988 National Championship soccer team and the Florida Tech Sports Hall of Fame, stopped by the Alumni House with his wife Sara and children Henry, 11, and Ruby, 10. Payne, who resides in Essex, England, is the chief financial officer for Equifinance Ltd., a specialist mortgage provider in London.

VINCE PRESS '91 was recently named director of communications at Clark Patterson Lee, a major architecture and engineering firm based in Rochester, NY. With more than 20 years of successful PR/marketing experience, he will now oversee all communications and grow CPL's brand awareness.

> Submit your news: alumni@fit.edu

Victoria Fuster was born to **ALVARO FUSTER** '92 on June 13, 2016, and if she behaves, she might be allowed to apply to FIT.

GABY LONGSWORTH '92 is back in the Melbourne, FL, area after obtaining her Ph.D. in human genetics and molecular biology ('98) from Johns Hopkins University and her law degree from Georgetown ('03). She is a partner at the intellectual property specialty firm Sterne Kessler Goldstein & Fox PLLC, based in Washington, D.C., and is focused on patent law in the biopharma space and other industries.

Lifecycle Biotechnologies has named **BRAD MORAVEC** '95 as business development manager where he will lead companywide efforts to achieve goals set for 2018 and beyond. Lifecycle specializes in biopharmaceuticals, regenerative medicine and industrial energies. After an illustrious and welltraveled career with the military, Major General **CEDRIC T. WINS** '95 M.S. currently serves as the commanding general of the U.S. Army Research, Development and Engineering Command.

JOHAN CHRISTENSON '95 M.S., CEO and founder of City Network, was recently elected as a member of the board at the OpenStack Foundation.

HEIDI BRAND '99 works with Melbourne-based Applied Genetics Laboratories and manages product development and commercial production of Hybloc™ DNA as well as maintaining quality assurance and conducting client-mandated laboratory audits.

The National WWII Museum in New Orleans has named **PETER CREAN** '99 M.S. as vice president for education and access. Crean leads the development effort for the museum's Hall of Democracy, which will house new departments for education, research and outreach.

Continued on page 34

SPECIAL EVENTS ON CAMPUS

Tastes Of The New Year 2018

Tastes Of The Season 2017

Continued from page 33

2000s

Col. **RODNEY HONEYCUTT** '02 M.S. was recently named the commander of the 405th Army Field Support Brigade in Kaiserslautern, Germany. He is a graduate of the Command and General Staff College and the Quartermaster Advance Course.

JAMES HALLEY '03 was recently recognized in *Airport Business Magazine*'s Top 40 Under 40.

Previously serving as the leader of Ernst & Young's cyber threat management practice in the financial services sector, **ANIL MARKOSE** '04 M.S. was recently named senior vice president leading cyber strategy and advanced analytics for the U.S. commercial business of Booz Allen Hamilton.

ERYCK DZOTSI '05, a search marketing professional and author of the book *How to Manage Remote Workers*, met Dr. McCay at a recent Founders Forum event.

JOEL WARHURST '05 M.S. is adjusting to his new position as the 35th Commander of the Anniston Army Depot. He previously served as the chief of strategic readiness in the Army G-4.

OLAWALE ADEBIYI '05 M.S. is the new CEO of Wecyclers, a company that aims to empower

Africa to be the recycling leader of the world. He previously served as COO.

NICK EVANCHO '06 was recently named vice president – aerospace, client engagement and industry for AIG. He joined the company in 2006 and has held positions of increasing responsibility within the underwriting team, most recently serving as aerospace zonal manager for the west zone. He will relocate to Atlanta, GA, in this new role.

ESTEBAN GARCIA '07 ran the NYC marathon on Nov. 5, 2017, with Frank Rivera.

BYUNG JOON OH '08 Ph.D. graduated in computer engineering, is currently living in Bellevue, WA, and is working for Samsung Electronics America Inc.

Former FIT soccer player **RYAN HAGERTY** '09 earned a podium finish at the 2017 World Master IBJJF-JITSU Championship.

ZEESHAN-UL-HASSAN

USMANI '09 Ph.D. recently won the October Kaggle Dataset Publishing Award for his collection of data of the last half-century of mass shootings in the United States. This work can be used to understand the epidemic of mass shootings occurring in the U.S.

MORGAN TWEEDIE WOODARD '07 and JAMES WOODARD '09 share that a new Panther has joined the FIT family.

<u>2010s</u>

DANIEL P. DIVINE '10 M.S. and his wife Monica welcomed the birth of their daughter, Charlotte Ann. Charlotte was born May 17, 2017, and joins big brother Cameron.

LOWELL HUNTINGTON '10 joined the Air Force in 2012 and is now a Captain and B2 Stealth Bomber pilot who has just completed his mission qualification with the 509th Bomb Wing, Whiteman AFB, Missouri.

GAËL LE BRIS '11 M.S. was recently published in the scientific and engineering journal of the Transportation Research Board, the *Transportation Research* Record, concerning an innovative airfield safety signage developed with the FAA. He was also featured in the quarterly spotlight of TRB's YMC – Aviation.

WAINDIM MBU YOUPUGHU '12 is the first Cameroonian with a Ph.D. in aerospace engineering.

PIERRE BASTINGS '14 recently joined Atlas Air as first officer on the Boeing 747-400 and 747-8 at only 23 years old.

MURPHY WONSICK '14 is working on the cutting edge of robotics as she devises ways astronauts and robots can work together in space. She is working on Northeastern's NASA robot, Valkyrie, one of the world's most advanced humanoid robots.

TIZIANO BERNARD '15, '16 M.S., received a medal of the Municipality of Trieste, Italy, his hometown, for his work and representing his city abroad. He is currently pursuing his Ph.D. at Florida Tech.

ALUMNOTES

JOHN GRABOWSKI '15 MBA was promoted on Aug. 1 2017, to Lieutenant Colonel in the U.S. Army. He started a new position working on the cyber buildup at Ft. Gordon, GA, helping to manage 60–80 construction projects expected to cost about \$2 billion.

WARREN PITTORIE '15 finished his term as president of the SGA in May 2017. He was recently elected to the board of directors for the Florida Tech Alumni Association. He is currently a graduate student assistant conducting research in the College of Aeronautics while pursuing his master's degree in aviation human factors.

AMANDA WIRZ '15 M.S. and NICHOLAS WIRZ '13 M.S. were married on April 15, 2017. Both are successful engineers employed by NAVAIR.

JOSEPH TORKAMAN '16 couldn't make it to Melbourne for homecoming, but he showed Panther Pride on the West Coast!

Jamaican Soccer Reunion

Last summer, intramural soccer friends from Jamaica and the Bahamas got together for a three-day reunion in the Melbourne area that included a dinner event, barbecue and soccer day, and beach day.

DAN PRUIM '16 was named one of *Airport Business Magazine*'s Top 40 Under 40 2017.

Recently at Myrtle Beach International Airport, as **DANIEL PRUIM** '16 flew in, he was welcomed by fellow Panther, **MIGUEL ESTREMERA** '98. Estremera currently serves as an airport management executive at Myrtle Beach International.

PureGen Power, a world leader in renewable energy/solar energy, appointed **JIM DOMENCICH** '16 M.S. as director of finance.

CPT FRANCISCO GONZALEZ RODRIGUEZ is the incoming commander for the 97th Transportation Company, Joint Base Langley-Eustis, in Virginia. He was honored by the Company Commander and soldiers during a change of command ceremony on Nov. 9, 2017. He is completing his Master of Science in Logistics Management through Florida Tech's Hampton Roads Site, located at Fort Eustis.

> Save the Dates! Homecoming 2018 Oct. 11–13

In Memoriam.

JOHN A. SKOLNIK '70 M.S. passed away Aug. 16, 2017. He retired from Harris Corp. after 36 services of service in 1992.

Major General JOHN R. D. CLELAND (U.S. Army, ret.) passed away Oct. 25, 2017. He was a long-time supporter of Florida Tech ROTC and attended all the commissioning events as a representative of the Military Officer's Association of America (MOAA).

SARA SNYDER CRUMPACKER, a member of the Advisory Council of the Ruth Funk Center for Textile Arts, passed away Dec. 23, 2017.

LAWRENCE MERTENS, a friend of Florida Tech founder Jerome Keuper who became the university's first marine biology instructor and later a major benefactor with his wife, passed away on Dec. 16, 2017. He was 88 and will be dearly missed by the Florida Tech community.

To see more reception photos, visit alumni.fit.edu

and click on Events>Photo Gallery

ON THE **ROAD**

Dallas

Alumni and guests joined President McCay for a special cookout and gathering hosted by trustee and alumnus, Randy Muns at his ranch.

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ALUMNI NEWS

Matt co-founded Wild Florida Rescue Corp. (WFR) and works closely with wildlife rehabilitators, Fish and Wildlife, and Sheriff's Animal Services to ensure that wildlife calls are handled as quickly as possible.

Matt with his wife, Danielle Huffner (another FIT alum), and their dogs, Louis (top) and Cooper.

Wild Florida Rescue

Matthew Buice '15 harnessed his passion for wildlife by forming a service organization committed to wildlife rescue response.

I knew from a young age that I wanted to work with wildlife and growing up in Pennsylvania, I have always been drawn to the outdoors. Most days I could be found in the woods behind my home catching frogs, snakes, salamanders and anything else I could get my hands on. As my passion and admiration grew, I began gaining hands-on experience anywhere I could. Through college, I spent time volunteering at Brevard Zoo and working for a local exotic pet store.

After college, I volunteered at a local wildlife hospital where I met my business partner Heather Pepe-Dillon. I co-founded Wild Florida Rescue Corp. (WFR) one year ago when we realized the need for a wildlife first response service. WFR is a 501(c)(3) nonprofit wildlife ambulance service dedicated to the rapid capture, stabilization and transport of sick, injured and abandoned wildlife.

Our organization operates 24/7 to help those with wildlife emergencies throughout Brevard County. We work closely with wildlife rehabilitators, Fish and Wildlife, and Sheriff's Animal Services to ensure that wildlife calls are handled as quickly as possible. Since the start, we have received over 2,500 calls and driven over 30,000 miles in our mission to save wildlife. From a raccoon with a jar on his head to a snake trapped in a garage door, WFR has helped not only rescue animals, but educated the public on ways to reduce unfortunate run-ins between people and wildlife and ways to live safely with the animals we share our planet with.

Days can be long and nights can be longer, but the reward of a safe and successful capture makes it all worth it. As we establish a presence in Brevard County, we hope to continue growth, extending to surrounding counties as we expand to someday serve all of Florida. Wild Florida Rescue operates on the professional care of committed well-trained volunteers. As we continue to grow and our call volume continues to rise, we invite anyone with a love for wildlife to join our team and help save the animals that call Florida home.

DEGREE:

'15 B.S. Marine Biology

CURRENT CITY:

Palm Bay

FAMILY:

Wife Danielle Huffner (another FIT alum) and dogs, Louis and Cooper

HOBBIES:

Wildlife photography, scuba diving, DIY projects

FAVORITE FLORIDA TECH MEMORY:

The summer field program to Peru. We met our best friends on this trip and had the time of our lives.

LITTLE KNOWN FACT:

Today I absolutely hate public speaking, yet when I was young I was always in plays at school and our local theater.

PROUDEST ACHIEVEMENT:

Marrying my high school sweetheart and buying a place of our own.

BEST PART ABOUT BEING AN ALUMNUS:

The connectivity of the school to your life after graduation. Work and friends and the community events all have a link to FIT. It's nice being a part of a family-oriented school with such an incredible reputation.

The task force has developed the (Cross-cultural) certificate to include academic courses, study abroad experiences and on-campus activities.

Mary Bonhomme is associate provost for Extended Studies and university professor of eEducation. She leads the Certificate in Cross-Cultural Competence task force. THE CROSS-CULTURAL NONCREDIT CERTIFICATE IS AN EXCITING NEW CREDENTIAL UNDERGRADUATE STUDENTS AT FLORIDA TECH CAN ACHIEVE. Given the international environment of Florida Tech, this certificate takes advantage of this diverse environment and helps leverage it into a credential that is valued in today's global workplace.

Growing out of the initial efforts of the Internationalizing the Campus Committee led by Mary Beth Kenkel from 2009 to 2015, the idea of a certificate program was presented to SACSCOC, our regional accrediting body, as part of our accreditation reaffirmation in 2015. Monica Baloga, senior vice president for academics and provost, says, "The crosscultural certificate requires students to participate in a variety of cross-cultural, global activities from academic courses to events on campus. We hope this participation gives students opportunities to meet students from other cultures and increase students' confidence in interacting with people from other backgrounds."

She appointed a task force to oversee the implementation of the certificate. The task force has developed the certificate to include academic courses, study abroad experiences and on-campus activities. Full details can be found at http://411.fit.edu/goglobal.

One of the components of the certificate requirements is participation in the 3C (cross-cultural competence) workshop. This three-hour workshop is facilitated by staff and students from the Institute for Cross-Cultural Management. The institute led by Richard Griffith, a professor in the School of Psychology and a member of the task force, provides consulting and training to organizations facing the challenges of operating in a global environment. Griffith says, "The institute is happy to support the certificate by facilitating the workshops that introduce participants to cultural awareness through presentations and role play." Mina Milosevic, also a member of the task force as well as a psychology doctoral student affiliated with the institute concurs. "Our participants report that the workshop opens their eyes to appreciating and understanding cultural differences."

Students in the University Experience course, a course designed to provide incoming students with the resources and skills to succeed in college and beyond, receive an introduction to cross-cultural competency skills. Kimberly Adkins, an advisor in the First-Year Experience Office and a member of the task force, remarks, "Students are introduced to the importance of being able to work, play and live in a global environment. In class, we encourage their participation in attaining the certificate. Many students are excited about this opportunity to put this portfolio together."

Students who complete all required components will receive a designation on their transcripts recognizing the attainment of this certificate. Deborah Matta, manager of international student programs and a task force member, comments, "This official recognition lends credence to the program and is useful for the student as they develop their résumés to apply for jobs or graduate school."

As the convener of the task force, I'm excited to work with such dedicated members. We're looking forward to offering this opportunity to our students.

15th Annual

Friday, March 16, 2018 Suntree Country Club

For a donation of \$100, you can have a BALL and a chance to win \$50,000!

We'll be flying high when we drop 2,000 numbered balls from a helicopter. The closest ball to the pin wins \$50,000! 2nd closest to pin wins \$10,000, and 15 lucky people win \$1,000 each!

e announced immediately following the Chopper Dropper reception. ps, \$5 of the ticket price will be donated to the General <u>Scholarship Fund</u>.

Reserve your tickets now, before they're sold out! WWW.chopperdropper.com

Each ticket allows ONE PERSON to enjoy food and beverages at the Sporting Affair Cocktail Reception!

tact winners if not present. Proceeds benefit Panther Athletic Scholarships, \$5 o Suggested donation: no purchase or donation necessary + Fair market value \$20

rne, FL 32940) Winners will be a

Friday, March 16, 2018 • 5:30 p.m. (ball drop 6:30 p.m.) • Suntree Country Club (1 Country Club Dr., Mell ed not be present to win. A Florida Tech representative will contact winners if not present. Proceeds be

Florida Institute of Technology Office of Marketing and Communications 150 W. University Blvd. Melbourne, Florida 32901-6975

Homecoming Raft Race

During the late '70s and early '80s, an annual homecoming week event was the raft race down Crane Creek. Students built their own vessels—using anything from empty milk cartons and fiberboard to rope and barrels—and floated from campus to Melbourne Harbor. Do you remember this wet and wild tradition?

