

# SpaceTEC Talk August 2016

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## A Message from the SpaceTEC® Pl...

Greetings Colleagues,

It has been many months since the last issue of SpaceTEC Talk. Even though you haven't heard from us lately, we haven't been idle. Opportunities continue to emerge in the industrial sectors we support, and we've done our best to focus our resources where they offer the best value to our constituents. It's been a dynamic year and we're seeing progress across the country bringing new programs and initiatives online. Offering pathways to good paying jobs, and ultimately to academic success for those technicians interested in careers in aerospace is what we're about.

First and foremost, the interest in performance-based certifications continues to grow. More colleges are adopting certifications as added value for their students, and those who opt for non-traditional and distance learning find third-party certifications provide a measure of credibility for their achievements.

Our military partners remain committed to providing service members the opportunity to earn industry credentials, VetTEC provides Veterans information and resources to translate their military skills to civilian careers, and Schools-to-Space continues to offer STEM resources for educators and students in grades 7-12 to promote and excite them about all things aerospace.

We're excited momentum is building and appreciate the continued support from our many partners. The staff here at SpaceTEC HQ is working hard to ensure

Steven Mason **Denmark Technical College** Luis Meza, Dona Ana C.C. Terry Thornton, **Dothan Technology Center** Bill Fletcher. **Eastern Florida State** College John Floyd, **Eastern Shore C.C.** William McInnish. Eau Gallie High School, FL Mel Cossette. Edmonds C.C. Dr. Diane Howard, Embry-Riddle A.U. Richard Stark. **Francis Tuttle Technology Center** Pat Hoppe, **Gateway Technical College** Howard Carter. **George T. Baker Aviation College** Walt Carter, **Greenville Technical College** Tim Fannin. Metro Technology Center Amy Kienast, **MIAT College of Technology** Jon Beck. Northland Community and **Technical College** Robert Sompolski, **Oakton Community College** Dr. Sallie Kay Janes, San Jacinto College Kim Alexander, South Seattle C.C. John Laubach, **Tennessee College of Applied Technology-**Hohenwald Jean Frank. **Thomas Nelson C.C.** Robert Walker **Trident Technical College** Jeff Lowe,

Jim Hall, Wichita Area Technical

College

**Tulsa Technology Center** 

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CertTEC and our newest division, Credential Testing Services, are fully operational while we all continue the work of building the acceptance of industry-defined, performance-based credentials as indicators of the knowledge and skill of those earning them. In this issue you'll see just how busy we've been and what we've put into motion to support you, our constituents.

Sincerely,

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Steve Kane SpaceTEC® PI and Managing Director

## Program Activities of Note



44th Space Congress

"The Journey: Further Exploration for Universal Opportunities". This was the theme for this year's 44th Space Congress. SpaceTEC® was proud to be a platinum sponsor at the annual event which was held at the Radisson in Cape Canaveral, Florida. The program opened with an address from KSC Director

Bob Cabana, a former space shuttle commander and pilot. The evening banquet was headlined by Buzz Aldrin, the second man on the moon, who discussed his concepts for how to ferry cargo and crews to Mars. This year's congress was hosted by the Canaveral Council of Technical Societies in partnership with NASA Kennedy Space Center, Space Florida, and the Economic Development Commission of Florida's Space Coast. SpaceTEC® set up an exhibit booth and took advantage of the many networking opportunities that were available.



AMC Competition SpaceTEC® continued its annual tradition of sponsoring an event at this year's Aerospace Maintenance Competition held in Dallas, TX, April 4th-7th. Due to its popularity at last year's competition, we chose to use our remote hazardous fuel loading event and require the contestants to dress in protective (Splash) gear to

simulate actual launch preparation activities. In addition to sponsoring an event, SpaceTEC® also sponsored a team from Eastern Florida State College.

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in timed 15 minute events.

We were very proud of our own intern, Michael

Life Support for a Marshmallow Astronaut? Eastern Florida State College Aerospace Technology

McKinney, who served as one of the SpaceTEC® event judges. In all, 52 teams from transportation industry

companies, colleges and training academies, competed

<u>Quick Links</u>

ICAC Press Release

**FAA Safety Approval FLORIDA SPACE rePORT** Nida Corp. **Mid-Atlantic Regional Spaceport Abaris** NAC NCAT 180 Skills AAR Corp. STC NCATT ETA-I NCATC Vencore Sierra Nevada Corp. **Titusville-Cocoa Airport** Authority URS **Air Washington Army-Redstone Arsenal Orbital ATK** NASA Embraer **American Airlines Spirit AeroSystems** VAe **CSS-Dynamac** Lockheed Martin Space **Systems** Bionetics Space Coast Energy **Consortium CCTS** CCID **Space Florida SpaceX** 

Students had their technology package sent to the "edge of space" on May 1st, 2016. Under the guidance of their instructor, Gregory N. Cecil M.A.S., and working with JP Aerospace, the students successfully had their project launched by high altitude balloon to an altitude of 100,000 feet/20 miles. Click <u>here</u> to read more about the



marshmallow astronaut.

### NASA/KSC Field Trip

Third grade students from Oak Park Elementary school in Titusville, FL took a field trip to the NASA Exploration Station at Kennedy Space Center on 5/5/2016. While there, the 112 students

participated in a science lab and other hands-on activities. All of the activities were academic based and the students had a fantastic opportunity to do space themed activities. At the end of the science lab they also had the special privilege of touring parts of the KSC Visitors Center. The field trip was sponsored in part by SpaceTEC® as part of our Schools-to-Space program.

#### EASA Testing

SpaceTEC®, through it's CertTEC® division is engaged in a proposal to supply global testing services to the European Aviation Safety Agency (EASA). The proposal, created by Avionics partner Aircraft Technical Books, seeks to centralize the EASA B1.1 and B2 licensing programs with a core question bank accessible 24/7 by any EASA-accredited training schools worldwide.

#### SpaceTEC Radio Interview

Our very own Greg Cecil, Schools-to-Space Outreach Coordinator, recently did an interview on WMEL Bold Talk Business Radio. The interview showcased Greg's interesting career in the space industry and his current role as an educator. If you would like hear the interview, please click <u>here</u>.

#### FAA Commercial Space Flight Conference

To keep informed on the Commercial Space effort and to stay in touch with industry representatives, SpaceTEC® will again be attending the FAA Commercial Space

**Blue Origin** 

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Conference (COMSTAC) on October 25 & 26, 2016 in Washington DC. COMSTAC's charter is to provide information, advice and recommendations to the FAA AST on matters relating to the US commercial space transportation industry.

## **Major Changes/Developments of Interest**

#### **VetTEC®** Initiative



VetTEC® is a free resource created to assist active duty and transitioning service-members and veterans interested in translating their technical skills from military occupational specialties into civilian jobs by gaining industry-recognized SpaceTEC® and CertTEC® credentials desired in the fields of aviation, aerospace, and technology. VetTEC® has compiled many of the resources provided by several agencies, including Veterans Affairs, Department of Defense, and Department of Labor, to provide a one-stop, user-friendly

site. Visit the VetTEC® website: vet-tec.us

#### **SpaceTEC® Apprentice Technician Certificate**

SpaceTEC® sponsored a Design a Curriculum (DACUM) held at St. Augustine High School last November. This new certification is being developed because there is presently no aerospace industry certification for non-college bound students. In addition, credentials are excellent resume boosters and often translate to college credits. This certification will maintain the same rigor and competencies as the SpaceTEC® Certified Aerospace Technician® certification, but it will be geared towards the secondary learner.

#### **New Relationships**

We would like to welcome all of the new partner colleges that have joined our consortium since our last SpaceTEC Talk: Denmark Technical College (Denmark, SC), Dothan Technology Center (Dothan, AL), George T. Baker Aviation College (Miami, FL), Greenville Technical College (Greenville, SC), Metro Technology Centers (Oklahoma City, OK), Oakton Community College (Des Plaines, IL), Tidewater Community College (Norfolk, VA), and Trident Technical College (North Charleston, SC). We are very happy to have you all on board, and look forward to long and productive partnerships.

## CertTEC® Avionics Certification Update



Cert*TEC*<sup>®</sup> has partnered with NIDA Corporation, a leading supplier of student electronics training equipment including online training content and Aircraft Technical Book Co. who publishes complete sets of FAA Part 147, FCC, and EASA B1.1 and B2 training publications supporting aviation training programs worldwide, to develop the CertTEC Avionics certification. As the only performance-based Avionics credential on the

horizon available worldwide to validate the knowledge and skills of technicians who troubleshoot, repair, modify and maintain avionics systems, much interest was seen. Aligned with the European Aviation Safety Agency (EASA) B2 standard, the only standard addressing Avionics technician performance-based training and licensing in the world today, work continues developing question banks and a practical examination process. Release is currently set for late summer 2016. In conjunction with CertTEC<sup>®</sup>

Avionics, SpaceTEC® Partners Inc. has joined forces with Aircraft Technical Book Co. in developing question banks for the delivery of EASA B1.1 and B2 licensing exam.

#### **Certified Technicians**

CertTEC® has certified over 670 technicians year-to-date! Here is the breakdown by certification: Basic Electricity and Electronics 530; Aviation Structures 63; Aviation Mechanical Assembly 18, and Basic Composites 9.

#### **Credential Testing Services**

Credential Testing Services (CTS) is a division of SpaceTEC Partners, Incorporated. CTS is a computer-based examination administration service for a variety of professional credentials. It is powered by Questionmark, SPI's cloud-based, scalable assessment management system. CTS is working with 180 Skills, Indianapolis, IN, to deliver certifications to those students that are successful in the 180 Skills Maker Career programs.

180 Skills Maker is an online career and technical education experience that fills the skills gap and gets the job done. They make and deliver technical education that can help anyone start a great career in the shortest amount of time, and with the least possible expense. To learn more about this program, go to their website: <u>http://www.180skillsmaker.com</u>

## Partner Updates

## SpaceTEC<sup>®</sup> Professional Development Opportunity

SpaceTEC<sup>®</sup> Partner College Professional Development Opportunity Surveys were recently sent out for interested partner college instructors and staff to request funding for professional development opportunities to build additional capability for instruction in STEM programs. The match-funded program requests which are submitted are reviewed by a team of SpaceTEC® staff and partner college educators. Once requests are approved, match-funding is negotiated with the instructor's partner institution. To-date, two programs have been approved and funded through the program.

## Virginia Tech Professional Development Opportunity

SpaceTEC<sup>®</sup> provided support to the Virginia Space Grant Authority in their proposal to NSF for their Geospatial Technician Education - Unmanned Aircraft Systems program. If you aspire to plan and fly UAS missions as well as analyze geospatial data, then a great opportunity has just opened up for you. The (GeoTED-UAS) project has just been funded by the National Science Foundation. This program provides a stipend to interested full-time community college faculty. For more about this opportunity <u>click</u> <u>here</u>.

#### Annual SpaceTEC NVC Meeting

Our 2016 National Visiting Committee Meeting will be held on November 9th and 10th. The venue will be the Reed Conference Center at the Sheraton Midwest City Hotel (OKC), OK. RSVP forms will be emailed out this week. If you could please return them to Heather as soon as possible, we would appreciate it. If you don't receive an RSVP and are interested in attending, please email (heatherkogut@spacetec.org) for more information. We look forward to seeing you all there.

#### M-STEM

For the third year, SpaceTEC is sponsoring sessions and providing information about industry certifications at the Materials in STEM (M-STEM) workshop. The event brings together students, faculty and business to strengthen understanding of Science, Technology, Engineering and Math (STEM) principles, especially relating to materials science, and to enhance K-20 technology education integration. A unique feature of MSTEM is hands-on, interactive learning which presents information in a way that engages students and teachers. M-STEM is being held at Tulsa Technology Center's Owasso Campus, November 6-8, 2016. To learn more about this event click <u>here</u>.

### Northland UAS DACUM



Northland Community and Technical College played host NORTHLAND to 10 industry and education professionals for a SpaceTEC® sponsored Unmanned Aircraft Systems (UAS) Maintainer DACUM in June. Their goal was to design a curriculum for the first third-

party, accredited UAS Maintainer Certification. This would complement the school's existing FAA A&P and small UAS (sUAS) programs.

# Intern Updates

## **Community Service Learning Program Continues**

SpaceTEC<sup>®</sup> continues to participate in an intern program with students from Eastern Florida State College. This past semester Michael McKinney and Ryan McHerg participated in the program. They are students in the EFSC Aerospace program. The interns volunteer 3-4 hours per week and get credit through the Voluntary Community Service Program at the college. Activities involved building a fluid transfer demonstration, inventorying equipment, vacuum bagging basics, composites machining, drilling, and repair to create test specimens. In addition to classroom skills in composites fabrication, upon completion of the semester, interns were evaluated by SpaceTEC® staff for core skills such as promptness, timekeeping procedures, and shop etiquette. We appreciate their assistance and hope they have gained some on the job experience which will help them obtain jobs in aerospace in the future.

To learn more about SpaceTEC® activities or to begin your certification work, contact us: By Email: Information@SpaceTEC.org By Telephone: (321)730-1020 By Mail: SpaceTEC® Headquarters, 7099 N. Atlantic Ave., Suite 300, Cape Canaveral, FL. 32920



Funded in part by a grant from the National Science Foundation

