Davis A&M, PHASTAR attend Red Bird Migration aviation conference

On Tuesday, October 15th, 2019 Davis Aerospace & Maritime Aviation Sciences Teacher Erik Haggard and PHASTAR President, Capt. Drew Ferguson travelled to Denver, Colorado to attend the 2019 Red Bird Migration aviation training conference. This two day event featured presentations from a wide range of industry leaders and small group breakout sessions focused on providing solutions to the real world problems facing flight schools and universities. It has become one of the leading conferences for flight training professionals.

The primary purpose for our trip was to explore the technologies and practices being utilized at all levels of the aviation training industry to prepare our future aerospace workforce. Davis A&M currently utilizes desktop flight simulators for initial pilot training, but plans to acquire higher quality FAA certified devices soon. Red Bird is recognized as providing one of the highest quality, affordable solutions in the flight training industry. But these simulators are not just for the aspiring pilot, they have become the basis for many STEM programs. “The STEM market for us is our single fastest growing market year over year. The shortage in pilots, the enhanced focus on more applied kind of teaching, the money that’s out there for teaching these kinds of programs … and aviation is by far the best framework to bring together science, technology and math in an interesting way,” Charlie Gregoire, President and COO of Red Bird Flight says.

Upon arrival in Denver, Capt. Ferguson and Mr. Haggard travelled first to Flight Safety International to meet with Ferguson’s former co-pilot Capt. Arthur Cawman and tour the training facility. The facility provides contract training for professional airplane pilots, helicopter pilots, Airframe & Powerplant Mechanics and flight attendants. It was important for Mr. Haggard to see and understand that the high quality training and utilization of flight simulation is

(Continue on pg. 3)
PHASTAR is now an American Red Cross Licensed Training Provider

Keeping with our mission to improve the quality of education and public service in Northeast Ohio, PHASTAR took steps this summer and fall to become an official Licensed Training Provider for the American Red Cross. This designation will allow us to offer a variety of lifesaving training opportunities for not only our students at Davis Aerospace and Maritime High School, but also our own staff and volunteers, as well as other members of the local community.

All of us at PHASTAR are known to wear many hats and take on tasks that go beyond our job titles. It’s just the nature of working for a small nonprofit. So after casually mentioning that she used to be a lifeguard, PHASTAR Creative Director Julie McCormick soon found herself enrolling in an American Red Cross Lifeguarding course to get re-certified and fulfill a need that our Marine Safety program had for a certified lifeguard to work on the PHASTAR 2543 rescue boat.

To fulfill an on-going need for trained and certified lifeguards, PHASTAR made the decision that having a lifeguard instructor in-house would offer us a lot more flexibility in providing lifeguard training for our Davis A&M students. So, McCormick then enrolled in another course to become a American Red Cross certified Lifeguard Instructor.

PHASTAR then applied with the American Red Cross to become a Licensed Training Provider, which allows us to offer lifesaving training courses using the American Red Cross’s curriculum and training protocol and to issue certifications to participants who successfully complete the courses and pass all requirements and tests.

In addition to the Lifeguarding course, PHASTAR can also provide training and certification for the following ARC courses: Adult and Pediatric First Aid/CPR/AED, Basic Life Support, Wilderness and Remote First Aid, Basic Water Rescue, and Personal Water Safety.

PHASTAR’s Maritime Director, Capt. Carl M. Walker, is also certified in First Aid, CPR, and AED and received his American Red Cross Instructor certification for Adult and Pediatric First Aid/ CPR/AED in December. Having two ARC certified Instructors on staff will provide PHASTAR the ability to train larger groups.

PHASTAR plans to offer its first American Red Cross training courses this January to members of the local rowing and sailing community, and internally to our staff and volunteers. The U.S. Maritime Academy will also be running Captain’s classes at our 1776 Columbus Road facility beginning in January, and PHASTAR will provide the First Aid and CPR training that is required by the U.S. Coast Guard to obtain a Captain’s license. Davis A&M students will be given the opportunity to take a Lifeguarding class in the spring, which will earn them the opportunity to work on PHASTAR 2543 during the boating season as a lifeguard and can help them get a job year-round at local pools and other facilities.

Training opportunities that will be made open to the public will be posted on our website and announced on various social media platforms.

If you or your organization are interested American Red Cross training opportunities available through PHASTAR, please contact us at info@phastar.org or call us at 216.860.4883.
Red Bird, Cont’d from pg. 1

not only a foundation for early training, but essential to ongoing career growth.

The conference began Tuesday evening with John Barry, Maj Gen, USAF (Ret.), CEO & President, Wings Over the Rockies Museum welcoming attendees and speaking to the success of the museum, their education programs and the value of their partnership with Red Bird. He was followed up by Roger Sharp, Col, USAF (Ret.) Designated Pilot Examiner and Airplane Sensei discussing the current state of flight training and the arrival of staffing shortages in the aerospace industry. The next morning began with William Ampofo VP, Business Aviation & General Aviation, Boeing Global Services and Dave Hirschman, Editor at Large, AOPA Pilot magazine and Paul Bertorelli, Editor at Large, Belvoir Media Group discussing industry trends. From their we met with other attendees to discuss individual efforts and learn more about best practices and available technologies to support our programming. That evening we attended an awards banquet where flight training programs and instructors from across the country were honored for their work. The conference wrapped up with a powerful presentation by Kirk Lippold, CDR, USN (Ret.) who was the Commanding Officer of the USS Cole the 12th of October 2000.

This conference enabled both to return to Davis A&M with the tools and practices required to carry the aviation program forward. Funding efforts are under way!!!

Save the Date!

Our next PHASTAR Task Force Meeting will be

March 13, 2020

We will meet on the first floor at Davis Aerospace and Maritime High School at 11:30am.

The Navigator is published quarterly by PHASTAR.

Submissions welcome!

The Navigator welcomes submissions on the topics of Education, Aviation, Aerospace, Maritime, Public Health & Safety, Discover Aviation Center, Ohio Interscholastic Drone Racing Association, After-School programs and all content relevant to our programs. Manuscripts for consideration are to be sent to info@phastar.org (pasted within email message preferred). Manuscripts are published at the editor’s discretion and edited to conform to style. The Navigator also welcomes the submission Letters to the Editor to be considered for publication.

The Navigator
C/O PHASTAR
1776 Columbus Rd.
Cleveland, Ohio 44113
Introducing DAC’s Newest Airplane, a Piper Archer/Cherokee

This Fall, PHASTAR and Discover Aviation Center added a third plane to its fleet, a Piper Archer (N1198X).

The plane, which is also known as the Cherokee 180, was built in 1975 and is a four place, low wing, single-engine airplane. It is a common upgrade from entry-model trainers. Slow with unremarkable handling characteristics, the Piper Archer is a safe, stable plane, that is easy to land even on short runways.

The plane made its public debut on television, when it was featured in a story on WKYC Channel 3 in October. Sydney-Marie Flowers, a student at Davis Aerospace and Maritime High School, was interviewed on-camera about being the first student at the school to take a solo flight. To accompany the story, DAC’s Paul Koziol conducted a flight lesson with her at Burke Lakefront Airport that was captured on-camera as well.

The new plane, along with DAC’s two other planes, a 1963 Cessna 172 and a 1982 Piper Tomahawk, will be used for flight instruction and training purposes.
Roy Richardson (1929-2019): The Last Cleveland Tuskegee Airman & a Friend of Davis A&M

The last surviving Cleveland member of the Tuskegee Airmen, Roy S. Richardson, 90, passed away peacefully at his home in Oakwood on December 3, 2019. Richardson was also one of the original supporters of the effort to open Davis Aerospace and Maritime High School.

Richardson, who is survived by his two daughters, served as a Corporal in the U.S. Army Air Corps from 1948 to 1950, and took basic training at Lackland Field, Texas. He was assigned to the 332nd Fighter Group at Lockbourne Field in Columbus, Ohio, under the command of Lt. Col. Benjamin O. Davis Jr. Richardson worked the flight line, pre-flighting, taxiing and performing aircraft maintenance. He also played clarinet, tuba, piccolo, and glockenspiel with the 766th Army Band. Upon advice from 1st Lieutenant Daniel “Chappie” James, who later became the first black 4-star general, he applied for flight school but instead joined Chappie in “Operation Happiness”, a very popular USO tour that entertained servicemen across the U.S. and the world.

Following the integration of the armed forces, Richardson transferred to the Smoky Hills B-29 Air Base in Kansas with the 91st Strategic Air Command. Shortly after being transferred to Barksdale Airbase in Louisiana, he left the service.

Back home in Cleveland, Richardson earned his pilot’s license at Horns Flying School at Chagrin Falls Airport in 1953. He joined other Tuskegee Airmen including Gilbert Cargill, Earl Lane, and Buddy Johnston in forming the Aero 8 Flying Club, which owned a Piper Cub, Ercoupe, and a Cessna 172.

Tuskegee Airmen were the first black servicemen to serve as military aviators in our country, fighting in World War II.

While an exact number of surviving Tuskegee Airmen is unknown, it was said in May 2019 that there were about 12 still living. Since then, the ranks have been reduced by two.
PHASTAR prepares to launch new Spirit of America program

This summer, PHASTAR announced a partnership with the Spirit of America Foundation, a not-for-profit public service organization that primarily serve’s the nation’s youth by offering America’s Premier Youth Boating Education Programs. The new PHASTAR program is one of 19 Spirit of America locations across the United States and will serve students at Davis Aerospace and Maritime High School as well as other Cuyahoga County youth.

PHASTAR has begun preparing for the full launch of the program in Spring/Summer 2020, and has brought on board Connie Murzyn, who will serve as our new Community Maritime Programs Coordinator. One of her primary responsibilities will be the oversight of the Spirit of America program.

Connie, who lives in Mentor, Ohio, has been as an avid boater, paddler and jet skier on Lake Erie for many years and has a passion for a variety of sports and outdoor activities. She has been teaching people all ages in various outdoor activities for her whole adult life.

Speaking of her new role with PHASTAR, Murzyn said, “I am happy to help bring boating/water safety skills and hands on training to new people. I enjoy watching others get excited learning new skills and finding new passions they may not have known existed. I am also a big advocate of keeping our environment healthy and clean and bringing awareness to others of this importance.”

Murzyn’s experience and expertise will be invaluable in the development and growth of the Spirit of America program. During the boating off-season, PHASTAR will work with the Maritime Science teacher at Davis Aerospace and Maritime High School to integrate the program into the school’s curriculum. The Spirit of America program will also be open to other youth who reside in Northeast Ohio and have a desire to learn about water-based activities.

The Spirit of America program offers a hands-on, water-based educational program where youth learn through teamwork hands-on skills for boating safety. The participants become the captains of their own vessels, and learn skills to sail, canoe, kayak, paddle board, PWC, and power boat. They also learn to work together as a team with the underlying goals including a variety of self-developing skills such as self-esteem, confidence, and empowerment. Most importantly they will be receiving lifelong skills on and off the water and a learn respect for our environment.

For more information about the national Spirit of America program and curriculum, please visit their website at www.spiritofamerica95.org.
PHASTAR to begin teaching Ohio Boater Education Courses

As the 2019 boating season began to wind down in October, Maritime Director Carl M. Walker was already starting to prepare for next year. He and Connie Murzyn, our new Community Maritime Programs Coordinator, and PHASTAR Task Force member Viola Hamlett attended a training course offered by the Ohio Department of Natural Resources (ODNR) that would allow them to become Ohio Boater Education Course (OBEC) Instructors.

Under Ohio law, anyone born after 1981 must take a boating education course approved by the National Association of State Boating Law Administrators (NASBLA) before being able to legally operate a boat greater than 10 horsepower.

The ODNR Watercraft division maintains oversight over the issuance of boater education cards, and is one of three authorized providers of NASBLA approved boating education courses, with the others being U.S. Power Squadron and U.S. Coast Guard Auxiliary.

Students at Davis Aerospace and Maritime High School all take a boater education course as a part of their maritime experience at the school, and until now, they have taken proctored written exams, which are then sent off to the ODNR for scoring and issuance of an Ohio boater education card. To streamline the process, PHASTAR decided that we needed our own OBEC instructors that could teach the course as well as administer and score the exams, instead of sending the exams off to ODNR.

Walker, Murzyn, and Hamlett attended a multi-day training program put on by the ODNR in Columbus, Ohio, and are now approved instructors for the boater education course. Davis A&M Maritime Science teacher Melania Santos also plans to attend an upcoming instructor training session offered by the ODNR.

The goal of the OBEC program is to reduce loss and injury due to boating related accidents and improve the boating experience in Ohio. The course teaches boaters to recognize that boating involves risks, and for boaters to help manage the risk, knowledge of boating laws and safety practices is necessary.

The OBEC is integrated into the curriculum at Davis A&M, and will be taken by all freshman students. It will also be a necessary component for our new Spirit of America program. Participants in the Spirit of America program will also be required to obtain an Ohio boater education card to be able to operate the power boats and PWCs, and PHASTAR now has the capability of not only teaching the course but also administering and scoring the exams for issuance of the card.

PHASTAR will begin its first Ohio Boater Education Course at Davis A&M in January 2020.

Pictured above is a sample of the OBEC card issued by the ODNR.

Joe Boater
2045 Morse Road
Columbus, OH 43229

01/01/1982
123456
06/12/2012

Course approved by the National Association of State Boating Law Administrators and recognized by the U.S. Coast Guard.
The Putzfrau sails once again!

In early November, a boat that played an important role in the clean-up of the Cuyahoga River after the waterway infamously caught fire in 1969 took its first voyage since being restored.

The Putzfrau, which means “cleaning lady” in German, was designed by the Samsel family of Samsel Supply and helped to remove oil and debris from the river. The Putzfrau was restored this year through a partnership between PHASTAR, West Creek Conservancy, and Samsel Supply.

While the boat has been repaired enough to traverse the Crooked River, work still needs to be done to get the crane hydraulics and vacuum system working again so that the boat can get back to doing what it was designed to do, and more.

The future looks bright for The Putzfrau, which has captured the attention of several organizations. NASA has an interest in replacing the gas-guzzling diesel motors with something a bit more environmentally-friendly. Local universities attempting to solve the algae bloom problem that plagues Lake Erie annually in the summers have expressed an interest in using the Putzfrau to scoop up the algae to repurpose it for biofuel and other uses. And lastly, the Port of Cleveland also has an interest in the Putzfrau and it’s heavy-duty hydraulic crane. While the Port of Cleveland’s Flotsam and Jetsam vessels help remove debris from the river, they sometimes struggle with the larger debris, like large logs, that the Putzfrau would have a much easier time retrieving.

The Putzfrau is an on-going project with a lot of potential and possibilities. Stay tuned to see what happens with the old cleaning lady, who looks to be on the verge of a second chance at life on the Cuyahoga River.

Check out some pictures from the November 8th trip, which Frank Samsel, 89, also accompanied representatives from PHASTAR and West Creek Conservancy on.
If you’ve always dreamed of putting the title “Captain” in front of your name, here is your chance to make your dream a reality. The U.S. Maritime Academy will be offering two sessions of its U.S. Coast Guard approved Captain’s classes right here in Cleveland at PHASTAR’s 1776 Columbus Road facility.

Taking the Captain’s class offered by U.S. Maritime Academy eliminates the need to go to a U.S. Coast Guard exam location for testing. As a USCG approved program, U.S. Maritime Academy provides all of the required training and administers the exams required to obtain licensure.

Tuition is just $1,350 and includes all texts, materials and Training Certificates. Payment plans are available.

To find out more information and to register, visit: northcoastcaptainclass.com.

**100 Ton Masters Near Coastal and Inland**

**Dates:**
January 6 through February 25, 2020
Monday, Tuesday, & Thursday

**Time:**
6:00 to 9:00 PM

**Location:**
PHASTAR, 1776 Columbus Rd., Cleveland

**100 Ton Masters Near Coastal and Inland**

**Dates:**
May 18 through July 2, 2020
Monday, Tuesday, & Thursday

**Time:**
6:00 to 9:00 PM

**Location:**
PHASTAR, 1776 Columbus Rd., Cleveland

**NOW ACCEPTING REGISTRATIONS @ NORTHCOASTCAPTAINCLASS.COM**
Enhancing the Davis A&M experience with exciting extracurriculars

The thematic experience at Davis does not end with the ring of the dismissal bell at 3:15 pm. Nearly 1 in 3 Davis students participates in at least one after-school program sponsored by PHASTAR. These clubs offer exciting experiences that build on what students learn in the classroom. These programs include:

**Fab Lab Assistants:**

Fab Lab Assistants have the opportunity to learn the ins and outs of every aspect of the Fabrication Lab. In this club, students receive advanced training in machine operation and maintenance for 3d printers, CNC machines, Soldering, and more. Students help with special projects and learn how these skills apply outside of the Davis Fab Lab.

**Drone Club:**

Students zip, swoop, flip, and fly past obstacles, through hoops, and around a race track as they fly drones as part of Davis Drone Club. From the basics of drone operation and safety to advanced skills such as navigation and flight planning, Drone Club offers students the opportunity to gain hands on experience flying drones in a fun and engaging environment.

**Boat Building Club:**

With just their hands, their dreams, and some simple tools, students in Boat Building club have the opportunity to build a boat that can take them safely on the water. It’s all about hands-on learning as you learn basic woodworking skills, painting techniques, and simple boat construction. They learn by doing - working with wood, fiberglass, and paint. This club allows students to increase their knowledge of boats and build the skills and confidence you need to care for a boat.

**Aviation Club:**

In Aviation Club, students operate flight simulators, hear from engaging speakers from across the Aviation Industry, and visit airports. Students have heard from air traffic control, military, commercial pilots, and airport management, and more.

**Rowing & Sailing:**

Through a partnership with The Foundry, Davis students practice and compete in both rowing and sailing regattas. Rowing and Sailing is a hit for students who were drawn to Davis by opportunities to be out on the water.
Davis A&M’s After-School Boatbuilding Club Moves to PHASTAR’s 1776 Facility

Davis Aerospace and Maritime High School’s after-school Boatbuilding Club recently relocated PHASTAR’s 1776 facility to complete their making of a set of oars. Under the guidance of mentors from the Cleveland Amateur Boatbuilding and Boating Society (CABBS), the students shaped the oars from ash planks using drawknives, hand planes, spokeshaves and other hand tools.

After much careful hand sanding, the students finished the oars with four coats of varnish. The completed oars will be used on the Bevins Skiff that the Boatbuilding Club completed in 2018.

PHASTAR’s 1776 facility, gives the club a nurturing environment and the space for their next project: finishing and painting a sailboat that was donated to the club. The owner had expertly built it, but never started the final finishing process. The students will prime, paint and varnish, build a mast, sew a sail, and work towards a Spring 2020 launch.
The PHASTAR Board of Directors

D. Andrew Ferguson  
President

Vicki Koziol  
Secretary

Doug McConnell  
Vice President & Treasurer

Paul Koziol  
Board Member

Jay Ross  
Board Member

Giving to PHASTAR

As a 501c3 nonprofit organization, PHASTAR relies heavily on the generosity of others to offer high-quality programs and initiatives for the area’s youth and most vulnerable residents.

Donations can be sent to:
PHASTAR
1776 Columbus Road
Cleveland, Ohio 44113

Your contribution will make a difference in the lives of Greater Cleveland youth, and will have a direct impact on their lives.

You can also make a donation on our website at www.phastar.org. Contact us at 216.860.4883 for other arrangements, or to set up a recurring donation. Other ways to give include volunteering your time, talents and/or services, or the donation of tangible goods. We are happy to discuss your possible donation.

HOW YOUR CONTRIBUTIONS IMPACT LOCAL YOUTH:

$50 = 1 hour of boat time on the water for up to 4 students at a time

$100 = 1 hour of flight time for a student interested in flying

$250 = 1 day of access to Fabrication Lab outside of school (weekends & holidays) OR 1 hour of safety vessel operation with full crew

$500 = 1 day field trip for up to 60 students

$1,000 = 1 month of utilities at PHASTAR facility providing educational opportunities

$5,000 = 1 year of support for Davis A&M’s Drone Racing Team

$10,000 = 1 private pilot license for a Davis A&M student

$25,000 = 1 CNC machine enabling high level design and manufacturing

$50,000 = 1 FAA Certified Flight Simulator allowing students to log flight time and advanced instrument training

$100,000 = 1 Mobile Mariner Ship Simulator providing qualification, certification, and credentialing to students, government, and industry partners