

For Immediate Release  
July 11, 2020

## **Nauticos, CARC, Dynamic Aviation and the historic vessel *Nellie Crockett* to conduct radio tests for clues to the final flight of Amelia Earhart**

*100 years ago, Earhart took her first airplane ride in California in December 1920 with famed World War I pilot Frank Hawks—and was forever hooked., “As soon as we left the ground, I knew I myself had to fly.” – Amelia Earhart*

One hundred years after Amelia Earhart took her first flight in December 1920 the search to discover her final resting place continues. Research teams from Nauticos, Rockwell Collins, Dynamic Aviation, and the national landmark vessel, ***Nellie Crockett***, will come together in Virginia for an important experiment that may define the most optimal search area leading to the discovery of Earhart’s legendary Electra 10E aircraft, along with the answer to an 83-year old question, what happened to Amelia and navigator Fred Noonan on July 2, 1937.

While other organizations searching for Amelia’s final resting place have crawled around jungles and explored shallow reefs in unlikely locations, **Nauticos** and their team has firmly maintained the theory that originated with the legendary pilot and writer Elgen Long...Amelia ran out of fuel only minutes from locating the airfield on Howland Island where the US Coast Guard Cutter ***Itasca*** was on station receiving her last radio transmissions.

It is this critical communication link that draws **Nauticos** and their specialized team of **Collins Radio Engineers (CARC)** together with **Dynamic Aviation** and the historic vessel ***Nellie Crockett***.

Since 1999 extensive study and analysis by **CARC** has focused on determining the technical parameters and performance of each of the system components comprising Earhart’s High Frequency (HF) communication link. This was initially accomplished by computer modeling followed by experimental measurements on each system component e.g. transmitters, antennas, propagation, and receivers. As a result, the final distance computation between the Electra and the USCG *Itasca* is subject to the combined statistical variations associated with each system component.

By recreating the total HF communications system as accurately as possible, and then measuring the end-to-end system performance the statistical variation of the previously obtained results will be reduced. Until recently, obtaining and restoring all of the scarce 1937 equipment prevented such tests. They are now in a position to accomplish such a test.

David W. Jourdan is the founder and president of **Nauticos LLC**, a company devoted to the exploration of the deep oceans. His career of nearly 30 years has been devoted to the

exploration of the deep oceans, concentrating in the areas of remote sensing, underwater navigation, and renewable energy applications.

During his commission as a U.S. Navy submarine officer and as a physicist at the Johns Hopkins University Applied Physics Laboratory, he became an expert in the exploitation of large undersea environmental data sets, specializing in information collected by U.S. Navy ocean research submersibles and associated development programs.

As leader of **Nauticos** for over 20 years, he has continued to support scientific, archaeological, and military programs. These include the development of oceanographic database systems for the Navy, development and use of Kalman Filter navigation analysis software for submarine inertial navigators, and support of autonomous underwater vehicle (AUV) test programs.

After nearly five months at sea in three searches that have covered over 3000 square miles of the deep ocean floor, the **Nauticos** team is researching new analysis methods and techniques. The purpose of this is to gather additional data to assist in determining “where do we go next and why?”

The most recent pursuit involves re-creating the complete communications links between aircraft and surface ship and measuring data on the entire system. This communications link experiment has only recently become possible with the acquisition and refurbishment of the same models of 1930’s radio equipment used aboard Amelia Earhart’s L-10E and the Coast Guard Cutter Itasca.

**Dynamic Aviation** celebrated its 50<sup>th</sup> anniversary on September 16, 2017. Founded as K&K Aircraft by Karl and Ken Stoltzfus in 1967, the company continues the aviation legacy started in 1934 by their father, Chris Stoltzfus.

**Dynamic Aviation** is now headed by Karl and Michael Stoltzfus and backed up by Rod Moyer, Flight Safety Director. Dynamic owns and operates a beautifully restored Beech 18 aircraft (N18G), which they have offered as a platform for this project along with their expertise in avionic design and engineering. The Beech 18 is a historic aircraft very similar in size and appearance to Amelia’s Lockheed Electra 10E.

DA’s employees Rod Moyer, Brad Holliday, and Mike Morin have enjoined the effort to configure N18G with equipment racks, HF antenna, and a Direction-Finding Loop antenna. **Dynamic Aviation** will take part in this event by flying out over the ocean and communicating with a ship east of Cape Charles. While recreating the last flight of Amelia Earhart, the engineers will be measuring the signal strengths and distances for each of her last transmissions.

As the leading provider of innovative special-mission aviation solutions designed to meet the unique requirements of government and commercial organizations worldwide, **Dynamic Aviation** delivers customized aerial assets and services to support a wide range of customers

including national defense, military intelligence, federal agencies, state and local governments, non-profit research organizations, and private companies.

**Dynamic Aviation** has the flexibility and resources to deliver world-class aviation solutions that combine mission-modified aircraft, experienced flight crews and comprehensive maintenance services. The company operates a 200,000-square-foot heavy maintenance and modification center, engine shop and privately-owned airport at its headquarters in Bridgewater, Va.

**Dynamic Aviation** employs more than 500 aviation professionals, owns over 140 aircraft and operates from 16 locations in five countries across three continents.

The **Nellie Crockett** is a Chesapeake Bay oyster buy-boat built for Andrew A. Crockett of Tangier, Virginia in 1925. She is home ported at Georgetown, MD on the Northern Chesapeake Bay and owned by Captain Ted Parish. She was designated as a historic landmark in 1994.

The selection of the **Nellie Crockett** was the brainchild of Nauticos volunteer and sailor Jeff Wightman, a longtime friend of the Parish family. In order to accommodate the array of radio gear matching that of USCG **Itasca**, the team needed a seaworthy vessel of adequate size...capable of offshore operation.

Wightman and **Nellie Crockett's** owner Captain Ted Parish have been working with the CARC team to develop a plan for outfitting the historic vessel and safely navigating her offshore for the tests. Captain Parish is a licensed Master Mariner and Delaware Bay Pilot.

The **Nellie Crockett** was built specifically to operate as a buy-boat, making the rounds of the Chesapeake Bay oyster beds to buy oysters directly from the harvesters, typically sail- powered [skipjacks](#) or oyster tongers. This allowed the oyster dredges to remain on the beds, avoiding the need to return to port when full. Buy-boats typically gave a lower price than a dockside sale, but most oystermen considered this a fair trade for not losing time on a run back to the dock. She is considered one of the best-preserved examples of this type of vessel.

The **Collins Radio Engineers (CARC)** Rod Blocksome, Tom Vinson, and Bryan McCoy are retired engineers from Rockwell Collins (now **Collins Aerospace** a division of **Raytheon**) and have known and worked with each other for decades as well as volunteering for **Nauticos** over the last 20 years in a quest to find Amelia Earhart's Airplane out in the Pacific. As part of their team, Nauticos' Sue Morris will be the "Earhart Voice" transmitting live from the plane in order to accurately simulate the actual transmission on the 3105 kHz frequency.

The video production and documentation of this historic radio test will be handled by Bill Mills and **BMA Production Services, Inc.** of St. Petersburg, FL. Bill has worked closely with Nauticos since 2001 and has documented both the 2002 and 2017 Pacific expeditions. He will be joined by a production team including co-producer/writer Dara Padwo-Audick of Falls Church, VA., whom **BMA** and Mills have collaborated with on numerous productions.

Mills is the primary Director/Cinematographer at **BMA Production Services, Inc.** and has provided a variety of production services for over 25 years to broadcasters, defense contractors, and corporate clientele globally. Mills holds a 100 Ton Master Mariner license, Master SCUBA diver certificate, and is a licensed UAS remote pilot and AOPA member.

He initially met **Nauticos** David Jourdan when their paths crossed during the production of a National Geographic Television Special, "***Search for the Submarine I-52***" in 1998.

The video production, to be captured in 4K imagery, will add to the extensive Nauticos digital library and provide a variety of products for STEM education and broadcast documentaries.

The Nauticos team also gratefully acknowledge the continued financial support of Alan Eustace, retired executive from Google, engineer, aviator, and stratospheric explorer.

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