

*Our Mission: To interpret aviation, particularly that related to New York State, with exhibits and programs that educate, entertain and excite the public*

## ESAM IS CLOSED DUE TO CORONAVIRUS BUT IS STILL MOVING AHEAD

Welcome to an abbreviated issue of The Empire State Aerosciences Museum newsletter, **Aeronotes**.

Yes, the museum has closed to visitors temporarily because of the Covid-19 virus. And our outreach programs are also suspended for the time being.

As of this writing we do not know when we will be open again.

But even during this “down time” your museum leadership is moving ahead with longer term projects. Please read **President Peter Russo**’s message on the next page to see some of the major activities that are proceeding during this time of social distancing.



The piles of dirt that have been sitting in front of the museum over the winter have now been smoothed in further preparation for installing ESAM's Concorde

## PRESIDENT'S COLUMN

Members and Supporters,

First, I hope this newsletter finds you all in good health and coping with this "shut-in."

I want to let you know what we are doing during this period of time, since March 16<sup>th</sup>.

- We are using Conference Call meetings and have been doing it on a weekly basis with the officers of the museum.
- We have also initiated Zoom meetings, beginning with our professional Fundraiser, **Michele Susko**.
- We have been mailing letters to Foundations and larger donors since March 30<sup>th</sup>.
- Our Saturday conference calls have been devoted to the preparations to install the Concorde. I want to be ready to "GO"....when we re-open the museum and get the model up in front. We're doing the plans to be ready, now, rather than wait until everything is back to normal.
- Financially we have received over \$10,000 with more coming from GE retired members matching funds.
- **Gary Davis**, a self-starter, has cleaned and disinfected both Galleries, exhibits and floor. And I want to thank him for doing this on his own initiative. **Thanks Gary.**
- Our office manager, **Pat Barrot**, has been able to get things done from home and occasional visits to her office. **Thanks Pat.**
- Joyce has been able to maintain the finances of the museum and has paid the major expenses to keep the museum in operating mode. **Thanks Joyce.**
- Unfortunately, Kevin had to cancel quite a few groups coming for tours of the museum and I'm sure will be re-scheduling them as soon as he can, when we open.
- The Arizona Commemorative Air Force with their B-17 arrival in May has been rescheduled for September.
- We had a request from the Prescott Group to provide them with one of our WWII exhibits for a conference that now has been cancelled. **John Kolwaite** created a whole diagram of how to move one of the exhibits. Of course, that has been cancelled due to the virus. However, we need to think about working together with this group. They have resources and aircraft and a desire to work with us.

That's about all for now, we are working to keep our original plans active. Our next board meeting, hopefully will take place in May or June, everything depends on this virus. I sincerely hope that you all are doing fine. I promise, we'll be together real soon. Until then, we'll rely on e-mail, OK!

Best regards,

*Peter V. Russo, Sr.*

ESAM President



**Peter Russo**

## AeroNotes

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## WINTER BREAK A HUGE SUCCESS

ESAM was opened during the winter school break, from February 18 – 23, and we could not have enjoyed a more successful program! Special classes and tours were conducted throughout the week, and a total of 345 folks visited the museum. Many thanks to all who helped – **Gary and Isaiah Gershon** provided training on our flight simulators, **Theresa Givan** delivered a great class on the space program, **Gary Davis** and **Paul Quantock** conducted tours, **Pat Barrot** did a great job of advertising, and we all had a LOT of fun.

## RECENT ACQUISITIONS

- **Scott Braman** donated an Elite Force 1/6 F-15C cockpit display, 1/6 scale pilot figure with flight gear, 1/6 scale VF-161 "Chargers" HGU-55 helmet in plastic display cube, and the book The Usborne Book of Cutaway Planes
- **Donald Perkins** donated ten die cast models of 7 World War II aircraft and 3 civilian aircraft.
- **Ruth Waters** donated two built balsa wood models.
- **Henry Rey** donated a large print of JFK airport with a Concorde at a gate, several prints from artist **Phil Dionisio** of NY Newsday, a print of a P-51 flight escorting a B-24 signed by Tuskegee Airman **Lt. Col. Spann Watson**, a member of the 99th Fighter Squadron.
- As an agent of **Gary B. Beard**, **Jeffrey Gorss** donated a box of books, photo albums and ephemera mostly related to the Concorde.
- On behalf of the **Oneida County History Center**, **Brian Howard** donated a business card belonging to Schweizer Aircraft Executive Vice President Paul Hardy Schweizer, circa 2001-2002.
- ESAM volunteer **Mardy Moore** donated a gas mask filter.
- ESAM Trustee **Marv Weiss** donated a Dell Latitude E5470; i& 6600U CPU @ 2.60 GHz; 8GB RAM; 64 bit OS, x64-based processor; 240 GB HD; windows 10 Pro.
- **Sharon Wiles** donated two 1919 books by Beach: Air Service Boys in the Big Battle and Air Service boys Flying for France. She also donated six First Day of Issue 4-cent Project Mercury stamps and envelopes with an explanatory document.
- **Robert Parmerter** donated his book Beech 18: A Civil and Military History.
- ESAM Trustee **Rich Bievenue** donated a cross-section view of the Concorde and two books: Images of War Royal Flying Corps and Images of War-Fighters under construction in World War II.
- **Glen Preece** donated six Technical Orders for C-130E aircraft.
- **Mark Rahn** donated various aviation-related magazines and newspaper articles.
- **Andrew Gaddis** of **Air Sky Store, LLC** donated Evolve passenger seats from a former Southwest Airlines Boeing 737-700 aircraft N396SW.

**Lockheed XFC-130H *Credible Sport* and MC-130 *Combat Talon***

by Kevin Millington

As all of you are probably aware, ESAM recently acquired a very rare aircraft, the XFC-130H *Credible Sport*, a unique prototype, which never saw operational service. As such, I am taking the opportunity to profile this plane. As a prelude, it is worth mentioning its origins. The Lockheed C-130 *Hercules* is without doubt the greatest tactical airlift plane ever built. Since entering service with the U.S. Air Force in 1956, it has the distinction of being the longest continually produced military aircraft in history. To date, over 2,500 have been manufactured, and it is still in production. The C-130 is also the most versatile plane ever built, and forty variants have been developed – for search and rescue, weather reconnaissance, aerial refueling, electronic warfare, ground attack, and of course the LC-130 *Skibirds* operated by our neighbors, the 109<sup>th</sup> Airlift Wing, for polar operations.

Since 1965, the U.S. Air Force has operated the MC-130 *Combat Talon*, a variant optimized for covert/night insertion, exfiltration, and resupply of Special Forces, and a fleet of forty-two such aircraft operated with great success in Vietnam and subsequent conflicts. In performing these missions, the *Combat Talon* is equipped with a special inertial navigation system, a terrain following and avoidance radar, precision cargo delivery avionics, and electronic and infrared countermeasures. The Air Force has continually upgraded these aircraft, and since 2012 began receiving thirty-seven of the new MC-130J *Commando II*.

Development of the *Credible Sport* began in 1980 in response to the seizure of the American embassy in Tehran by Iranian revolutionaries. A total of 52 American diplomats and staff were subsequently held from 11/14/79 to 1/20/81. During this period, the U.S. Department of Defense began development of a sub-variant of the MC-130 further optimized for ultra-short takeoff and landing as a means for rescue. A total of three aircraft – one test bed and two prototypes – were developed and designated XFC-130H *Credible Sport*. In addition to the avionics suite of the MC-130 *Combat Talon*, the aircraft were modified for this special mission with the installation of thirty rockets intended to drastically slow the descent, land the plane, and provide for ultra-short takeoff – with eight forward rockets, eight downward, ten in the rear, and four under the wings for stabilization. In addition, various structural modifications were installed, including dorsal and ventral fins, double-slotted flaps, extended ailerons, and a tail hook for landing on an aircraft carrier. The intended mission involved taking off from a forward operating location in the desert, landing at night in a soccer stadium near the embassy, with a Delta Force attacking and hopefully rescuing the hostages. Since casualties were expected, the plane would execute a short takeoff and land on an aircraft carrier with its hospital facilities. As the hostages were eventually released through negotiations, the mission never materialized, and the planes were never used operationally.

Of the two aircraft modified for this mission, one crashed in tests, and the surviving plane, Serial Number 74-1686, was subsequently re-designated YMC-130H and served as a prototype for the advanced MC-130H *Combat Talon II*, and was on display at Robins Air Force Base, Georgia for a period. It is now proudly at ESAM, and following installation of the propellers and re-painting, it promises to be a great addition to our fleet of historic aircraft.

Like the MC-130 *Combat Talon*, the *Credible Sport* had a maximum speed of 300 mph, a range of 2,700 miles, and was powered by four Allison T56 turboprop engines, each providing 4,900 horsepower.





**ESAM's XFC-130H Credible Sport being primed**

### **ESAM RECEIVES GRANT FROM GLOBAL FOUNDRIES/TOWN OF MALTA FOUNDATION**

The Empire State Aerosciences Museum has received a grant of \$3,270 to enhance its Malta Project exhibit. ESAM has a world class set of artifacts relating to the **Malta Test Site** and over the years has developed an outstanding interactive exhibit about the test site. We thank the **Global Foundries-Town of Malta Foundation**. for making this grant.



**Presentation Ceremony for the 2019 Global Foundries-Town of Malta Grants  
Can you find ESAM's representation?**

### STAG-1: THE US NAVY'S SECRET DRONE PROJECT IN WORLD WAR II

At the February 15<sup>th</sup> monthly breakfast, World War II researcher **Donna Esposito** gave a presentation entitled “STAG-1: The US Navy’s Secret Drone Project in WWII.” Although unmanned aerial vehicles are considered a new technology, their history dates back to before World War II, and several types of unmanned drones were used in combat in both the European and Pacific Theaters.

The US Navy’s Special Task Air Group One (STAG-1) flew TDR-1 drones controlled by specially modified TBM Avenger torpedo bombers. The drones had an RCA television camera in the nose that transmitted to a TV screen in the Avenger control plane where a drone pilot controlled the TDR-1 with a joystick and telephone dial. The STAG-1 group flew combat missions from the Solomon Islands against Japanese targets like Rabaul and Bougainville for one month beginning in late September of 1944. Despite reasonable success and no combat losses, the program was cancelled and the squadron was disbanded.

Esposito began researching the squadron after the dog tags of its radio communications officer, Lt. Francis A. Mahan, were acquired by the South Pacific World War II Museum on the island of Espiritu Santo in Vanuatu as an example of typical naval dog tags. They had no idea Lt. Mahan had served such an interesting role in STAG-1. Moreover, after the squadron was disbanded, Lt. Mahan served on the island of Espiritu Santo for several months. Lt. Mahan returned safely from the war, but three pilots of STAG-1 did not. Although there were no combat losses, three men were lost in a sailboat near their base in the Solomon Islands and are still missing in action.



Top: TDR-1 Drone  
Bottom: Avenger Control Aircraft

If you missed the presentation, it can be viewed online here: <https://youtu.be/Z1vyHvffyPI>  
Color footage of TDR-1 practice missions can be viewed online here: <https://www.pbs.org/video/history-detectives-tdr-1-test-mission/>

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supported in part by:

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\*ESAM Charter Member

## TRY A NEW YORK STATE AVIATION HISTORY QUIZ

During World War II, New York State aviation companies were very active in building military aircraft.

For each NYS company, select the military aircraft that the company produced the most of.

Bell (Buffalo)

- a. P-39
- b. P-63
- c. P-59

Brewster (Long Island)

- a. F2A
- b. SB2A
- c. F3A

Curtiss (Buffalo)

- a. C-46
- b. P-36
- c. P-40
- d. P-47
- e. SOC

Grumman (Long Island)

- a. F4F
- b. F6F
- c. J2F
- d. JRF
- e. J4F
- f. TBF

Republic (Long Island)

- a. P-35
- b. P-43
- c. P-47

Answers on page 8

## OUR VOLUNTEERS

Volunteers are the life blood of our museum.

Here's a factoid. During 2019, ESAM volunteers donated/worked 10,101.75 hours.

3,692 of these hours were worked from March 15 to June 15.

If we aren't able to restart our normal routines until mid-June, ESAM stand to lose out on more than 3,500 hours of productivity for 2020.





**Architectural Rendering of Revitalized Main Hangar**

### ANSWERS TO QUIZ

Bell: P-39

Brewster: SB2A

Curtiss: P-40

Grumman: F6F

Republic: P-47

## ESAM Membership Application

Please check one: NEW MEMBERSHIP \_\_\_\_\_ RENEWAL \_\_\_\_\_

### ANNUAL DUES:

#### INDIVIDUAL/FAMILY

- ☐ Senior Citizen \$35  
☐ Student \$35  
☐ Individual \$45  
☐ Family \$60

#### VIP:

- ☐ Contributing \$80  
☐ Supporting \$135  
☐ Sustaining \$285  
☐ Galaxy Club \$500  
☐ Friend of ESAM \$1,000

#### BUSINESS

- ☐ Supporter \$285  
☐ Patron \$500  
☐ Benefactor \$1,000  
☐ Not for Profit/School/Library \$60  
☐ Small Business \$100

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: Home (\_\_\_\_) \_\_\_\_\_

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**Please make your check payable to ESAM**

**Mail to ESAM, 250 Rudy Chase Drive,  
Glenville, NY 12302**

If your company offers a matching gift program, please contact them with the amount of your gift.

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### ESAM ESTABLISHES ADVISORY COMMITTEE

Under an initiative developed by ESAM President Peter Russo, the museum has formed an Advisory Committee to help the museum establish major priorities and accomplish them. The members of the Advisory Committee are:

Paul Fahey: Primeau Fahey Studios, Marketing and Advertising

Lawrence McArthur: previous ESAM Vice President and Current ESAM Volunteer

John Shea, Esq: Attorney

Michele Susko: Owner/Principal Roya Consulting LLC, Professional Fund Raiser

Peter V. Russo, Sr.: President, Empire State Aerosciences Museum Board of Trustees

Richard Ruzzo: Member, Schenectady County Legislature and Managing Partner Shepherd Communication & Security

The Advisory Committee has met twice, once in person over the winter and once remotely on an April 24th conference call. Topics covered at the meetings include:

- Installation of the Concorde model in front of the museum. The model is 102 ft. in length & 12 tons in weight.
- Initiating an on-line program for children, 4<sup>th</sup> grade up to high school, on aviation.
- Continued fundraising from donors and foundations for museum infrastructure improvement.



**C-47 Placid Lassie, owned by David Prescott, visited ESAM on January 13th.**

## LETTERS LIKE THESE WE LIKE TO RECEIVE AND HOPE WE WILL AGAIN SOON

From our Facebook Page:

A gem of a museum with lots of photos, dioramas, interactive exhibits and actual airplanes to see. The history of aviation and its relation to Schenectady County is covered as well as WWI, II and Vietnam and more. There are two indoor exhibit areas as well as outdoor exhibits. We were enthralled by a docent sharing his knowledge of the replica Japanese aircraft carrier from the film Tora, Tora, Tora. Our grandchildren ages 5 and 8 were well entertained by this jewel in our backyard. In existence since 1992 this was our first visit but won't be our last.

Irene Coburn

From our Facebook Page:

Awesome little museum! Highly recommended place to take the kids.

Emily Cordeiro Bartlett

Email dated February 3, 2020

Hi!

Another HUGE thanks to you all at the Aerosciences Museum for lending us the seatbelt and the airplane seats for our production of "Frost/Nixon!" We had quite a successful run - and many compliments on such a great piece of memorabilia that set of seats is! It fit perfectly for this production.

Is there any particular day or time that works best to coordinate the return of these items? I know Evan, Lindsay, and myself, who all worked on the show, can work on finding a vehicle that can comfortably transport the seats, so just let us know what day and time would work & we can go from there.

Thanks so much!

Nick Bosanko  
Schenectady Civic Playhouse

October 30, 2019

Received from the Mohawk Hudson Humane Society

Dear Friends,

Danke Schon!

Thanks to your generous support, Oktopurrfest raised over \$10,000 for the animals! It was a fun and festive night. With over 150 in attendance enjoying great food, beer and music, and a fun feline twist on the evening's activities... the funds raised will allow us to continue to provide much-needed care for unwanted, abused and neglected animals. Nothing we do is possible without the support and caring of friends like you.

Thanks for your compassion and generosity.

Todd A. Cramer  
President and CEO

**NEW YORK STATE AVIATION FIRSTS**  
compiled by R. P. Shannon

October 6, 1873: **Washington H. Donaldson** made the first attempt at a transatlantic flight in a balloon. The balloon launched from Brooklyn, NY and was forced down by bad weather in Connecticut.

September 30, 1902: **Edward Boice** and **Leo Stevens** made the first powered flights in the United States in two airships over Brooklyn.

July 4, 1908: **Glenn Curtiss** made the first public demonstration flight of an airplane in the United States at Hammondsport, NY in his "June Bug".

August 4, 1910: **Elmo Pickerill** made the first air to ground radio communication over Manhattan Beach, Brooklyn, NY while flying a Wright Model B airplane.

August 2, 1911: Harriett Quimby became the first licensed American woman pilot at Hempstead Plains, Long Island, NY. She was also the first woman to fly the English Channel.

August 5, 1911: The first intercity airplane race took place between New York and Philadelphia.

September 23, 1911: **Earl Ovington** made the first airmail pilot flight from Garden City, Long Island to Mineola, Long Island

September 17-November 5, 1911: **Cal Rogers** made the first coast to coast flight in the United States in a Wright biplane named the "Vin Fiz". The flight went from Sheepshead Bay, Brooklyn to Long Beach, California.

October 8, 1919: The first transcontinental air race started when 48 airplanes left Roosevelt Field, Long Island and 15 airplanes left San Francisco, California.

May 2-3, 1923: **Lieutenants O. G. Kelly** and **J. A. MacReady** made the first non-stop crossing of the United States from Roosevelt Field, Long Island to San Diego, California.

May 20-21 1927: **Charles Lindberg** made the first solo transatlantic flight from Roosevelt Field to Le Borget Airport, Paris, France in the Ryan monoplane "The Spirit of St. Louis".

October 5, 1930: **Laura Ingalls** became the first woman to make a transcontinental flight, going from Roosevelt Field to Glendale, California.

November 10, 1931: The first autopilot was used by an Eastern Airlines Curtiss Condor transport on a flight from New York to Washington, DC. The auto pilot was designed and built by the Sperry Company of Brooklyn.

July 15-22, 1933: Wiley Post made the first around the world flight in his Lockheed Vega "Winnie Mae". He left from and returned to Bennett, Field, Brooklyn.

September 8, 1958: The first American transatlantic jet flight took place when a Pam American Boeing 707 flew from Idlewild (later Kennedy) Airport, Long Island to London, England.

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## **HAPPENINGS AT ESAM**

### **MUSEUM HOURS**

**DUE TO RESTRICTIONS RELATING TO THE COVID-19 VIRUS  
THE MUSEUM IS CLOSED UNTIL FURTHER NOTICE**

**General Museum Admission** – \$8 per adult; \$6 per senior and military; \$5 age 6-16;  
under 6 free when accompanied by an adult  
free admission to active duty military personnel and up to 5 family members  
**Simulated Reality Vehicle (SRV)** – Ride: \$5