

AERONOTES

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

Volume 29, Issue 1 Spring 2019

ESAM OBTAINS HARRIER AND ENGINES

ESAM is pleased to announce that it has taken possession of a Hawker-Siddeley Harrier GR MK 1 donated by **Centurion Investments, Inc.** of Chesterfield, Missouri, dba **AVMATS**. In addition to the Harrier airframe, the donation includes a General Electric YTF34-F5 Engine, a General Electric TF-34 Convertible Engine and a Rolls-Royce Pegasus MK 106 Turbofan Engine. The donation is made for static display. Neither the airframe nor the engines are airworthy.

The Harrier was manufactured in 1971 and was assigned Serial #FL-41H-726855. It has arrived at ESAM in parts for reassembly.

The Rolls-Royce engine is one that would have been used in the US Marine Corps AV-8 Harrier.

The General Electric YTF engine was the precursor to the TF-34 engine used on the A-10 Warthog and S-3 Viking aircraft. ESAM has an A-10 Warthog in its Air Park. The General Electric TF-34 Convertible Engine was developed by GE for use in the Sikorsky X-Wing.

ESAM thanks **Arthur** and **Justin Giessman** for this exciting donation, and thanks **ESAM Trustees John Panoski** and **Dan Wilson** for representing the museum during the transaction.

The airframe will be reassembled and placed on display.

The donation was trucked to the museum by **Lucia Specialized Hauling**.

Top right: Harrier airframe
Middle right: GE YTF34-F5 engine
Bottom right: Rolls-Royce Pegasus MK 106
turbofan engine



PRESIDENT'S COLUMN

Spring has finally shown up and our calendar is almost full for the months of April and May. In April we will be introduced to the RPI Ambassadors, students at RPI who will assist us in many different areas where we need help. In May, we will be hosting the American Trucking Association's event on the 18th entitled "Touch A Truck". We'll have trucks from industry, military, fire & police, and antiques.

The architectural firm, Re4orm Architects, whom we hired to transform the main hangar, have presented a rough draft showing how the museum could look in the very near future. (The picture you see below is their vision of the museum in the future.) The draft has been sent to all the members of the Board of Trustees for their input.



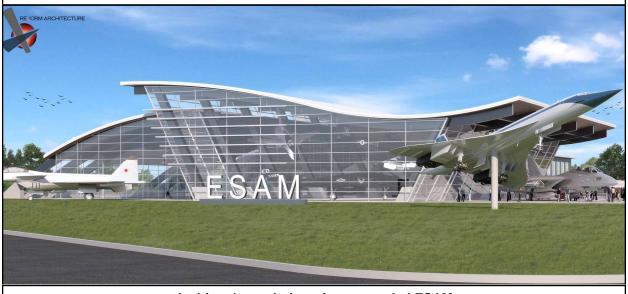
Peter Russo

The architect has provided us with a 3-phase plan, along with costs. The main effort of Phase 1 is restoring the main hangar so it can be used year-round as the main gallery for the museum.

The County is working with us by providing the funding for the architect and hopefully for the beginning of the rehab of the hangar. We will be launching a major fundraising effort which will begin when the Concorde model has been erected in front of the hangar.

We have three new major exhibits to be included in all tours; (1) Concorde – 12 ton model when erected, (2) Harrier jet, and (3) The "Credible Sport" C-130. We want to welcome everyone to the museum and hopefully more people will be coming to see us with these new additions.

Look forward to seeing you at the museum, Peter V. Russo, Sr.



Architect's rendering of an expanded ESAM

A eroN otes

Published quarterly by the Empire State
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Glenville, NY 12302

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MEMBERSHIP MATTERS

If you are receiving "Aero-notes" delivered, you most likely are already a member of Empire State Aerosciences Museum. Therefore, you know why you, your family, or your business is a member of this great institution. It is vitally important that you be able to convey to others why they should sign up!

Our Board of Trustees has taken on some grand projects, which will shape the future of this Institute of History. We have set a goal of 100 members at the "Friend" level for 2019. Every member is precious to us, but the needs of the next decade of the museum are great. Reaching this goal will go a long way to make our plans come to pass. The first few months of 2019 have been very generous, particularly since a number of those at Friend level are working or have worked for firms that match their contribution. We have a long way to go. Please consider increasing your membership to this level, if you are not already there.

This in no way diminishes the importance of every member contribution. For the price of a dinner at a restaurant, you can provide membership for an entire family for a year. The family can attend the museum as often as they wish. This makes a great gift that can not only benefit a birthday or anniversary, but extend that gift to an entire family. This is truly great for those, who no longer live in the Capital Region, a trip to ESAM can be a highlight of a family visit!

Yes, it is true, that our museum attempts to capture the contribution of New York State to Aviation History and World Aviation History, which is vast. ESAM also displays the wonder of flight in all its forms, whether that be Helicopter, Balloon, Soaring, VTOL, Blimp, or Airplane. We also remind the Youth of our Nation that the spark of innovation can start in a garage or backyard and your limits are only those of your imagination. Our STEM programs and camps lift the lid of possibilities for young minds. In short, to see the vision that they can make or be a part of history, because we are making it every day! America has experienced an explosion of Remote Pilot Certificates and Ownership and we are working to be a part of that new arena. The future of Electric and Solar Powered Aircraft has appeared on the horizon. There is no better place to document that exciting innovation, than here in the County named after the Electric City!

We are told, that during any given day, there are no less than 1 million people, airborne in Jet Aircraft in the United States. This is a concept that would be considered Science Fiction at the beginning of the last Century. Many of the Jet Engines, that power the aircraft aloft, are made possible by the research done in the hangar that ESAM occupies.

We need your help. If you have a friend or family member or business that would benefit from membership please reach out to me. If a call or letter or visit would further encourage them to join our ranks of members, I will help.

Thanks, Frederic Lee Membership Chair

MCDONNELL/DOUGLAS AV-8B HARRIER

by Kevin Millington

As many of you know, the museum recently acquired an AV-8B Harrier, and it will certainly be a great addition to our already tremendous collection of military aircraft. As such, I thought I'd profile this legendary plane, the first successful short/vertical take-off and landing aircraft.

The AV-8B is a second generation derivative of the unique Harrier developed in Great Britain by Hawker-Siddeley, and later British Aerospace, for the Royal Air Force during the 1960's. Key to the Harrier's ability is the Rolls-Royce Pegasus jet engine, and the vectored thrust provided through four exhaust nozzles which can be positioned horizontally for for-



ward flight or rotated 90 degrees for vertical flight. As a result, it is not dependent on long traditional runways, and can be deployed to very small landing areas.

In addition to serving with the RAF, the Harrier was also purchased by the U.S. Marine Corps during the early 1970's for ground attack missions, and designated the AV-8A. Although the AV-8A was capable, it had a very limited range and weapons load, and its simple avionics lacked all-weather capability. As a result, the U.S. and Great Britain began development of a significantly upgraded version during the late 1970's, which Great Britain subsequently withdrew from. The U.S. Marine Corps, however, pushed ahead with the project and McDonnell-Douglas developed the much improved AV-8B, which entered operational service in 1985. Through the use of weight-saving composite materials and aerodynamic improvements, the AV-8B evolved as a much more capable ground attack aircraft.

The AV-8B was used extensively during the 1991 Gulf War, being operated from land bases, as well as from the smaller amphibious aircraft carriers. In addition to the U.S. Marine Corps, it also serves with the air arms of Spain and Italy. The Harrier is powered by a 23,800 lb. thrust Rolls-Royce Pegasus turbofan engine, which provides it with a top speed of nearly 700 mph. The AV-8B is equipped with a 25mm. cannon, and can carry up to 13,000 lbs. of air-to-ground munitions on six under-wing pylons. The unique design of the Harrier, however, has resulted in the loss of a number of pilots and planes. With the exhaust nozzles located in the mid-fuselage, it is particularly vulnerable to hits by small shoulder-mounted heat-seeking surface-to-air missiles, and several were lost during the Gulf War from these weapons. In addition, most non-combat crashes have occurred during the critical horizontal to vertical flight transition. The AV-8B is currently being replaced in Marine Corps squadrons by the new F-35B Lightning.

ESAM's Harrier was acquired from AVMATS Corp., located in St. Louis, Mo. The aircraft was built in Surrey, England as a Harrier GR-1, and subsequently used by McDonnell-Douglas as a prototype for their production AV-8B. Many thanks to AVMATS for their very generous donation, as well as to **John Panoski** and **Dan Wilson** for their efforts in coordinating this acquisition for ESAM.

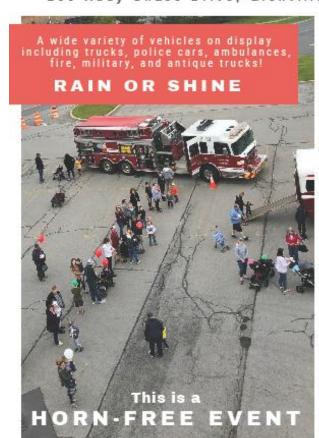
PS – Except at air shows, Harriers rarely takeoff vertically. Since a vertical takeoff requires thrust greater than the aircraft weight, with a bomb load and full internal fuel a short takeoff run is always used. I also think the Harrier ranks as one of the noisiest planes ever!

TOUCH-A-TRUCK

MAY 18, 2019 • 9 AM - 2 PM

Empire State Aerosciences Museum 250 Rudy Chase Drive, Glenville, NY 12302









This event is free and open to the public. The cost of food and raffle tickets is extra. Discounted museum admission available for \$5 per person or \$20 per family, maximum! A portion of the proceeds will benefit the Veterans Miracle Center.

In cooperation with:



A full day of education and fun!

- ✓ ALL YOU CAN EAT BREAKFAST
 - 8:30 AM 10:30 AM \$5 kids / \$8 adults
- LUNCH
 - 11:00 AM 2:00 PM hamburgers, hot dogs, etc.
- RAFFLE PRIZES

REGISTER TO BE A TRUCK EXHIBITOR AT NYTRUCKS.ORG

SOARING

On March 16th Yves Nollet, Reigh Walling and John Mahony from the Adirondack Soaring Club made a presentation on soaring at the monthly ESAM breakfast.

The presentation started by defining a glider as a heavier-than-air FAA licensed aircraft with a rigid structure and an enclosed canopy. Glider glide ratios vary from 25:1 to 60:1, independent of weight. A 15 meter wingspan is typical. A glider has the same controls as any aircraft except a throttle which is replaced by a spoiler that kills lift and increases drag, particularly for landing. Gliders tend to have slow roll rates. Retractable landing gear, water ballasts, flight instruments such as an airspeed indicator, altimeter and compass are standard, as are a variometer that indicates vertical speed (often with an audio capability) and a yaw string instead of a needle and ball. A radio, GPS, and radar transponders are also common. The airframes of contemporary gliders are made of a carbon fiber composite.

Gliders get into the air either by aero tow or a winch. When being towed, a glider normally becomes airborne before the tow plane does. Once at a predetermined altitude, the glider releases from the tow plane and searches for thermals. One common indication of a thermal is a cumulus cloud. Porpoising is the process of spiraling up in a thermal, descending out of the thermal to another thermal and rising again repeatedly. In addition to thermals, lift can be provided by ridge lift, a mountain lee wave and convergence lift.

Gliders are always descending in relation to the air around them, but not necessarily in relation to the ground if the air around them is rising. Record setting glider flights are 56 hours,1,600 miles and 76,000 ft altitude.

An FAA glider pilots license is needed to solo in a glider.

The Adirondack Soaring Club operates out of the Saratoga Springs Airport. It has 70 members, 7 instructors, 3 two-seat gliders, 1 single-seat glider, and two Piper Pawnee tow planes. The Club is happy to have interested people spend some time with them at their base of operations. The club provides introductory flights at a cost of \$125. To solo it takes anywhere from 20 to 60 flights, 10 to 12 hours in the air and an instructor signoff. More information about the Adirondack Soaring Club can be found at www.adirondacksoaring.com.



Adirondack Soaring Club member, Peter Scarpelli flying in the Senior Nationals in Florida. Photo by Tim & Roxanne Hanke

ESAM SUMMER STEM CAMP TO EXPAND IN 2019

Building on its success in 2018, the 2019 ESAM Summer STEM camp will expand to four programs. The programs will again be undertaken in partnership with **Schenectady County Community College**. Registration can be done either on-line at the SCCC web-site: http://sunysccc.edu/coursex/ncreg.html, or in-person at SCCC, Registrar's Office, Elston Hall, Room 212. For questions, call 518-381-1348. *Scholarships are available for all camps. Call Rachel Rourke at 518-506-3208 for more information.

- **1. Aviation Engineers In-Training**, Ages 14-17 years, August 19-23 from 12:30-3pm, Maximum 6 students, Fee: \$150. Want to roll up your sleeves and get your hands-on real airplane parts? Then this course is for you. As a team, you will learn the inner workings of an airplane as you dismantle and reassemble an airplane. This class is limited to 6 participants. (Please note for students who wish to participate in the morning camp program and this program must bring a lunch daily.)
- **2. Young Aviators**, Ages 8-10 years, August 19-23 (possibility of 24th for flights only) from 8:30am-12pm, Maximum 12 students, Fee: \$150, a healthy snack is provided daily. Your week will be filled with guest presenters, field trips, museum and airpark exploration, learning about aviation careers, and why and how aircraft flies and a special team project. Each camper will have the opportunity to take an airplane flight (parent permission required) piloted by an EAA Certified and Insured pilot.
- **3. Tween Aviators**, Ages 11-12 years, August 19-23 (possibility of 24th for flights only) from 8:30am-12pm, Maximum 12 students, Fee: \$150, a healthy snack is provided daily. Your week will be filled with guest presenters, field trips, museum and airpark exploration, learning about aviation careers, the forces of flight, and a flight mission created with your team. Each camper will have the opportunity to take an airplane flight (parent permission required) piloted by an EAA Certified and Insured pilot.
- **4. Teen Aviators**, Ages 13-17 years, August 19-23 (possibility of 24th for flights only) from 8:30am-12pm, Maximum 12 students, Fee: \$150, a healthy snack is provided daily. Your week will be filled with guest presenters, field trips, museum and airpark exploration, digging deeper into aviation and taking on the challenge of creating a real-life flight plan with your team! Each camper will have the opportunity to take an airplane flight (parent permission required) piloted by an EAA Certified and Insured pilot.

VOLUNTEERS RECEIVE CPR/AED TRAINING

On February 23, 2019 ESAM hosted an CPR/AED Training Class instructed by American Heart Association CPR Instructor Kevin Sarsick. ESAM volunteers Robert Tomlinson, Ronnie Quinn, Gary Davis, Gary Gershon, Kevin Millington and John Kusek successfully completed the course.

An Automated External Defibrillator (AED) is a lifesaving device that shocks an abnormal electrical rhythm in the heart back to normal. While success is not a guarantee, it is an important part of the Out of Hospital Chain of Survival: Recognition of cardiac arrest and Activation of Emergency Response System (dial 911), Early CPR (chest compressions), Rapid Defibrillation, Basic and Advanced Emergency Medical Services, and Advanced Life Support and Post Cardiac Arrest Care at Hospital.

ESAM's AED is located at the ESAM Office Main Entrance. Anyone can use this device. Upon witnessing a sudden cardiac arrest (no pulse) Call for help (dial 911), if willing start CPR, send someone to grab AED and follow AED prompts. AFTER 911 notified and AED enroute, contact Aircraft Restoration and Research Center for CPR/AED Trained Volunteers. The AED is expected to be in service before the end of April.

LETTERS LIKE THESE WE LIKE TO RECEIVE

September 14, 2018

Empire State Aerosciences Museum 250 Rudy Chase Drive Glenville, NY 12302

To everyone who so generously gave of their time!

Thank you Gary Davis and everyone who approved the idea of your little red Hovey being one of the main attractions at our 40th Carrot Festival October 7. In appreciation of your generosity I enclose a contribution of \$100 to the museum.

Sincerely,

Stephen Schechter

8/11/18

Dear ESAM

Thank you for hosting our Summer Camp in July. We had a blast learning about aviation. We really enjoyed climbing up and sitting on all the awesome aircrafts.

Chatham Kids Club Campers & Staff

September 4, 2018

We would like to thank the amazing staff at the Empire State Aerosciences Museum. You worked with us to get a ... rate that made it possible for us to come and visit. Everyone loved it and the staff were all terrific.

Thank you very much,

Aim Services

Without Walls

Email received from the Charlton Community Center on February 27, 2019

Kevin,

Wonderful talk you gave us today! And we had a good turnout.

You really got us to look forward to our actual visit to ESAM the 22nd of May- so many interesting things to see.

Thanks again.

Regards,

Torben

ESAM Restoration Group member Rich Bievenue prepares to install the wing sections of the Concorde to the fuselage. A lot of heavy lifting was involved to pair these large sections.



ESAM Restoration Group volunteers work on installing new windshield panels for the Concorde.

Pictured from left to right are: Gary Davis, Bob Tomlinson (behind the cockpit),

Fonz DiBlasio, and Peter Bergendahl.

ESAM THANKS THE FOLLOWING PEOPLE WHO HAVE ESTABLISHED OR RENEWED THEIR MUSEUM MEMBERSHIPS		
	VIP Friends of ESAM	
Mr. Sanjay Correa	Mr. Raymond Davis	
	VIP Galaxy Club	
Mr. Edward Barili	Dr. Nancy Fitzroy	
	VIP Supporting	
Mr. James and Mrs. Judith How- ard	Mr. Thomas Koehler	Mr. Robert and Mrs. Joyce Newkirk
	VIP Contributing	
Mr. Carleton Davis	Mr. Daniel DeBellis	Mr. Robert Duncan
Ms. Donna Esposito	Ms. Maria Esposito	Ms. Karen B. Johnson
	Mr. Ryan Macherone	
	Business Supporter All Season's Equipment	
	Family	
Mrs. Diane Bengtson-Kilbourn	Ms. Lynn Chevalier	Mr. Richard Fullam
Mr. Gary Gershon	Mr. Jeff Gorss	Mr. David Grimm
Mr. Tom Nobles	Mr. Gerry and Mrs. Eleanor Pierce	Ms. Ronnie Quinn
Mr. Stephen Schmidt	Mr. Matthew Tully	Mr. James Uram
Dr. Daniel Way, M.D.	Mr. Jefferson Wood	
	Library	
Castleton Public Library	Friends of the Stillwater Library	Kinderhook Memorial Library
	North Greenbush Public Library	•
	Individual	
Mr. Peter Bergendahl	Mr. Gary L. Jones	Mr. Aaron Lauber
_	Mr. Paul Toscino	
	Senior Citizen/Student	
Mr. Larry Britt	Mr. Dennis Cusano	Mr. Lonnie D. Clar
Mr. Gerald Crawmer	Mr. Gary W. Dansfield	Mr. Robert Dawes
Mr. Paul Dickson	Ms. Loretta Gillen	Mr. David Nash
Mr. Yves Nollet	Mr. Paul Scholz	Mr. Anthony Russo
	Mr. Ronald Volungus	

ESAM JOINS THE 21ST CENTURY

Thanks to an initiative conceived and spearheaded by **ESAM Trustee Jim Liguori**, ESAM's computer network is now being served by a fiber optic feed. Replacing the DSL network our computers were working on, the new fiber optic provisioning allows download and upload speeds ten times and more than 20 times faster, respectively. This advantage allows a huge improvement in our ability to access and use the Internet, quickly provide content for our social media outlets and maintain the currency of our entire computer network. Thank you, Jim!

2018 ANNUAL APPEAL DONORS RAISES \$11,465.00

ESAM's successful 2018 Annual Appeal raised \$11,465.00. We thank the following people and businesses who contributed to the Annual Appeal.

1st National Bank of Scotia **Advanced Aesthetics ALMAC Capital Corp.** Jessica D. Berman, MD **Charles Blodgett** Richard J. Bievenue Larry Britt **Delores Carter** Louis Buhrmaster Lvnn Chevalier Lonnie D. Clar **Raymond Davis** Daniel DeBellis Michael Petrillo, Jr. Alfonzo DiBlasio Paul Dickson John L. Dupier Jack Ericson Frederick Fink Nancy Fitzrov David A. Grimm John Hackert Mrs. Stanley Hemstreet Dr. Richard Hoskinson, DDS Karen B. Johnson Gary L. Jones Vina Kaczmarczyk Patricia Kennedy **Matthew LaPlante** James Lennon Dan Loegering **Michael Lotano Teresa Lozier** Charles W. Marshall Chester 'Bud' & Katie Matthews Jr. **Larry and Dorie McArthur** Kevin Millington **Mardy Moore Earl Mollov** Donald A. Morrett **Robert and Joyce Newkirk** Joseph Palko Robert Pollack Stephen and Sherri Ruggles Peter V. Russo, Sr. Mr. and Mrs. Peter J. Ryan **Douglas and Barbara Sargent Raymond Sprague Honorable Senator James Tedisco** Robert M. Vore Ryan and Laura Sprague Chester Watson **Marvin Weiss Charles Weissend Maurice York**

ESAM GLIDER PLACED ON DISPLAY AT ROTTERDAM SQUARE MALL



Participants in the installation of ESAM's glider at Viaport Rotterdam pose in front of their masterpiece: (left to right) Alan Fanitzi of Viaport Rotterdam, Jade Bilen of Viaport Rotterdam, Dan Wilson of BBL & ESAM, John Panoski of ESAM, and Justin Ooms, Mike Sharer and Art Leahon of BBL

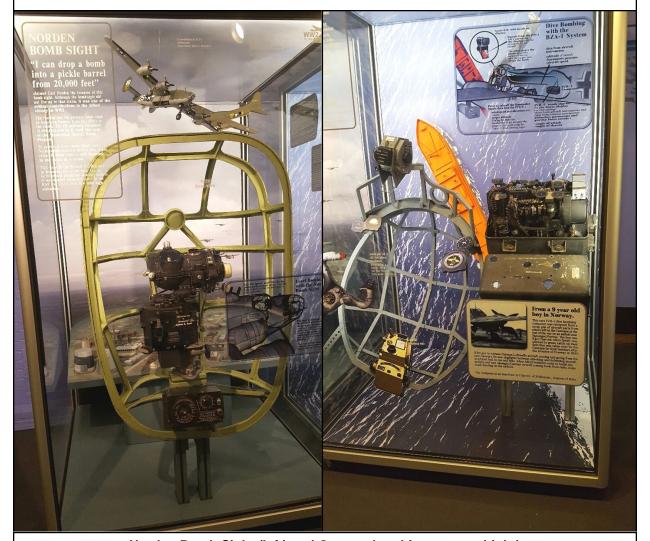
OUR VOLUNTEERS

NEW WORLD WAR II EXHIBIT IS OPEN

ESAM'S totally revamped World War II exhibit is open for visiting. Last winter, the museum's World War II exhibit room was cleared of artifacts and a full redo of the room was undertaken using plans developed by **Trustee John Kolwaite** and approved by the Board of Trustees.

The new exhibit is designed to highlight the service of New Yorkers during World War II. In that vein, the exhibit contains wall panels dedicated to individual New Yorkers who served in World War II. In addition, much of the exhibit is devoted to the equipment used in bombing campaigns, including a side-by-side comparison of the Norden Bomb Sight and a German Junkers-88 BZA-1 bombing system. The exhibit also highlights models of World War II aircraft, a bomber gun turret and other WW II memorabilia.

The entry to the exhibit is decked with pennants describing major events of the war years and with a framed print signed by the officers of the B-29 Enola Gay. Come see it all!



Norden Bomb Sight (left) and German bombing system (right)

OUR SUPPORTERS

RECENT ACQUISITIONS

• **ESAM volunteer Paul Quantock** donated a Dumas model of an Army L-19 Bird Dog. The model was built for Paul by **Mike Wilkinson** in 2015 and given to Paul upon his retirement.



US Army L-19 Bird Dog Model

- **ESAM volunteer Dennis Cusano** donated a Vietnam-era POW/MIA bracelet for LCDR Charles Richard Lee, USN along with information about LCDR Lee from the Wall of Faces.
- **ESAM Trustee Gary Gershon** donated a framed black & white print of a Lockheed P-38 Lightning by Ken Fox.
- **Eugene Gierka** donated two books: Jane's Pocket Book of Military Transport and Training Aircraft and Aviation Engines, 1919 edition.
- **Brian Howard** donated a Tactical Air Command uniform patch and archived photocopies of five aviation-related publications.
- Mr. & Mrs. Richard Fullam donated a book: Diary of a WW I Pilot: Ambulances, Planes, Friends, Harvey Conover's Adventures in France 1917-1918. signed by Frances Conover Church.
- **Jean Bambury** donated a USAAF leather flight jacket circa WW II, owned by William J. White, cousin of the donor's husband, V. Dalton Bambury.
- **ESAM member Joseph Palko** donated a framed print of an F/A-18 Hornet from VMFA-232, MCAS Miramar, California. In a separate donation, Mr. Palko donated two books: Future Flight, The Next Generation of Aircraft Technology and Foreign Language: Vojenska's Letadla.
- Maria Holden of the NYS Education Department provided a loose leaf notebook titled Industrial Arts Junior Aviation in the Schools of New York State circa 1942-1944, including a DVD with pictures of students working on their aircraft projects.
- **Douglas Dederick** donated a set of aviation-related books.
- We found in our collection an invitation to a Schenectady County Airport Dedication, Sunday afternoon October 31,1943. (**Donna Esposito** discovered that the airport had undergone a \$2,000,000 expansion.)

The Empire State
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supported in part by:
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John Panoski
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Veer*

*ESAM Charter Member

OUR SUPPORTERS

ESAM RECEIVES STEWART'S HOLIDAY MATCH GRANT



The Empire State Aerosciences Museum has been awarded a \$750 grant from Stewart's Holiday match to conduct children's programming. The grant money will help support the cost of ESAM's Summer STEM camps for young aviators.

ESAM First Vice President Kevin Millington, with the help of ESAM volunteer **Larry McArthur**, applied for the grant.

The museum thanks Stewart's for its generous donation.

ADOPT-AN-AIRPLANE PROGRAM TO RETURN IN 2019

ESAM's very successful 2018 Adopt-an-Airplane program will return in 2019. People who adopted airplanes in 2018 are being given first choice to re-adopt them in 2019. Once we know what planes will be available for adoption in 2019 we will be recruiting new "parents".



Embroidered ESAM Jackets are on sale in the ESAM Gift Shop

ESAM SPRING BREAK PROGRAM TO OPERATE FROM APRIL 22 TO 26

ESAM will be open from 10 AM to 4 PM from Tuesday, April 23rd through Friday, April 26th during school spring break. Guided tours of the museum's galleries, rides in the Simulated Reality Vehicle, and visits to see the museum's newly-acquired Hercules in the Air Park will be available.

In addition flight simulators will be available for use from 11 AM to 2 PM, and at 11 AM on Wednesday, April 24th a retired Naval Aviator will demonstrate flight gear and discuss aircraft carrier flight operations.

Entry cost is \$5 per person, or \$20 per family. The cost of a Simulated Reality Vehicle ride is \$5.

APRIL FLY-IN BREAKFAST PROGRAM WILL FEATURE TALK ON LOCAL WORLD WAR II PILOT

At 10 AM on April 20th, ESAM volunteer **Donna Esposito** will deliver a presentation on World War II MIA pilot **Lt. John Mancini**. Lt. Mancini hailed from Ballston Lake, NY. He flew the Lockheed F-5 Lightning, the unarmed photoreconnaissance version of a P-38 fighter, in the Solomon Islands during World War II. Come and learn about Lt. Mancini and the daring missions he flew. The presentation will include a newly discovered film of his squadron on Guadalcanal. Lt. Mancini is one of the New Yorkers featured in ESAM's new World War II aviation exhibit in Gallery II.

This presentation is being given in association with ESAM's Fly-In Breakfast.

ESAM Membership Ap	plication
Please check one: NEW MEMBERSHIP RENEWAL _	<u></u>
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 \$1,0	BUSINESS Supporter \$285 Patron \$500 Benefactor \$1,000 Not for Profit/School/Library \$60 Small Business \$100
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City State Zip Phone: Home ()	Glenville, NY 12302
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Empire State Aerosciences Museum 250 Rudy Chase Drive Glenville, NY 12302

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HAPPENINGS AT THE AIR MUSEUM

MUSEUM HOURS

Summer Hours: Tuesday through Sunday 10 AM to 4 PM. Summer hours start on June 18th Winter Hours: Friday through Sunday 10 AM to 4 PM

General Museum Admission – \$8 per adult; \$6 per senior and military; \$5 age 6-16; under 6 free when accompanied by an adult

Blue Star Program runs from May 24th through September 2nd: free admission to active duty military personnel and up to 5 family members

Simulated Reality Vehicle (SRV) – Ride: \$5

Jansz Vander Veer Research Center/Library Hours – Friday 9 AM to 12 noon & Saturday 10 AM to 12 noon

- April 20, Saturday Pancake Breakfast: 8:30-10:30 AM. All you can eat: \$8 (\$4 for kids under 12). Menu varies with pancakes or French toast, sausage, eggs, applesauce, juice and coffee. The public is invited to attend.
 Pilots: Tower Frequency 121.30; Ground 121.90. Land at Schenectady County Airport and taxi to Richmor Aviation North. Browse the Museum beginning at 10 AM. Museum Admission: \$8 per adult; \$6 per senior and military; \$5 age 6-16; under 6 free when accompanied by an adult.
- **April 20, Saturday Speaker Series:** 10 AM. Donna Esposito talks about local World War II pilot Lt John Mancini from Ballston Lake, NY
- April 23-26, Tuesday-Friday Spring Recess Programs at ESAM: The museum will be open.
- May 18, Saturday Pancake Breakfast: 8:30-10:30 AM. All you can eat: \$8 (\$4 for kids under 12). Menu varies with pancakes or French toast, sausage, eggs, applesauce, juice and coffee. The public is invited to attend. Pilots: Tower Frequency 121.30; Ground 121.90. Land at Schenectady County Airport and taxi to Richmor Aviation North. Browse the Museum beginning at 10 AM. Museum Admission: \$8 per adult; \$6 per senior and military; \$5 age 6-16; under 6 free when accompanied by an adult.
- May 18, Saturday Touch-a-Truck Event at ESAM: 9AM-2 PM. Free and open to the public. ESAM Breakfast 8:30-10:30. Lunch 11:00-2:00. Raffle prizes. The cost of food and raffle tickets is extra. Discounted museum admission available for \$5 per person or \$20 per family, maximum! A portion of the proceeds will benefit the Veterans Miracle Center.
- May 20, Monday Board of Trustees Meeting: 7 PM. ESAM Community Room
- June 17, Monday Board of Trustees Meeting: 7 PM. ESAM Community Room
- July 15, Monday Board of Trustees Meeting: 7 PM. ESAM Community Room
- July 27, Saturday ESAM 35th Anniversary Celebration, save the date
- August 19-23, Monday-Friday—ESAM Summer STEM Camp: 8:30 AM-12 PM. Separate programs for 8-10 year-olds, 11-12 year-olds and 13-17 year-olds. Guest presenters, field trips, museum and airpark exploration, learning about aviation careers, the forces of flight, and flight mission planning. A healthy snack will be provided. Fee is \$150. Scholarships may be available.
- **August 19-23, Monday-Friday ESAM Summer STEM Camp: Aviation Engineers in Training:** 12:30 PM-3 PM. As part of a team, you will learn the inner workings of an airplane as you dismantle and reassemble an airplane. Fee is \$150. Scholarships may be available.