MUSEUM HOURS
MONDAY—FRIDAY 9-4
SATURDAY 9-3
CLOSED FEDERAL HOLIDAYS
EXCEPT MEMORIAL DAY,
INDEPENDENCE DAY AND
VETERANS DAY

GIFT SHOP HOURS
MONDAY—FRIDAY 9-4
SATURDAY 9-3

WEBSITES
WWW.ARMYAVIATIONMUSEUM.ORG
VISITOR CONTROL CENTER
OZARK GATE: M-F 8-4
DALEVILLE GATE: M-SUN 8-4
FOR MORE INFORMATION GO TO WWW.RUCKER.ARMY.MIL
OPEN THE "MISCELLANEOUS" TAB AND CLICK ON GATE
PROCEDURES. ADDITIONAL INFORMATION CALL 334-255-0607.

POST ACCESS FOR NON ID CARD HOLDERS
WWW.ARMYAVIATIONMUSEUM.ORG
FOR THE GIFT SHOP CLICK ON THE "SHOP" BUTTON

THE PROP & ROTOR Issue Winter 2020

THINGS YOU SHOULD KNOW

Hello and Happy New Year from the Army Aviation Museum! So much has happened since our last newsletter and moving into a new decade. First, and most importantly, we finally received the furniture and cases for our new Army “Values and Heritage” Gallery. It is not the cases that are important, but the history that will be housed in them. November 7th was the ground breaking for the new Training Support Facility (see the article on page 7). And lastly, we have several aircraft in various stages of the restorations process. All of this gives us cause for celebration and a need to share the news with all of you.

The Army Values and Heritage Gallery will be an important stop for all newly arriving Aviation Soldiers and part of their initial training. It will incorporate stories of ordinary Soldiers that have done extraordinary things! It will also focus on those who have been overlooked by history or did not get the credit they so richly deserved. An example of this, we plan to showcase the brave women of the “Women Airforce Service Pilots” or WASP, who served during World War II.

Their mission was to ferry aircraft from the production line to the front line, often in very dangerous conditions. Many of these brave women were lost to weather related mishaps or mechanical failures. The duties they performed freed men up to fight the war in Europe and the Pacific.

Women pilots of WWII serving with the WASP.

Wings worn by the Women Airforce Service Pilots

Director’s Corner
by Robert Mitchell
Museum Director

When the tide of war swung in our favor, the WASP were told their services were no longer needed and unceremoniously dismissed from service. If they wanted to keep their uniforms, they were required to purchase them! For decades their service was a mere footnote in history and it took many years for them to get the credit they were entitled to. We are hoping that our Gal-

(Continued on page 2)
November 7th was the highly anticipated and official ground breaking for the new Training Support Facility (TSF). Many of those involved in the planning and execution process were on hand to help celebrate this long awaited ground breaking. The TSF will house approximately 100 large and small aircraft and feature the evolution of all things Army Aviation—from uniforms to weapons, to ATC equipment, and much more. In addition, the TSF will have a 50 person classroom, a reference library where soldiers can research documents for the equipment and artifacts on exhibit, and work their professional development assignments in a state-of-the-art environment. We are hoping for a late 2021 opening of the TSF and will be sure to keep you updated.

Pictured above helping dig the first deep hole for the TSF are (left to right): Mr. Nick Dill, senior representative for Robins and Morton Construction; Mr. Robert Mitchell, director, U.S. Army Aviation Museum; LTG Ret. Daniel Petrosky, president, AAMF; Mr. William Kidd, deputy to the commanding general, USAACE; COL Ret. Charles Bowery Jr., executive director, U.S. Army Center of Military History; COL Whitney Gardner, Fort Rucker Garrison Commander; and MAJ Richard Peacock, deputy commander for the Mobile District, U.S. Army Corp of Engineers.

The gallery will also include other WWII stories from the American Volunteer Group, better known as the “Flying Tigers,” as well as Soldiers’ services and sacrifices from the skies of the Western Front, to the Afghanistan mountains, and much more. This Gallery will be named in honor of Mr. Walter D. Sabey, a former Army Aviator and beloved longtime volunteer at our Museum.

As for restorations, work is progressing on the AH-56 Cheyenne. The most challenging phase was the removal of several layers of paint, some of which was house paint applied with brushes. The interior pilot/gunner station is about 90% complete and it’s time for priming and painting. The YUH-61 is next in the line to be restored, followed by the YAH-63, the L-5 and L-19. We also have a Gift Offer from our wonderful Foundation going up the chain for approval to restore the sole remaining Vietnam era UH-1 Huey used for tube-launched, optically tracked, wire guided (TOW) anti-tank missile operations.

In closing, I wish everyone a safe and prosperous New Year and give you a promise from us that 2020 will be an exciting year!
UPCOMING AAAA 2020 SUMMIT

The AAAA 2020 Summit is rapidly approaching and we are very excited to participate in this gathering of aviation professionals. The Summit will be April 22-24 in Nashville at the Gaylord Opryland Hotel. Each year we are part of AAAA Scholarship and Museum Foundation Donation Luncheon and have an amazing booth with lots of aviation items, clothing and keepsakes from our Gift Shop.

The Donation Luncheon will be held on Wednesday, April 23, and is one of our biggest fundraisers where we receive donations from many civic, company and industry leaders. During the 2019 luncheon the Foundation received contributions from: AAAA, AECOM AIRBUS, Ameripack, Bell, Boeing, Brauer Aerospace, City of Enterprise, City of Ozark, GasTops, L3, M1, Piasecki, S3, Buckelew, American Airlines, AECOM, Airbus, Ameripack, Bell, Boeing, Brauer Aerospace, City of Enterprise, City of Ozark, GasTops, L3, M1, Piasecki, S3, and SES totaling $642,040.00. We thank them for their generous gifts!

Donations from the past three years have funded more than $719,000 in restorations. Completed projects include: Sikorsky YH-19; XH-59AB & XIH-39; Piper L-4B; and the Bell YOH-4 & UH-1M; Sopwith Camel & YLI15 fabric repairs; and a 15 piece engine collection.

Our priorities for future restorations include: the Del Mar DH-1A; Lockheed AH-56 Cheyenne; currently undergoing an amazing restoration; Bell YAH-63 & King Cobra; Hughes TH-55; Stinson L-1 & L-5; Boeing YUH 61; Goodyear Inflatoplane; Beech RU-8 and the Cessna YH-41A (see page 4-5). These and other legendary aircraft sit unappreciated behind closed doors in storage in need of our mutual help. Once restored, they will be proudly displayed for their contribution to aviation history and for the enjoyment of our approximate 100,000 annual visitors.

Donations from companies and individuals are crucial to our progress. If you do not currently contribute, and would like to jump on our bandwagon of success, we ask that you add us to your budgets. This will give us the opportunity to publicly recognize you at the April Luncheon. In turn, you will have a hand in the restoration and conservation of our aircraft, artifacts, collections, and the preservation and interpretation of Army Aviation’s story of innovation, sacrifice and service to our nation.

For more information please reach out to Leslie Edens at foundation@armyaviationmuseum.org or 334-598-2508. Thank you for keeping the U. S. Army Aviation Museum “Above the Best”!

THANK YOU!

ALONE
WE CAN DO
SO LITTLE;
TOGETHER
WE CAN
DO SO
MUCH.

~ Helen Keller

THE GIFT SHOP

Notes from Linda Gentzyel, Gift Shop Manager

It was a great year for sales in the Gift Shop, and as fast as items have been flying off the shelves, we are getting them back in. We receive shipments weekly of our regular and other fun new items.

The Official 2019 White House Christmas Ornament sold like hotcakes over the holidays. The good news is we will continue to carry them and keep them in stock. The ornament is in honor of our 34th President, Dwight D. Eisenhower, who was the first commander-in-chief to have an and fly in an official presidential helicopter. This helicopter, “Army One”, served four presidents and resides in our museum. The ornament is a replica of this amazing and historical Sikorsky VCH-34A aircraft.

One of our new items are magnets featuring the CH-47 Chinook, UH-60 Blackhawk and the AH-64 Apache, each available in black or OD green. We also have them as an ornament. You can have them engraved and they make the perfect gift tie-on for that special aviator or crew-chief in your life.

To keep you warm on a chilly night, we have a variety of throws available. These large throws are adorned with insignia of the Aviation Branch or the Warrant Officer Corps, and the Fort Rucker throw features various buildings and aircraft found on post.

The Gift Shop is also running a few sales that you won’t want to miss. Our warm and comfy 1/4 zip fleece pull-overs are 20% off and are embroidered with the Prop and Wing insignia. Our framed aviation related art is also 30% off (but framed art cannot be shipped).

If you can’t make it into the store, you can always shop with us online at: WWW.armyaviationmuseum.org.
CHARITY CLIMB BENEFITS  
YH-41A SENeca RESTORATION PROJECT

Update by Leslie Edens

The AAMF is excited to announce our charity fundraiser to benefit the restoration of an aircraft in the museum’s collection. The “Climb for the Army Aviation Museum Foundation” will help to raise $9,500 to restore an Army YH-41A Seneca helicopter. AAMF board member James Bullinger learned in November about this unique surviving aircraft in storage and the need for work before being displayable to the public.

“I got the idea from a climbing fundraiser hosted by the AAAA Tennessee Valley Chapter this past year,” Bullinger said. “They raised $4,000 for climbing a small mountain to benefit soldiers and I thought I might try to do something similar to help out the Aviation Museum.” Speaking with Museum Director Bob Mitchell, Bullinger learned about the YH-41A helicopter. “After doing some research on the history of the aircraft, it appears to be a great choice and a worthy cause,” Bullinger said.

The CH-1 “Skyhook” was the only helicopter developed and built by the Cessna Aircraft Company of Wichita, Kansas during the 1950s. A total of 50 variants of the CH-1 were built and sold for civil and military use. The U.S. Army purchased 10 CH-1B aircraft in 1956 for evaluation before a possible future production contract and designated it as the YH-41A Seneca.

“The aircraft has a short, but rich history,” Bullinger said, “I learned it was the first helicopter to land on the summit of Colorado’s Pikes Peak at 14,110 feet on Sept. 13, 1955. It took off from nearby Peterson Airfield in Colorado Springs with Cessna Pilot Jack Zimmerman (an Army WWII pilot), and it had Army pilot Capt. Knowles from Fort Carson to fly shot-gun.”

The YH-41A aircraft also set a world altitude record for a helicopter. “On Dec. 27, 1957, Army Capt. James E. Bowman was an evaluation pilot with the Aviation Test Board,” Bullinger explained, “he flew a YH-41A at Cessna's Wichita facilities to a recorded indicated altitude of 30,355 feet, setting two new records with the aircraft. One for a piston-engine helicopter and one for a helicopter in its weight category.”

At the Dec. 5 meeting of the Executive Work Group, Bullinger proposed to use his upcoming Ecuador climbing trip in February as a fund-raising opportunity for any of the aircraft needing restoration work. Based on Mitchell’s recommendation, Bullinger then proposed the YH-41A. “This aircraft was also used by the Ecuadorian military,” Bullinger said, “Six YH-41A helicopters were purchased by the Fuerza Aerea Ecuatoriana through a DoD military assistance program in the late 1950s. This historical connection adds to the significant and relativity of our charity climb. I will be climbing at high altitude and in an area where the aircraft was operational flown for its capability.”

Bullinger will be climbing Cotopaxi, Ecuador’s second highest volcano at 19,347 feet without supplemental oxygen. In February, the AAMF is seeking supporters to pledge an amount of money for every 100 feet Bullinger climbs from the trailhead to the summit, an elevation gain of 4,582 feet over a 3-mile route. There are 45 100-foot segments with a request for a bonus amount for reaching the summit. To learn more about how to pledge your support, please visit the AAMF’s website’s “Museum Climb” page. Pledge donations are tax-deductible, and you can follow the adventure on the AAMF’s Facebook page.

Best of luck to Bullinger and his guide Estalin Suarez with Andengipfel Reisen in Quito.

YSOTLIGHT ON THE  
CESSNA YH-41A SENeCA

Article by James Bullinger

Disclaimer: My online research for details about the CH-1/ YH-41A helicopter yielded information from various sources to include Wikipedia, an October 1955 article from Army Aviation magazine: an article by Steven Remington. The Cessna CH-1 Helicopter: A Record Setter; and comments post by Robert Ransone, a flight test engineer who flew the YH-41A. These were the information sources for this article.

In January 1952, the Cessna Aircraft Company of Wichita, Kansas, acquired the Seibel Helicopter Company with all its patents, rights, equipment and S-4B helicopter. The assets were moved to Cessna’s Pawnee Plant in Wichita, where Charles Seibel became the chief engineer of the new helicopter division. Seibel believed that the S-4B with a Cessna body would make an excellent helicopter and work began on the CH-1 design during the summer of 1952. The helicopter had a semi-monocoque airframe resembling the light airplanes built by Cessna, with a front-mounted reciprocating piston-engine to power a single two-bladed main rotor system. This design gave the aircraft a stable center of gravity. Cessna named it the “Skyhook” similar to the names Skyhawk, Skycatcher and Skyplane used with aircraft for the civilian market.

The first CH-1 was a two-seater helicopter and received a CAA type-certificate 310H on June 9, 1955. However, stability problems at higher gross weights required additional modifications. After reworking issues, to include the stabilizer, a second row of two-seats was added. The four-seat aircraft was designated as CH-1A and certified on Feb. 28, 1956.

In December 1955, while trying to obtain a possible Army contract to produce a limited number of CH-1s for test and evaluation, Cessna began modifying the CH-1A variant with a newer engine and other aerodynamic and structural changes to help elicit a production contract. It was the aircraft’s high-altitude performance that peaked the Army’s interest. In the spring of 1956, the Army awarded Cessna a contract to produce a CH-1B aircraft fitted with a 270 hp Continental FSO 526-A engine for evaluation and testing before a potential mass production contract.

The Army designated the helicopter as the YH-41A and named it “Seneca” after the Indian nation of the New England area. These aircraft with serial numbers 56-04236 to 56-04245 (C/N 45005 to 45014) were delivered between December 1957 and June 1958. A CH-1A prototype (N5156) was painted in an olive drab-color scheme for use by Cessna and the Army for marketing purposes and this aircraft was featured in various news stories. On Dec. 28, 1957, Army Capt. James Bowman set a world altitude record by flying a YH-41A piston-engine helicopter to 30,355 feet MSL. Testing of the YH-41A was conducted at various sites across the continental United States.

Cessna decided to terminate the production line in December 1962. The company indicated that this was due to the civil aviation market not being ready for this type of aircraft. However, a CH-1 owner named Rex Traylor alleges that it was due to catastrophic transmission failures. A total of 50 aircraft variants were built before Cessna ended their venture into helicopters. Cessna revoked the type certificate and bought back most of the Skyhook aircraft to scrap, presumably to remove any liability to the company for continued operation by owners of any aircraft they could not retrieve.

Eventually, it would be turbine-engine powered helicopters with better performance and simpler maintenance that would interest the Army. The Army’s evaluation of the YH-41A concluded the aircraft’s limited payload and somewhat complex maintenance requirements precluded it from a large-scale procurement. However, the YH-41A program helped to advance the Army’s understanding of rotary wing capabilities for high-altitude Skyhook operations. In 1962, the aircraft were re-designated as NH-41A. The Army Aviation Museum has one YH-41A Seneca aircraft (SN 56-04244) as a part of its collection, although it is not currently on display pending restoration.

Aircraft General Characteristics:

- Capacity: 4 (1 pilot, 3 passengers)
- Fuselage Length: 29 ft 5 in.; including rotor: 42 ft 6 in.
- Height: 8 ft 3 in.
- Empty weight: 2,800 lb
- Gross weight: 3,100 lb
- Main rotor diameter: 35 ft 0 in
- Performance:
  - Maximum speed: 108 mph at sea level
  - Range: 260 miles (230 nm)
  - Rate of climb: 1,030 ft/min
  - Endurance: 5.15 hours (with auxiliary fuel)

The YH-41A Seneca helicopter, SN 56-04244, flown by the Aviation Test Board at Fort Rucker, awaits restoration in museum storage. Army Aviation Museum photo.

Army YH-41A, SN: 56-04244, undergoing a performance evaluation while mounted on a flight test stand. (Army Photo)