

Hangar Happenings for September, October, November and December 2021

Rotorheads

I'm so far behind that I lumped the end of 2021 all together in it's last four months. Although things slowed down, the H-46, H-37, DL-125 and H-12 saw work as well some other good projects, a little bit of infrastructure work and lots of great tours. All of it's wrapped up with some great history and cool videos. So, let's get to it.

On the **Boeing Vertol HH-46 Pedro Sea Knight**, we removed, repaired and replaced the ramp actuators. This work included fixing a leak in the left hand actuator with new parts. The ramp was then pumped up a couple of times to replace lost fluid in the repaired actuator and to pressure the actuators for leaks. Both actuators checked good. There were a number of spare control boxes which were categorized and sorted.

The **Sikorsky H-37 Mojave** saw some really grueling, messy and dirty work. The original engine pod fuel cells were removed, which had largely rotted away. The pod fuel cell cavities were then cleaned. Priming and painting will be a future project. The pods are now in protected storage under the new parking and storage structure which you can read about in the June, July and August 2021 Happenings.

The **De Lackner DL-125 Cloud Buster** saw some fuselage structure work. Some of the engine compartment sheet metal was repaired, painted and installed. You can see it in the picture on top between the last two fuselage frames.

The last bird that saw some action this period was the **Hiller UH-12/OH-23 Raven**. The ground handling wheels were mounted so it could be moved out to get access behind it in the hangar. The tires



H-46 ramp actuators



Old H-37 fuel cell



H-37 fuel cell removed



H-12 wheels attached



H-12 tires serviced



Repairing a ramp actuator leak



Spare H-46 control boxes



H-37 engine pods stored



DL-125 engine compartment



Moving the Hiller H-12



H-12 door fixed

were deflated a bit and needed to be serviced. After the tire servicing, it was successfully moved out and then back into its spot on the museum floor. We also did some work on the cockpit door.

The major non-aircraft project was the **New Air Compressor**. The compressor was installed outside under the new



New compressor set up

parking and storage structure.

The installation was a lot more detailed than it seemed, requiring positioning under the low-clearance sloping roof on a solid base. Power



Good to go



Compressor valve adjusted



Compressor motor oil added



Compressor hose reel

and output pressure required specific wiring, hoses, electrical connectors and air pressure valves. The work resulted in a beautiful machine, capable of supplying air throughout the museum hangar. To assist getting the air to every corner of the museum, a roll-around **Hose Reel Cart** was built which allows quick access



Portable hose reel constructed



Roll-around reel

to air pressure

connections on the hangar inside perimeter. The **Tail Rotor Display** was worked on with a new gearbox, hub and blades added. A 1960's **Vintage Wall Rotary Dial Phone** was hung out side of the model room. A digital adapter was added and the phone wired into the hangar phone system. You can call in and out on it. A **Rotary Dial Desktop Phone**



Wiring up vintage dial phone



TR gearbox & hub



Working on tail rotor display



Now it's a workable dial phone



New model room models

was also acquired and checked out but is yet to be installed. Three new models were added to the **Model**



Cleaning the Wright R1820

Room of the Focke-Wulf Fw-61 transverse-rotors helicopter, the Bell XV-3 tiltrotor and the Russian Mil V-12 giant transverse-rotors helicopter.

Infrastructure work is never ending in a museum. Cleaning displays and associated items like **Engines and Batteries** takes place continuously. New **Overhead Lights**



Moving Pressure-Jet and 1820



New model



New lights installed

were installed in the north end storage hangar. The **Disabled Parking Sign** was removed, repaired and rehung. The **Helo Stained Glass** was hung in the gift shop. Rotor blades were moved into new



Fixing disabled parking sign



Rotor blades moved

storage, including a set of **S-52 Rotor Blades** that were boxed for transport for an S-52 restoration project. In addition to moving the blades, the **Wright Cyclone R1820 Engine** and the **Pressure-Jet Helicopter** displays were repositioned. **Helo Photo Files** were further researched for digital filing. A good number of tours were conducted over this period. We also had a visitor who worked with Frank Piasecki as an engineer on the Piasecki 16H Pathfinder.

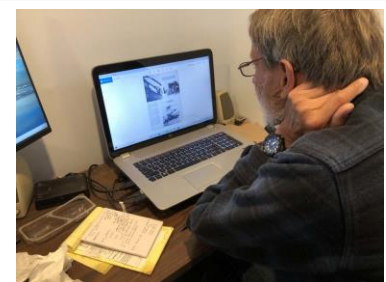


Helo stained glass hung



S-52 rotor blades boxed

History-wise, there were so many cool things that happened towards the end of the year, it was hard to narrow it down to just a few. The first is some historical pics of our 46. Our H-46, number 157688,



Digital photo files organized

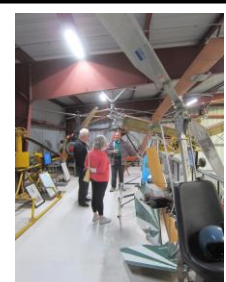
started its career as a CH-46F with HMM-262 in Hawaii. During that tour, it ditched following an engine failure, water-taxed to shore then had to be hoisted out by an



Visitor worked for Piasecki



Tour at the HH-1N Huey



Hobby-Copter tour

Army CH-47 Chinook. In the 90's it was flying with the Marines in Bosnia. She ended her USMC career in 2015 reconfigured to an HH-46E Pedro SAR bird with VMR-1 at Marine Corps Air Station Cherry Point,



USMC CH-46F in Hawaii



CR N57688 at Ramona



Remote control

North Carolina. Now she is working as N57688, a beautiful functional display with Classic Rotors. Other year-end firsts included September 1941 when Arthur Young demonstrated cable-remote controlled helo model to Larry Bell, and Bell Helicopter was born. In December 1939 Igor Sikorsky made the first tethered hover of his VS-300. Many countries have their rotary-wing pioneers who have contributed to the technology, often significantly. One of those was Italian Corradino D'Ascanio. On October 8, 1930 his D'AT3 was one of the first helicopters to be officially recognized for setting flight records. The 1760 lb coaxial aircraft was powered by a 95 hp Fiat engine, setting records for altitude, distance and endurance. It

was controlled by three outrigger propellers, flying to an altitude of 59 ft over a distance of 3553 ft and staying aloft for 8 min and 45 sec. The 49 ft rotors were controlled by servo flaps on the blade trailing edges, a technique adopted by designers world-wide including Charlie Kaman in the U.S. This event was during the Depression and D'Ascanio's company collapsed in 1932. His other claim to fame was inventing the Vespa motor-scooter in 1946. Anyone who has visited

Italy is familiar with Vespas, where the streets are often alive with swarms of these little scooters.

A quote of note from Mr. Sikorsky, "The helicopter appeared so reluctant to fly (forward) that we even considered turning the pilot seat around and letting it fly backwards." I've attached some cool videos for you below. Enjoy them, then hop onto your Vespa and motor-scoot to the museum hangar where you can see some rotary-wing firsts and other unique one-of-a-kind aircraft. You can even go inside of some of our larger displays like the H-46 for a more up-close and personal experience. Looking forward to seeing you here. Stay healthy and safe.

Chip out

Arthur Young remote controlled helo (2.5 min)

[Worlds First RC Helicopter from 1941 also Crazy Accident!! - YouTube](#)

Igor Sikorsky VS-300 flight test (2 min)

[Vought-Sikorsky VS-300 \(1941\) - YouTube](#)

Corradino D'Ascanio D'AT3 coaxial helicopter (6 min silent)

[HD Stock Video Footage - D'Ascanio Italian helicopter being tested in North Ciampino near Rome Italy \(criticalpast.com\)](#)



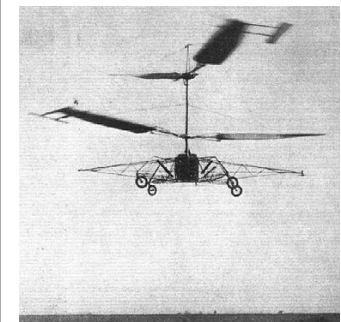
CH-46 157688 in Bosnia



HH-46E in Cherry Point



VS-300 tethered hover



Italian D'Ascanio D'AT3