

Project Phoenix

Update 4 – July 25, 2015



The Program Manager and Executive Director's Representative visited the 1426 at Elizabeth City on July 23rd to observe progress on the restoration to date. A great deal has been accomplished. CAPT Sal Palmieri and CAPT Keith Overstreet visited the site several weeks ago and applied a number of sheet metal repairs to the fuselage. They were assisted by AMT1 AAGARD from Aviation Logistics Center Elizabeth City. Vector CSP SME John Siemens, expert technician Craig Simmons, and CAPT Jim Martin, C.O. of ALC, join the HQ (CG-41) leaders in reviewing a recent copy of the PteroGram.



During our visit, 1426 was once again undergoing a thorough wash-down to remove media blast debris. Paint was also removed from the engine cowling surfaces.



The aircraft was towed to the ALC line, where it was sprayed with an alodine solution. This treatment finely etches metal surface in order for primer paint to adhere. In addition, alodine is a highly effective anti-corrosive substance. In the pictures below, you can see alodine being sprayed on and removed by water after a brief period. The alodine is recovered through a holding tank drain on the ramp below the aircraft. After receiving this treatment, 1426 will be a pristine aircraft, capable of appearing "mission ready" for the next fifty years!





We met Gary Polaski, recently retired as Commander, USCG. Gary is the business development manager at ALC and has kept a close watch on the restoration, providing advice and coordination as VectorCSP work progresses. We were accompanied on our tour by Mr. Roger Connor, Rotary Wing Curator at the National Air and Space Museum. We met Mr. John Berry, manager of the ALC Paint Hangar, where 1426 will eventually receive her paint and insignia.

After three hours of thorough drying, 1426 was towed to the Paint Hangar, where she received a coating of primer paint. This completes the “pre-paint” process and 1426 gleamed with her new “under skin.”



Our next stop on the tour was the Fiberglass/Composite Shop, where we observed various fiberglass assemblies undergoing preparation for primer painting. After a brief visit to the Upholstery Shop we



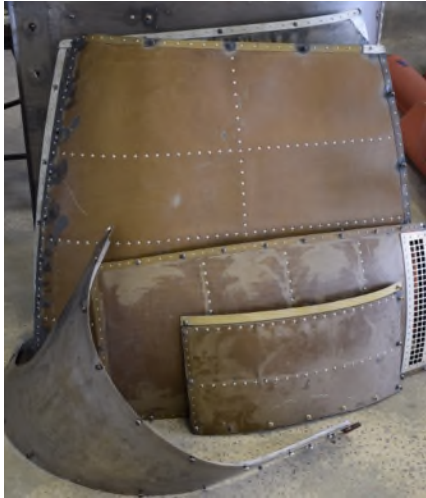
returned to the FBO Hangar to see several sub-assemblies undergoing repair. Below you can see both pilot's and co-pilot's cyclic grips. One is heavily chalked and discolored, but VectorCSP obtained a near-perfect replacement grip, so the grip in the worst condition will not be used.



We viewed the tail rotor 90-degree gear box and pitch change rods, which have been scrubbed and are ready for primer. Of note, the main gear box retaining hardware, base nut and hub (with eyelet) underwent a Magna-Flux inspection and were re-plated. All components that will absorb the load of suspension at Udvar-Hazy passed with flying colors! VectorCSP received authorization from Mr. Connor to substitute the fiberglass tail pylon from 1425 (one of the "Aberdeen Girls") since certain stiffeners inside the pylon had been broken, and repairs would have been too costly. A number of fiberglass components including tail rotor drive shaft covers await refurbishment and paint. I was



surprised to learn that a number of engine and transmission cowling components were made of magnesium! Replacement of instrument panel gauges is proceeding nicely. The remainder will be installed after the panel is re-mounted, in order to avoid adverse weight. The rescue hoist will be painted but will not be attached until just before suspension at Udvar-Hazy. At that point, the electro-hydraulic motor will be removed to allow spooling of a specified amount of cable, after which the motor will be re-installed. The hoist ring will be re-painted bright yellow. We visited the "T" hangar so Mr. Connor could observe several new additions.



Several old auxiliary flotation bags were located. They are no longer air-tight and serviceable, but their hardware “plumbing” is intact and can be connected to the fittings on the sponsons, after which the bags can be folded with talcum powder and inserted into rubber-impregnated canvas covers and lashed with bungee cord, such that the assembly replicates the original technology. The challenge will be to restore the multi-riveted flange that surrounds the canvas covers. John Siemens showed Mr. Connor the cockpit glare shield, which has been re-painted in its flat black scheme.





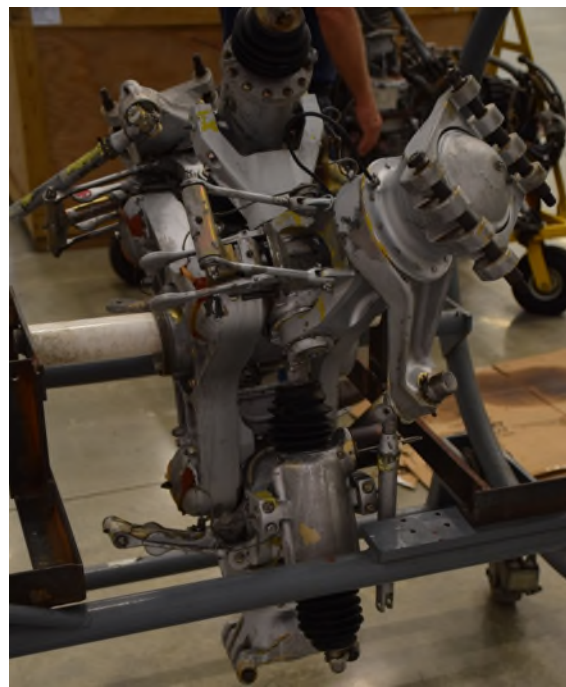
The tail rotor blades are slightly dusty and dirty. Rather than attempt to re-paint them, Mr. Connor authorized us to apply a heavy coating of wax, which should render the red, white and black surfaces much brighter – and still leave the stenciled information on the blades legible. We viewed the cabin radio rack, which has been re-populated with all but two transceivers – the AN/ARM-25 TACAN and the VHF-FM



transceiver. WE are also looking for a TDL-424 LORAN C “mini navigator” control head, so keep your



eyes open and let us know if you are aware of a source for these! We proceeded to the Telephonics hangar to view the engine, transmission and rotor head. We are grateful to Telephonics for providing temporary climatic storage for the drive train. The engine is ready for final packing. The transmission will undergo some additional cleaning around the stationary swashplate and rotor mast.



Once more... the aircraft restoration is proceeding on track to deliver a white HH-52A with red and blue diagonal stripes in an appearance befitting “any mission-ready H-52 sitting on an air station flight line in 1975.” Later this summer the cockpit, cabin, sponsons, MLG, and tail rotor drive components will be detailed out and re-installed. Final paint may be applied sooner than expected. This aircraft will be immaculate when trucked to Udvar-Hazy for final assembly and suspension over the north hangar. Remember, CGAA has planned this project for ten years and we are excited it is coming to fruition. You will be able to take your children, grandchildren and great grandchildren to see this “first of its kind” technological marvel that set the stage for our modern turbine-powered craft.



Artist's conception of HH-52A 126 suspended in military aircraft wing of Udvar-Hazy

Let's turn for a moment to what is needed from you. We need your generous contribution toward this exhibit that will be viewed by millions of people over the coming years. This is the centerpiece of our 2016 100th Anniversary of Coast Guard Aviation. We need to raise approximately \$150,000 to augment monies that have, or will be, expended from our USAA account just to complete Phoenix. Moreover, our goal is to have a substantial amount of money to fund 2016 100th Anniversary events. CGAA will award a life membership for a donation of \$250 or more and a one year membership including 3 25-page issues of the “PteroGram” newsletter for a donation of \$30 or more. We urge you to recognize that this is, and will probably be, the first and only Coast Guard aircraft on display in this prestigious collection for many years. We will be grateful for a donation in any amount. Please send your donation by check to:

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