



Something From (almost) Nothing

P-40K is the new reality in warbird restoration

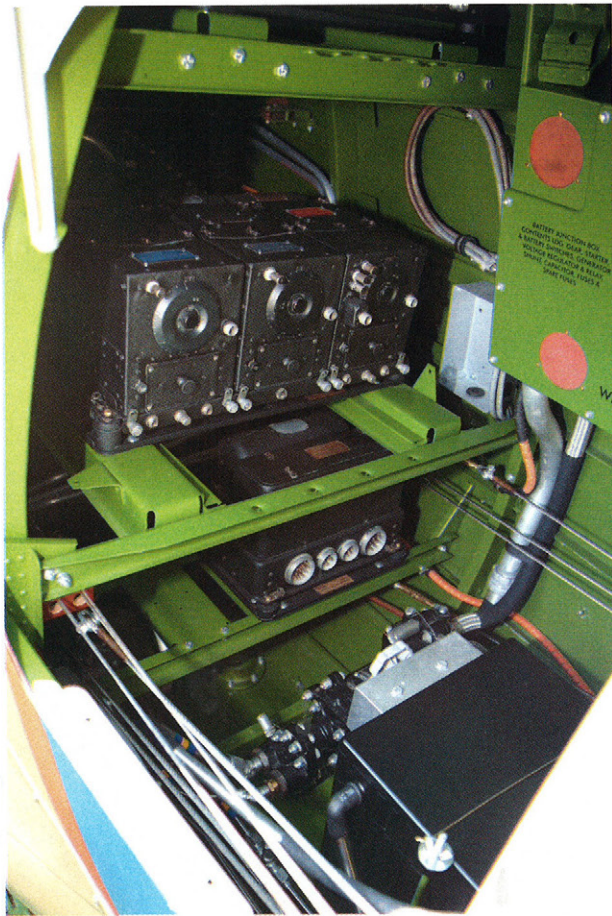
BY FRED JOHNSEN

Better than alchemists trying to make gold from lead, the folks at Warhawks Inc. have made a golden warbird from wrecked aluminum. Their scarce Curtiss P-40K Warhawk restoration first flew June 5, 2006, following a lengthy recovery and rebuild that started back

in 1992. Few P-40Ks remain.

In that year, the wreckage of a crashed P-40K was removed from where it lay for a half-century in Murmansk, Russia. A Soviet pilot got the worst end of a tangle with German fighters in this Warhawk after it had 10 months of combat flying. The re-





Upper Left: Fuselage interior details.

Left: Cockpit interior.

Above: View from rear 1/4.



sulting crash-landing and subsequent deterioration pretty much wiped out everything aft of the cockpit, says restorer Erik Hokuf. Initially, Ken Hake brought the K-model to Kansas where he performed substantial restoration on the airframe. The horizontal stabilizer and enlarged vertical fin are new-made, mated to original Curtiss

elevator and rudder assemblies.

The K-model is identifiable by its enlarged vertical fin. When some Warhawks exhibited lateral control deficiency, Curtiss and the National Advisory Committee for Aeronautics (NACA), NASA's forerunner, tested alternate vertical tails to find a solution to the problem.

Hokuf credits Hake with creating tooling to build 80 percent to 90 percent of the P-40's structure. In 2004 Warhawks Inc. bought Hake's substantial P-40 inventory and tooling and moved the project to Granite Falls, Minnesota. Owners Ron and Diane Fagen have six P-40 projects

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plus a P-38L and a P-39 to rebuild. Erik Hokuf says the company intends to perform complete restorations on these airframes and then sell the finished products. Warhawks Inc. can furnish parts for other P-40 restorers. Chin cowl and belly fairings are especially hard to find since they literally take it on the chin when a P-40 makes a wheels-up landing. Warhawks Inc. can manufacture new pieces like these, although Hokuf is pleased to note this P-40K has a brand-new old Curtiss chin cowl.

The level of detail goes beyond what can be seen, even with cowl-ing panels removed for inspection. Hokuf says the vast majority of the rivets in the airframe were replaced as much of the Warhawk was re-skinned. To match Curtiss specifications, a batch of new rivets was made with the 78-degree countersink bevel Curtiss used.

Hokuf and his compatriots at Warhawks Inc. scour the country for usable parts. The drop tank suspended beneath the P-40K at EAA AirVenture is from brand-new old surplus stock that Hokuf uncased just three weeks ago. To protect the fighter's finish when people climb up to the cockpit, Hokuf placed original Curtiss canvas runners on the wing roots, still bearing tags with the number 87—Curtiss' model number for the P-40 series.

The classic diamond tread main tires on the P-40K are part of a batch of 30-inch aircraft tires molded by McCreary tires a few years ago. Soft goods, like tires, wear out and must be replaced periodically. Joe Yancey at Rialto, California, rebuilt the P-40K's Allison V-1710 engine mounted beneath burnished exhaust stacks.

All that detail is complemented by a paint scheme that faithfully reproduces the hues of gray, olive, and green Curtiss applied to this P-40K when it left the factory. 