IN THE WORKSHOP

Weisse Eins

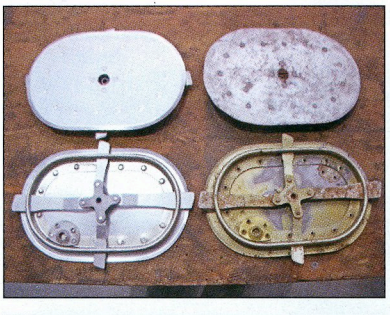
KATHRYN "KT" BUDDE-JONES provides an update on the ten-year restoration of a com bat veteran Focke-Wulf Fw 190

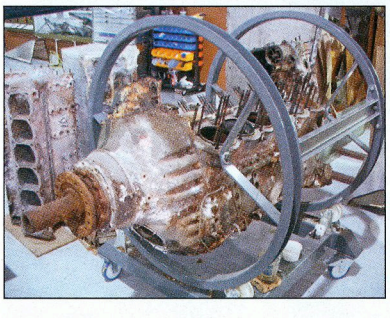
ALITTLEOVER ten years have elapsed since Focke-Wulf Fw 190 *Weisse Eins* (White 1) began to be restored to flying condition. On February 9, 1945, it miraculously landed on the steep side of a snow-covered mountain after a battle over Norway's fjords. Its pilot, Heinz Orlowski, parachuted into deep snow. Decades later, *Weisse Eins* was salvaged and displayed in the Texas Air Museum in the USA.

In 1999 Dr Mark Timken took on the herculean task of restoring it to fly. It would be no ordinary project; Timken's WWII Fighter Aircraft Foundation (WWIIFAF) aimed to return Fw 190F-8 Werknr 931862 exactly to its 1945 state, using the original blueprints, specifications, parts, materials, paints and compounds, and one of the two remaining flight-worthy BMW 801 engines. It would be the second original flying Fw 190, and the most original.

Exactly as per original

All of the parts are either restored or handmade using original plans and/or parts. The metals and materials match the original specifications. For example, the original metric 120° countersunk rivets were especially made, and all of the original production markings are applied to the restored or replaced components. Even the paint and rubber materials embody the original chemical compositions used in this late-production Fw 190. The restoration team's adherence to the original configuration has ensured that it will be comparable with any museum restoration of a fine work of art.





Progress is not rapid when such high standards are set, but the dedicated team is making great strides. The wing rebuild is well under way, using reverse-engineering techniques that allow the original components and restored wing sections to be reassembled exactly as they were at the factory. The flaps and ailerons are complete. German engineering is complex. Production differed from one aircraft to another, and "field" modifications were common.

The very complex oil tank and the hydraulic-fluid reservoir Trager Ring are prime examples of over-engineered German systems. Ten years' research has revealed the design's complexities and the inconstencies among the various examples. The very rare BMW 801 engine, being rebuilt by Mike Nixon's Vintage Aero Engines, is nearing its first run-up. The intricate baffles were made in the WWII FAF plant and museum at Kissimmee, Florida.

The original undercarriage was restored by Gomolzig in Germany, and the electrical components that actuate it are finished. The cockpit's instrument panel and side consoles, the canopy and seat are completed. The unique MG131 actuating mechanisms are near completion. These components will be united with the fuselage, which is being assembled by Goss Hawk in Arizona. This year it will go to the WWII FAF's new home at Stallion 51 flight operations at Kissimmee for final assembly.

Weisse Eins will be kept in Stallion 51's No 2 hangar along with Mark Timken's extremely rare Fw *190 Dora* 9. The move brings Axis and Allied Second World War fighters together at one location, as Stallion 51 has a stable of North American P-51 Mustangs and the two-seat dual-control TF-51 *Crazy Horse,* which is available for orientation and training flights. Mark Timken's WWII Fighter Aircraft Restoration Foundation's TF-51 Mustang *Missy* will also be stabled there. Check the website for the grand opening in spring 2011.

~www.WWIIFighterAircraftFoundation.org

ABOVE An artist's impression of how the finished Weisse fins will look upon completion.

LEFT Reconditioned original ribs in one of Weisse Eins's wing panels.

LEFT Original (right) and fabricated wing-inspection access plates assembled with specially made 120· rivets.

ABOVE An original inspection-hatch cover with part number stamping in the background, with an exact duplicate ofthe original part, including the stamping, in the foreground.

ABOVE LEFT One ofseveralJumo 213 engines that will ultimately be used to power the future Fw 1900 project.