

U.S. Aircraft Carrier Seals Leaking Hatches on Flight Deck



The Auxiliary Electric Start Systems (AESS) lockers on an aircraft carrier provide the ability to “jump start” a fighter plane if required. The hatches are flush with the carrier deck and are designed to keep water and other contaminants from getting into these lockers – potentially compromising the operation of the electrical systems.

What often happens, however, is the gasket retainer corrodes due to constant immersion in saltwater, fuel, hydraulic fluid, etc. As a result, the hatches leak and the AESS lockers can fill with water. This is not a good thing.

A conventional welding repair is time-consuming and sometimes damages the hatches. The ship’s engineers decided to utilize a

more “high-tech” approach. The damaged areas were repaired with DurAlloy then sanded smooth to the desired shape and dimension. Two coats of CeramAlloy CL+ [AC] were then applied over the entire seal area to provide long-term corrosion protection to these hatches.

