185th CONSOLIDATED AIRCRAFT MAINTENANCE SQUADRON

LINEAGE

STATIONS

ASSIGNMENTS

COMMANDERS

HONORS
Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

EMBLEM SIGNIFICANCE

MOTTO

NICKNAME

OPERATIONS
The base had to undergo nearly $40 million in upgrades during the conversion process to make room for the larger KC-135 and reconfigure facilities for changes in personnel and operations.

In October of 2003, a new Fuel Cell/Corrosion Control Hangar was completed at a cost of nearly $7.9 million. The new hangar allows the KC-135 to be fully enclosed in a facility, and is now the home of the fuel shop personnel. The old maintenance hangar (building 261) was remodeled and altered to allow a tanker to fit inside it for maintenance and repair work needed on the KC-135.

To meet the new demands of loading fuel into the KC-135, in 2004, construction was completed on a Phillips Constant Pressure Hydrant System, or Type III system. This system allows POL to deliver fuel to the ramp through over a mile of newly ran underground stainless steel pipeline and has a capability of issuing fuel to the aircraft at a rate of 600 hundred gallons per minute. A third fuel storage tank was constructed at the POL Complex because of the extra fuel required for the tanker mission.

Maintenance on the older aircraft was quite a change for the 185th ARW when converting from the F-16.

According to Senior Master Sgt. Winston Belfrage, Propulsion Element Supervisor for the 185th, the engines for the KC-135 are also considered Level-2 type maintenance engines. The mechanics at the 185th are limited on what major components they can remove to work on. "With the F-16, we could tear the engine apart ourselves and work on it ourselves. With the KC-135, some of the major repairs require the engine to be sent off for Depot-Level maintenance," said Belfrage.

"With the F-16s, the mechanics were able to hook the engines up to computers and run diagnostic tests which would give the mechanics a set of computer generated fault codes telling them what the problem. With the Pratt & Whitney engines of the KC-135, the mechanics have to isolate any problems on their own by troubleshooting them and reading through technical orders (T.O.s). "The T.O.s are a very good source of information. In order to understand the technical orders, you really need to have some type of engine background and/or experience. You need to understand the "engine terminology" and have an engine vocabulary to read the technical orders.

Just keeping the KC-135 clean is no easy task. "Because the plane is so much bigger than the F-16, it is much more difficult to clean and takes a great deal more amount of time and resources," Regulations require each KC-135 be washed every 120 days, which means crews are washing one of the KC-135's every 12 days. "It takes four days to wash an airplane. They wash the outside and remove the cowlings off the engines and wash them down. We use a team of eight crew chiefs and specialists to wash an airplane.

Each tanker has two full-time crew chiefs, who are skilled mechanics responsible for the overall condition of the plane. "Each plane also has a traditional Guardsman assigned to them," Along with the crew chiefs, there are highly trained specialists in areas such as electronics, hydraulics, and engines who maintain the myriad of systems on board the tankers.

The additional size of the KC-135 also presents other challenges for the newly trained maintenance crews. "More often, it takes two people to do a lot of jobs it only took one person to do on the F-16. The parts are a lot bigger. For instance, it would only take one person to change a tire on the F-l6, but because of the weight of the tires on the KC-135, it now takes two people to change a tire," "There are now four engines to maintain instead of one, and the overall size of the plane requires a lot more checking during routine maintenance checks."

When locating problems, fixing them is not always easy. The KC-135 is so old that it's difficult to get some of the spare parts because the original manufacturers are no longer making them or have closed down altogether. Therefore, some parts have to be made from scratch right on base.

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