WSTIAC Success Story:
Naval Air Systems Command Integrated In-Service Reliability Program (IISRP)

Problem: WSTIAC provided Naval Air Systems Command with technical and program management expertise to enhance the operational readiness and service life of critical aviation system components. The WSTIAC/IISRP team focuses on two metrics: component time on wing (TOW) and the component beyond capable maintenance (BCM) rate per thousand flight hours. The objective is to increase TOW, which will reduce component demand and/or reduce the number of components that are returned to the depot. Reduced component demand is the basis for the program's cost savings projections.

Approach: WSTIAC personnel have been integral members of the Integrated In-Service Reliability Program (IISRP) Team since its inception. WSTIAC personnel worked closely with their IISRP Teammates to select, analyze, fix and measure high-value aviation depot-level repairable (AVDLR) components that exhibit poor service life. Components exhibiting high removal rates from aircraft are evaluated to determine if there are technical or maintenance-related causes for the poor operational service life. The team collaborates closely with cognizant fleet support teams, production managers/artisans and fleet maintainers to eliminate the causes for degraded service life through process changes, redesign or logistic element improvements. After implementing the improvements developed and agreed to by the component stakeholders, IISRP monitors subsequent component removal and BCM rates to verify that the anticipated positive impacts on service life and operational readiness occur and to ensure that expected cost reductions are achieved. Actual TOW and BCM rates are compared to projections once per quarter. A review is conducted on each component that does not perform within established confidence intervals to determine why improvement projections are not being met.

Solution: As a result the team has:

- completed 319 component studies resulting in more than 1,600 actions that led to improved support and component TOW;
- realized more than $352 million in AVDLR cost-avoidance since program inception;
- realized a payback ratio greater than 4-to-1 on funds invested in team operations;
- saved $72 million in verified material and labor costs avoided 13,000 fewer component returns to the depots for repair.