

**F117**  
MILITARY ENGINES

**F117-PW-100**

## PERFORMANCE IMPROVEMENT PACKAGE FOR THE C-17

IMPROVED FUEL CONSUMPTION BY OVER 1%

EXTENDED TIME ON WING

REDUCED CARBON EMISSIONS

# F117 Product Improvements

**Provides tangible operating cost benefit by leveraging proven technology**

Pratt & Whitney's F117 performance improvement package (PIP) for the C-17 leverages existing commercial technologies for incorporation during engine maintenance to improve engine capability. Use of current mature technology, successfully incorporated into other programs, yields minimal insertion risks. The durability and performance improvements that accompany the PIP will deliver direct operational benefits to the warfighter.

## ANNUAL SAVINGS of \$29M and 21 Shop Visits (Fully Incorporated)



### ~1.3% Fuel Burn Reduction

6.5M Gallons Saved & 140M lbs. CO<sub>2</sub>  
Reduced Per Year

Projected to provide over 1% fuel burn improvement worth \$29M in annual fuel savings and 5% time on wing increase which directly reduces engine shop visits leading to lower operation and sustainment costs.



### 13.5°C EGT Margin Retention

10 Fewer Scheduled Shop Visits Per Year

The use of proven materials provide improved clearances and exhaust gas temperature margin retention in service contributing to a 34-month time on wing increase.



### ~500 Engine Flight Hours Improvement

11 Fewer Shop Visits Per Year for  
Unscheduled Engine Removal Drivers

Incorporation of coatings during scheduled shop visits will help improve hardware durability and reduce the number of unscheduled engine removals.