



Pratt & Whitney
An RTX Business

F117
MILITARY ENGINES

F117-PW-100

EXCLUSIVE POWER FOR THE C-17 GLOBEMASTER III TRANSPORT

PRATTWHITNEY.COM



Photo Credit: Gettyimages, Marcin Rozpedowski
©2024 RTX. This document has been publicly released and is not subject to the EAR or ITAR.
The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.
Updated-2-3-24

F117



Exclusive Power for the C-17 Globemaster III Transport

Pratt & Whitney's F117-PW-100 engine is a member of the PW2000 family of commercial engines. Certified at 40,440 pounds of thrust, the F117 was selected by the U.S. Air Force as the exclusive powerplant for the C-17 Globemaster III, an advanced four-engine transport. The F117 engines are equipped with a directed-flow thrust reverser capable of being deployed in flight. On the ground, the thrust reverser can back a fully loaded aircraft up a two-degree slope. It is also noteworthy that the F117-powered C-17 set 22 world records during qualification testing before initial operating capability (IOC).



RELIABILITY

Pratt & Whitney's F117 engines have accumulated more than 18 million flight hours in support of military and humanitarian missions around the globe. The world's ever-changing geopolitical landscape requires military flexibility. Whether it's an airlift mission, humanitarian aid or an overnight combat airdrop in an unsecured location, the F117-powered C-17 is ready to respond.



DEPENDABILITY

Four F117 engines power each C-17 Globemaster III, and has consistently proven itself as a world-class, dependable engine in military service. Pratt & Whitney's ongoing investment in product improvements has enabled the engine to continuously surpass established goals for time on-wing, in-flight shutdowns and reduced turnaround time.



SYSTEM AVAILABILITY

A Full-Authority Digital Electronic Control (FADEC) delivers high operational performance, low fuel burn and excellent maintenance diagnostics. The F117 engine is a solid performer and complements the reputation of the PW2000 family of engines as the world's leading midrange-thrust engines.

Today's F117 engine—the reduced temperature configuration (RTC)—uses technical and material advancements such as second generation single-crystal turbine materials, improved cooling management and thermal barrier coatings to lower operating temperatures. These enhancements contribute to the F117's excellent reliability, durability and long time on-wing.

ENGINE SPECIFICATIONS

Thrust	40,440 pounds (179.9 kN)
Weight	7,100 pounds (3,220 kg)
Length	146.8 inches (3.73 m)
Inlet Diameter	78.5 inches (1.99 m)
Maximum Diameter	84.5 inches (2.15 m)
Bypass Ratio	5.9 to 1
Overall Pressure Ratio	30.8 to 1