# PRATT & WHITNEY F135 ENGINE FAST FACTS | 2025

# F135 The World's Most Advanced Fighter Engine



### **CAPABILITY**



40K+ LBS of thrust



5th GENERATION stealth technologies



**PRECISE** & RESPONSIVE integrated engine control system



**50% INCREASE** in thermal management capacity over 4th generation engines

### **AVAILABILITY**



1,300+ engines delivered in total



Current production configuration is **DOUBLE** the spec for mean flight hours between removals



Safety rate more than AN ORDER OF **MAGNITUDE BETTER** than previous generations of fighter engines



CONTINUOUSLY **EXCEEDS** full mission capability rate requirements of 94%

### **AFFORDABILITY**



Reduced average cost of an F135 by MORE THAN 50% to date



Component Improvement Program investments are projected to yield ~\$21 BILLION in lifecycle cost savings



**TARGETING~50% COST REDUCTION** 

on 1st scheduled maintenance visit, which is projected to **SAVE \$14+ BILLION** over the life of the program

### **ECONOMIC IMPACT & INVESTMENT**



SUPPLIER LOCATIONS

\$500+ MILLION

invested in capital, process improvements & cost reduction initiatives

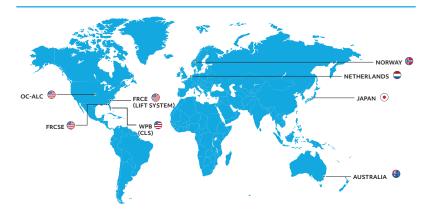
The F135 program sustains more than **57,000** domestic RTX jobs

255 SUPPLIERS

provide parts for the F135

Contributed \$2.2B+ to the U.S. economy in 2023

## F135 GLOBAL MRO&U NETWORK



MAINTENANCE, REPAIR, OVERHAUL & UPGRADE (MRO&U) CONTRACTOR LOGISTICS SUPPORT (CLS)



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### PROGRAM AT A GLANCE (AS OF FEBRUARY 2025)



1,110+ aircraft in service



Approaching 1M flight



48 bases worldwide (includes ship activations)

13 services have declared IOC





services have conducted

operational missions

















### F-35/F135 IN ACTION

16 services flying

F-35A

F135-PW-100

Conventional Takeoff

and Landing (CTOL)





F135-PW-600 Short Takeoff/Vertical Landing (STOVL)



F135-PW-100 Carrier Variant (CV)

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nations operating on home soil



















USAF, USN and USMC

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### F-35 PROGRAM PARTICIPANTS

















































### **F135 ENGINE SPECS**

	F135-PW-100 Conventional Takeoff and Landing (CTOL) Carrier Variant (CV)	F135-PW-600 Short Takeoff/Vertical Landing (STOVL)
Maximum Thrust Class	43,000 lbs	41,000 lbs
Intermediate Thrust Class	28,000 lbs	27,000 lbs
Short Takeoff Thrust Class		40,740 lbs
Hover Thrust Class		40,650 lbs
Length	220 in	369 in
Inlet Diameter	43 in	Main engine: 43 in Lift fan: 51 in
Maximum Diameter	46 in	Main engine: 46 in Lift fan: 53 in











