



## AUSTRALIA F135 ENGINE HEAVY MAINTENANCE FACILITY ACHIEVES INITIAL DEPOT CAPABILITY FOR FAN & POWER MODULES

News / Maintenance / Trainings



TAE Aerospace announced today it has successfully achieved Initial Depot Capability (IDC) requirements for the repair of the Pratt & Whitney F135 engine fan and power modules, which power all three variants of the 5th Generation F-35 Lightning II fighter aircraft. With this achievement, TAE Aerospace's F135 Maintenance, Repair, Overhaul and Upgrade (MRO&U) facility, or depot, in Australia becomes the first operational F135 engine depot in the Asia-Pacific region and has begun supporting the repair of fan and power modules for the fleet.

The module IDC milestone was reached with the completion of a full rebuild of an F135 power module at TAE Aerospace's Queensland facility. This achievement follows the company's successful fan module repair qualification in 2020.

According to TAE Aerospace's CEO, Andrew Sanderson, achieving module IDC marks a critical point in the development of a regional F135 engine MRO&U capability. As an operational F135 engine depot outside of the U.S., TAE Aerospace will support engines for all F-35 operators in the Asia-Pacific region under the F-35's Global Support System.

"The investment made by the Commonwealth of Australia and TAE Aerospace over the past five years will result in benefits for both Australia, with an important sovereign industrial capability now available in country, as well as at the local level, with the creation of many jobs over the coming years," Mr. Sanderson said.

"We congratulate the TAE Aerospace team on reaching this critical sustainment milestone for the F135 engine," said O Sung Kwon, Vice President, Pratt & Whitney Military Engines Sustainment Operations. "The activation of the Australia depot will bring increased capacity to the global F135 MRO&U network in support of the growing fleet. Standing up the regional MRO&U depots is an integral part of the enterprise's strategy to accelerate capacity growth across the F135 MRO&U network to exceed program requirements."

Since being assigned the Asia-Pacific region's F135 engine MRO&U responsibility in 2015, TAE Aerospace, Pratt & Whitney and the Australian Government have delivered a broad range of initiatives to stand up this regional capability including:

- The development of TAE Aerospace's new 16,000 sqm Turbine Engine Maintenance Facility (TEMF) in Bundamba, Queensland
- The completion of the first F135 fan module repair outside of the United States in February 2020
- The completion of the first power module repair outside of the United States in May 2021

Mr. Sanderson said that all three organizations have worked closely over the past six years to achieve fan and power module IDC in the Asia-Pacific region, a major milestone for program.

"Strong partnerships between the Commonwealth, global OEMs, and Australian industry are fundamental to supporting airpower capability in our region. Close collaboration has enabled us to stand up this important capability in time, underpinning Australia's goal to achieve a sovereign MRO&U capability for the F135 engine."

"Pratt & Whitney has a long-standing relationship with TAE Aerospace that dates back to the 1990's on the F-111 Aardvark program, where TAE was the engineering authority for our TF30 engine and maintenance provider for the RAAF," added Mr. Kwon. "We're thrilled to build on this partnership with the F135 engine for the F-35 fighter, which will be the centerpiece of allied air power in the Asia-Pacific for years to come."

The 5th Generation F135 is the most advanced and most powerful fighter engine in the world, featuring a host of performance attributes that deliver a step change in capability over 4th Generation engines. This includes 40,000+ pounds of thrust; a 50 percent increase in thermal management capacity enabling the full spectrum of F-35 weapons and sensor capabilities; a precise and responsive integrated engine control system allowing the pilot to focus squarely on the mission; and an unmatched low observable signature enabling the F-35 to conduct operations in modern Anti-Access/Area Denial (A2AD) environments.

Additionally, the F135 is the most dependable fighter engine Pratt & Whitney has ever built in its 96-year history. With its advanced damage tolerant design and fully integrated prognostic health

monitoring, the current F135 production engine has demonstrated a Mean Flight Hours Between Removal (MFHBR), which is the primary metric for reliability, that is more than two times the program objective.

21 JULY 2021

**ARTICLE LINK:**

<https://virginia.50skyshades.com/news/maintenance-trainings/australia-f135-engine-heavy-maintenance-facility-achieves-initial-depot-capability-for-fan-power-modules>