

# AE 3007

## Power for the Global Hawk and EMB 145 Special Versions

The Rolls-Royce AE 3007 turbofan has been developed to meet the stringent requirements of corporate, regional airlines and military customers worldwide. Over 2,600 engines have been delivered to date with over 19 million flying hours accumulated. The AE 3007 is an affordable, low risk powerplant with Full Authority Digital Engine Control (FADEC) to reduce pilot workload and improve maintainability.

Two AE 3007 engines power a range of Embraer EMB 145 Special Version aircraft used for intelligence, reconnaissance and surveillance missions. These aircraft combine the proven ERJ 145 regional jet platform, also powered by two AE 3007 engines, with the latest intelligence gathering systems to offer reliable and affordable solutions for a full range of national security missions.

A single AE 3007H engine enables the US Air Force and US Navy RQ-4A/B Global Hawk unmanned aerial vehicle produced by Northrop Grumman to fly at 65,000 feet while providing near real-time imagery to battlefield commanders for more than 32 hours per mission. The system has already proven itself over the skies of Afghanistan and Iraq.

Excellent reliability, maintainability and performance of the AE 3007 are the result of being part of the Rolls-Royce common core family of engines. The AE 3007 shares the same core as the AE 2100 turboprop and AE 1107C-Liberty turboshaft engines and benefits from over 80 percent parts commonality.

- **The industry standard for intelligence, reconnaissance and surveillance aircraft**
- **Unrivalled operational experience from record setting Global Hawk**
- **Over 2,600 engines produced to date**
- **Over 19 million flying hours in military and civil operations**

### Engine Specification

Engine	AE 3007H	AE 3007A1E
Thrust lbf (kN)	9,500 (42)	8,895 (40)
Bypass ratio	5.0	5.0
Pressure ratio	23	23
Length in (m)	115.08 (2.92)	115.08 (2.92)
Diameter in (m)	38.5 (0.98)	38.5 (0.98)
Basic weight lb (Kg)	1,644 (746)	1,657 (752)
Compressor	1LP, 14HP	1LP, 14HP
Turbine	2HP, 3LP	2HP, 3LP
Applications	Northrop Grumman RQ-4A/B Global Hawk Embraer EMB 145 AEW&C, RS/AGS, MP/ASW	

