



Rolls-Royce

AE 1107C- Liberty turboshaft

Power for the V-22 Osprey



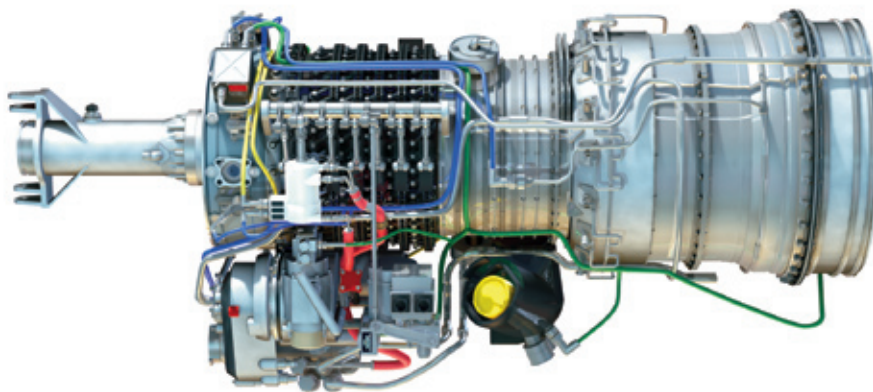
AE 1107C- Liberty turboshaft

Unique tiltrotor engine

The AE 1107C-Liberty is a new-generation 6,000shp class turboshaft engine developed as the T406 for the Bell Boeing V-22 Osprey tilt-rotor transport, which is due to enter service with the US Marine Corps and US Air Force.

The AE 1107C-Liberty shares a proven common core architecture with the AE 2100 and AE 3007, incorporating high efficiency components and reduced maintenance features required for operation in the unique V-22. When installed in the V-22, the AE 1107C-Liberty powerplants are housed in wing-tip tilting nacelles.

- **Unique 6,000shp powerplant capable of meeting the demanding requirements of tilt-rotor operations**
- **Shares a common core with AE 3007 and AE 2100 family of engines, proven over 17 million hours of operation**
- **Due to enter service with USMC (MV-22) and USAF (CV-22 Osprey)**
- **Low-cost, performance-enhancing 'drop-in' upgrade option for existing heavylift rotorcraft**



intelligent innovation

Rolls-Royce has delivered over 100 AE 1107C-Liberty turboshaft engines for the V-22 program which are provided to the US Military under a commercial procurement agreement and supported under a commercial Power by the Hour[®], agreement. Such agreements have resulted in a Defense Acquisition Executive Certificate of Achievement Award for the V-22 team members.

The common core approach benefits operators around the world with reduced operating costs, shared lessons-learned and streamlined global support. The AE 1107C-Liberty is now also being considered as a cost-effective upgrade for existing heavylift helicopter assets such as the CH-47 and CH-53.



Engine Specification

| | |
|----------------------|-------------------------|
| Engine | AE 1107C-Liberty |
| Power shp (kW) | 6,150 (4,586) |
| Pressure ratio | 16.7 |
| Length in (m) | 78.1 (1.98) |
| Diameter in (m) | 34.2 (0.89) |
| Basic weight lb (Kg) | 971 (440) |
| Compressor | 14HP |
| Turbine | 2HP, 2PT |
| Application | Bell Boeing V-22 Osprey |



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