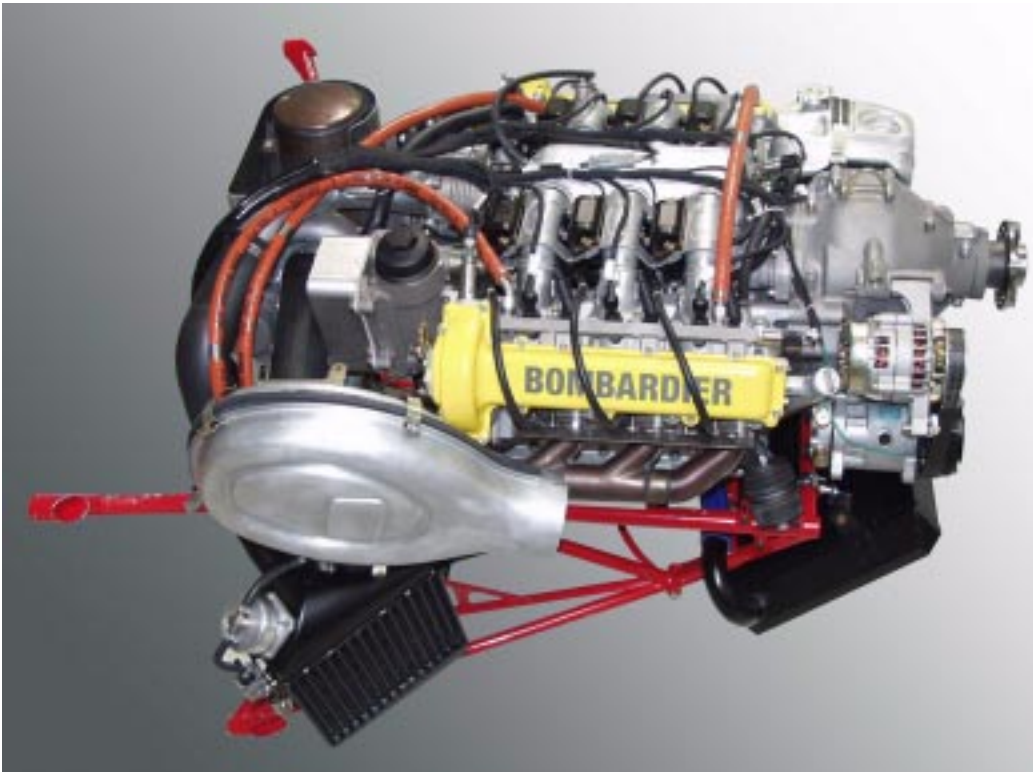


## New Bombardier Aeroengine line uses CANaerospace/AGATE databus

Oshkosh, WI - Bombardier Recreational Products Division has introduced its new V220 and V300T aircraft engines. The fuel-injected, watercooled, 120-degree V-6 engine line has a single overhead camshaft and starts with a normally aspirated 220-hp and a turbocharged 300-hp version. A dual redundant electronic engine control unit provides true single-lever control of throttle, prop and mixture setting. Adaptive knock controlling allows the engine to sense the fuel (Avgas or Mogas) and adjust the engine timing accordingly. Additionally, the engine control unit can be programmed with updated engine parameters and records maintenance data.



Aside from the ability to drive classic “steam gauge” type cockpit instruments, the engine control unit uses a redundant CANaerospace/AGATE data bus interface for glass-cockpits. A state-of-the-art engine monitoring unit (EMU), providing the pilot with all engine data, “service engine now” and “limp home” mode indications has already been developed and is installed in a Murphy Moose aircraft used for engine

flight tests. A second unit shows off in the panel of Bombardiers Piper PA28 Arrow which has already demonstrated the V300T performance and reliability in more than 1000 flight hours, while a third unit will be used in the test aircraft of the launching customer for the turbocharged V300T.



The CANaerospace/AGATE data bus protocol, originally developed by Stock Flight Systems in Germany, has been standardized by NASA as a next generation general aviation databus within the Advanced General Aviation Experiments (AGATE) program in 2001. CANaerospace is already used as a distributed avionics system network in single engine aircraft used by the NASA Langley Research Center for the SATS (Small Aircraft Transportation System) program and in numerous other applications.

The Bombardier aeroengine line is another CANaerospace/AGATE databus application applying for certification after the distributed avionics system network in the Ae270 turboprop single engine aircraft. In the Ae270 as well as within the SATS program, CANaerospace/AGATE databus has already demonstrated excellent reliability and immunity against electromagnetic interference.

**Bombardier contact person:**

Dipl.-Ing. (FH) Martin Steiger  
Bombardier Recreational Products  
A-4623 Gunskirchen, Austria  
phone: +43/7246-601-538  
fax: +43/7246-601-760  
e-mail: martin.steiger@brp.com

**References:**

Bombardier website: [www.VaircraftEngines.com.com](http://www.VaircraftEngines.com.com)  
NASA SATS website: <http://sats.nasa.gov>  
Stock Flight Systems website: [www.stockflightsystems.com](http://www.stockflightsystems.com)  
CANaerospace website: [www.canaerospace.com](http://www.canaerospace.com)