

# Pressure check on turbine engine exhaust gas

## APPLICATION C180

Turbine engine repair and overhaul organizations perform aircraft maintenance checks on commercial/civil aircraft after a certain amount of time or usage. In a turbine engine, pressure ratio is the chamber pressure divided by the exit pressure. The pressure ratio, being a measure of how much the gas expands, determines how much thermal energy is converted to mechanical energy. At higher compression ratios, efficiency increases, creating more mechanical power output and lowering the exhaust temperature.

Type of Company: Service - Engine Overhaul & Repair

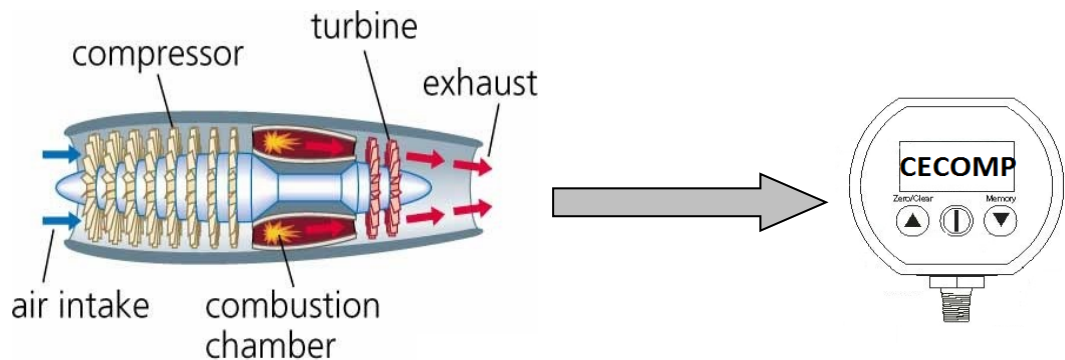
Location: New Jersey



Photo by M.O. Stevens

## The Engineering Issue

- The engineer requires an accurate pressure check for the exhaust gas on their turbine engines which will be used to determine the pressure ratio.
- Gauge must maintain calibration and withstand the use and abuse in the hanger



The engineer used a Cecompe F20B gauge. This rugged gauge gives the technician an accurate visual readout of the exhaust pressure to use in his overall pressure computations.

**Problem. Solved.**