



**Customer:** Curtiss-Wright Flight Systems  
**Location:** Shelby, NC  
**Project:** F-22 Gearbox Test Stand

### Project Information

Turnkey delivery of an F-22 Main Weapons Bay Door (MWBD) and Side Weapons Bay Door (SWBD) Gearbox Test Stand. The test stand consists of a steel framework supporting a sliding test bed, mechanical hardware, electrical hardware, and instrumentation. The operator controls test stand functions via a computer console connected to the main test frame. The operator selects the gearbox to be tested using the computer console, and the test stand executes the respective test sequence as outlined in the appropriate test plan. An electric motor is used to drive the gearbox input, and an oil shear brake applies load to the output shaft as required. A rotary torque meter is used to measure the free-running torque of the gearbox. A test report summarizing the collected test data is generated at the completion of the test sequence. LabView software is used for control and data acquisition.

