

# F-16 NOZZLE ACTUATOR LINKS

## COMPONENT PURPOSE/REQMTS:

- engine nozzle flaps control the velocity, and sometimes direction, of turbine exit gas flow
- actuator links translate the motion of a piston actuator to the 24 flaps of the F110 engine

## SELECTION CRITERIA:

- high specific strength and stiffness
- good fatigue resistance
- elevated operating temperature

## MATERIAL:

- Ti-6Al-2Sn-4Zr-2Mo matrix composite (TMC) with Trimarc-2 SiC monofilament reinforcements, produced by Atlantic Research Corporation by a powder process
- replaced Inconel 718 fabricated part

## BENEFITS:

- direct weight savings of 2.0 kg (3.4 lb) per shipset
- 50% increase in buckling resistance

