Planning Information

Affected Procedure:
Tear Down Inspection at 1/3 TBO for aerobatic propellers

Affected Propellers:
All hydraulic Constant Speed Propellers, which are used on unlimited competition aerobatic airplanes.

Reason:
During unlimited aerobatic flying the stresses in the propeller rise to very high levels. For safety reasons the propeller should get a tear down inspection at 1/3 of the TBO (see SB No. 1).

The tear down inspection must contain the following items:

- **Before disassembling**: Visual inspection of the propeller hub, blades and spinner assy.
- **During disassembling**: Inspect parts for wear and damage. (Do not remove outer ball races, studs or flange bolts)
- **After disassembling**: Cleaning of all parts
- **After cleaning**:
  - **Blades**: Torque test of the lag screws, refer to manual E-220. Inspect blade surface and stainless steel erosion sheet for cracks and damages.
  - **Blade Bearings**: Inspect visually, in case of doubt perform a magnetic particle inspection according to ASTM-E-1444
  - **Hub**: Inspect the transition area to the flange by liquid penetrant method according to ASTM-E-1417 Removal of the studs or flange bolts is not required.
  - **Counterweights**: Visually inspect the counterweights for cracks.

- **Assembling**: Reassemble the propeller with new seals/gaskets and grease.

Required Publications:


Required Material:

Tools listed in Overhaul Manual E-220.
Suitable o-rings according to parts list in Overhaul Manual E-220 for the affected propeller.
Grease according to parts list in Overhaul Manual E-220.
Every part, which has to be removed because of defects.