THE ENSTROM HELICOPTER CORPORATION
TWIN COUNTY AIRPORT, P.O. BOX 490, MENOMINEE, MICHIGAN 49858

SERVICE INFORMATION LETTER

Date: July 17, 1980

Subject: Corrosion on Main and Tail Rotor Blades

Models: All

Operation in corrosive or abrasive atmospheres causes accelerated pitting and/or corrosion to unprotected rotor blade leading edges. (Ref. Service Information Letters No. 0024 and 0089) Adhering to the following recommendations will extend service life and efficiency of these components, while failure to take preventative maintenance action may effect blade warranty consideration for those aircraft still within the specified warranty period. There is no adjustment issued for corrosion beyond the warranty period.

It is important to note that corrosion, unless removed, will continue to damage spar material even if painted or taped over. Although leading edge tape is recommended for main rotor blades in all operating conditions, it is considered mandatory in coastal areas and areas of high humidity, air pollution, and sand or dust. Normal service life of the polyurethane tape should be approximately 300 hours.

Because of the adverse affects of the environment on rotor blade finish and material, the following outline of a preventative maintenance procedure is provided. This preventative maintenance schedule is considered minimal and is a required part of the helicopter's regular maintenance program.

1. Daily or Preflight

   a) Inspect leading edges of non-tape equipped blades for corrosion, pitting or flaking.

   b) Blades equipped with tape should be checked for roughness and security of attachment. Damaged or loose tape should be removed and replaced.

   NOTE: Evidence of deterioration calls for frequent flushing with clean, fresh water until more permanent action can be taken to repair the damage.

2. Weekly (twice weekly in high corrosion areas)

   a) Wash and rinse with fresh water.

   b) Inspect thoroughly for corrosion, pitting or flaking. If a problem appears, repair damaged main rotor blades as described below and apply polyurethane tape as soon as possible.

3. Monthly (two weeks in high corrosion areas)

   a) Clean, using a mild soap and rinse with fresh water. Wax with hard coating wax.

CORRECTIVE ACTION

If evidence of moderate pitting or corrosion is detected on non-tape equipped main rotor leading edges, they should be sanded smooth with 320 grit, or finer, abrasive. Care must be exercised in maintaining the edge contour and not exceed 3/32 inch in depth.

NOTE: DO NOT sand blade skins.

The area should be cleaned and indited or primed with a suitable primer before painting. Wax blade after suitable drying period.

Installation of Main rotor blade leading edge tape:

1) Remove any roughness or corrosion on the leading edge per “Corrective Action” above.

2) Clean the blade with soap and rinse with fresh water.

   NOTE: DO NOT use solvents or paint strippers.

3) Beginning 1/16 inch in from the tip of the blade, press tape onto either the top or bottom surface along the spar bond line the entire length of the tape. Carefully smooth tape over the leading edge, working out all air bubbles. Use a soft plastic squeegee to smooth over the tape and insure a complete bond. Minor air pockets found after final installation may be removed by puncturing with a pin.

4) Wax the blade.

Leading edge polyurethane tape can be purchased from an Enstrom Distributor or Enstrom Customer Service.