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TO-All owners and operators of Hughes Helicopters

SUBJECT: INSPECTION AND SERVICEABILITY - MAIN ROTOR THRUST

BEARING, PN 269A5050-63 AND PN 269A5050-73

MODELS AFFECTED:

All Model 269A, TH-55A, 269A-1 and 269B Helicopters equipped with Modification Kit PN M10044 or M10044-3

All Model 269C Helicopters

Reference

269 Series - Basic HMI, Issued 1 April 1973; Revision No. 5, 1 February 1978 269 Series - HMI Appendix B, Issued 1 July 1973; Revision No. 5, 1 August 1976 Hughes Service Information Notice No. N-76. 2, dated 22 March 1971

A number of the subject main rotor thrust bearings have been removed from service, after field inspection revealed an abnormal bluish-gray discoloration of the bearing balls and cage.

Further examination by HH and the bearing manufacturer showed, however, that the discoloration was due to "blush" corrosion, a very thin layer of iron oxide which did not significantly affect the internal tolerances of the bearings. Also, the discoloration of the bearing cage was due to tinting of the silver plating and also did not affect the operation of the bearing. These bearings were considered suitable for continued service.

"Blush" corrosion can be caused by moisture condensation during periods of bearing use, or can result from the wide variation of tempratures and humidity conditions a bearing sees in service. It is stressed that continuous periodic inspections of the thrust bearing be performed at the intervals specified in the HMI. Also, if there are extended periods of non-operation, the bearing should be lubricated periodically. Extra care should be used during lubrication of the bearing to ensure that no contaminants enter the bearing. The bearing seals should also be inspected for damage, and the drain hole above the upper bearing in the bearing retainer nut checked to ensure that it is open.

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If there are any questions regarding corrosion discoloration and service-ability of the thrust bearing, contact your HH Service Center or Distributor before scrapping the part.

Edward Koch, Manager

Customer Service Department

Hughes Helicopters