Australian Government
Civil Aviation Safety Authority

AIRWORTHINESS BULLETIN

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Helicopter Corrosion Prevention Control Programmes (CPCP)

1. Effectivity

All Helicopters operating in corrosive environments.

2. Purpose

To advise operators of offshore helicopters of the requirement to have in place a rigorous corrosion control program to combat all levels of corrosion encountered in a salt laden environment.

3. Background

A recent defect report submitted to CASA has highlighted corrosion issues on Sikorsky S92 helicopter flap stop bracket pins. This bracket inspection and other critical inspections are a requirement of the Sikorsky CPCP.

Figure 1

Corroded Dowel Pins located in Main Rotor Head

4. Recommendations

Operators incorporate the CPCP into their System of Maintenance/Maintenance Programme to ensure the continued safe operation of the rotorcraft in corrosive environments.

When transitioning aircraft to offshore operations the aircraft is inspected to establish a base-line of corrosion damage. All major corrosion damage is reported directly back to the Original Equipment Manufacturer (OEM) to provide input into the worldwide aging fleet data and the update of the OEM CPCP programs.

Operators may also wish to include the following as part of their current fleet maintenance programme:

- Airframe corrosion data acquisition mapping inclusive of location type and depth of corrosion. This allows for the analysis of corrosion as a potential wide spread corrosion/fatigue damage which is a particular concern in structural critical components,
- Corrosion data collection across all models of helicopters operated to allow for collection of known corrosion spots and future maintenance planning,
- Operators develop internal inspection and Corrosion Preventive Compound (CPC) application interval plans based on mission requirements, operating environment and experience, and
- Operators cross reference this information with other operators of similar models within Australia.

5. Reporting

Severe and/or concerning levels of corrosion should be reported to CASA via the Defect Reporting system and to the OEM (Type Certificate holder) directly.

6. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

AirworthinessBulletin@casa.gov.au

or in writing, to:

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