

CASE STUDY: AEROSPEC® 400

Performance you can trust



LOCATION

Finnish Air Force

APPLICATION

F-18 Hornet wheel bearings

BACKGROUND

Throughout 1995 & 1996 investigations by the Finnish Air Force found corrosion in the wheel bearing assemblies of their F-18 Hornets.

CHALLENGE

Not only was corrosion evident at several points within assemblies, but there was also a general lack of grease present within those in service and evidence of oil separation in stored spares. Despite a redesign of NGL wheel spacers to prevent washout, the adoption of maximum shelf life periods for spare wheel & tyre assemblies and procedural changes to avoid the intermixing of differing grease brands, a further study during 2007 - 2008 found corrosion rates remained unacceptably high.

THE ROCOL SOLUTION

Following a thorough re-evaluation of greases on the market which exceeded the original MIL-PRF-81322 specification, it was found that Rocol's Aerospec 400 was found to perform best. In-country directives were then issued by the Finnish Air Force for Aerospec 400 to be used in place of MIL-PRF-81322 in all F-18 Hornet and Hawk wheel bearing assemblies

WHY?

AEROSPEC 400 is the multi-purpose aerospace grease of choice for high load applications such as wheel bearings and landing gear. Tested by:

- ▶ US Military
- ▶ UTC Aerospace Systems (formerly Goodrich Wheel & Brake)
- ▶ Messier-Bugatti-Dowty in conjunction with Finair

ACCEPTED BENEFITS/COST SAVING

Since 2010, there have been no findings of corrosion in bearing units lubricated with Rocol's Aerospec 400. As a result, the stored shelf life limit for wheel & tyre assemblies has been increased from 12 months to 18 months. FINAF are also likely to adopt Aerospec 400 as their 'multipurpose' grease of choice in preference to the MIL-PRF-81322 formulation