EASTMAN | aviation solutions

Expert, efficient hydraulic system fluid analysis can prevent costly problems.

Quick turnaround on fluid analysis ensured a New Zealand Defence Force aircraft was available for tasking.

Hydraulic fluid analysis is included for Skydrol™ aviation hydraulic fluids customers.

Eastman technical service representatives are just a call away to help with fluid analysis or fleet maintenance.

The challenge

A potential hydraulic system contamination issue arose with a New Zealand Defence Force (NZDF) B757. An NZDF engineering officer believed contamination had been avoided but needed final assurance on the integrity of the hydraulic system.

One of two Boeing 757s used by the NZDF for troop and equipment deployment and evacuations needed fluid analysis to return to service. Time was of the essence.

The alternative? A full-system flush, which would be very time consuming and expensive.

The solution

The engineering officer contacted Eastman with an urgent request for fluid analysis at the suggestion of Air New Zealand, which services NZDF aircraft and is a longtime customer of Skydrol hydraulic fluids and Eastman turbo oils.

David Fettell, Eastman technical service representative for the Asia Pacific region, instructed the engineering officer to expedite a sample to the Singapore lab. This expert lab testing and results analysis service is available to all Skydrol customers at no additional cost.

More importantly, the lab was able to react very quickly to the NZDF's request. Within 36 hours, Fettell provided a comprehensive fluid analysis report that showed the fluid was within specifications with no apparent contamination.

> **"I was impressed with the speed and professionalism of the Eastman team in dealing with our particular situation. Including the sample testing in the Skydrol product offering is nice, but in this case, the turnaround time was what really mattered. They realized we had an urgent request and handled it accordingly."**
>
> **—AJ Sasidharan**
> NZDF flight lieutenant

SKYDROL HYDRAULIC FLUIDS from eastman

The results

After Eastman confirmed that no system contamination had taken place, NZDF personnel filled the aircraft hydraulic system with Skydrol.

"We prioritize aircraft on ground (AOG) and other urgent fluid analysis requests for quicker turnaround times and were able to test the fluid and get the results back to the New Zealand Defence Force within 36 hours," Fettell said. "The fluid analysis confirmed that there was no contamination. If Eastman hadn't responded so quickly, a complete system flush would have been required to ensure no contamination had taken place and to return the aircraft to service."

In addition to the Asia Pacific lab, Eastman Aviation Solutions does sample testing in Anniston, Alabama, for the Americas and in Newport, United Kingdom, for Europe, the Middle East, and Africa.

This service saves customers from paying a third party approximately $300 per sample for fluid analysis. In addition, Eastman technical service experts are always just a call away to help with fluid analysis or answer fleet maintenance questions. This support is more valuable knowing it is coming from Eastman, the formulator and manufacturer of essential hydraulic fluids.

Because aircraft are subject to harsh and varying environments, the properties of hydraulic fluid can change over time. Eastman recommends the fluid be analyzed periodically to ensure it meets aircraft specifications and retains key functional properties designed to maximize hydraulic system performance.

> **"Eastman's level of service and turnaround time were impressive. These things are critical for the civil aviation industry where most aircraft are operated on a cost-per-hour basis."**
>
> **—AJ Sasidharan**
> NZDF flight lieutenant

For more information, contact your Eastman Aviation Solutions sales representative or visit **Eastman.com/Aviation**.

EASTMAN

The results of **insight**™

Eastman Corporate Headquarters
P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, +(1) 423-229-2000

www.eastman.com/locations

EAS-11222 6/20