

## Thanakom Panyothin

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**From:** McConnell, DAVE P <dave.p.mcconnell@lmco.com>  
**Sent:** Wednesday, July 11, 2018 1:42 PM  
**To:** Nattawut Wongyai  
**Cc:** Grant Robinson; Thanakom Panyothin; Anusorn Srichanon; Colin Inglis; Andy Taylor-Jones  
**Subject:** 761064 swashplate duplex bearing

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Following is the CSE response to an FTR I submitted asking for an evaluation of the HUMS signature of the swashplate duplex bearing on HVF. The response directs removal of the bearing, but does not specify when. I recommend putting the bearing on close monitoring and replace it at your earliest maintenance convenience, providing there is no significant degradation of the existing HUMS signature.

Case Number: C0098925  
Customer: Thai Aviation Services Limited  
Aircraft S/N: 761064  
Aircraft Model: S-76D  
Aircraft TT: 2,292  
ATA: 62  
Part Number: 76104-78500-041  
Case Subject: Swashplate Timken Bearing-HUMS Data Scatter

### Problem Description:

The TAS HUMS department is monitoring the swashplate Timken HI values of the swashplate installed on A/C S/N 761064.

Historical HI values remain generally below 0.5. Values that have moved above 0.5 were brought down by Timken bearing re-grease or grease purge on 26 JUN 2018 and 08 JUL 2018.

Of particular interest to TAS is the data scatter, which appears to be part of the bearing's long-term signature.

Typical scatter can be seen clearly over the RDF range:  
Start 78286.S-76D.1064.20180530T235702,000Z.RDF  
End 78286.S-76D.1064.20180709T010627,598Z.RDF

The other four swashplates in the TAS fleet do not exhibit this type of high density scatter.

The swashplate pickup installation has been checked with no anomalies noted.

A/C S/N 761064 A/C TT 2291.5  
Swashplate  
P/N 76104-78500-041  
S/N A1735-00060 Component TSN 2291.5

TAS request SA HUMS group comment on the possible source of the noted data scatter, and recommended maintenance action, if any. EoM

This email notification is provided as the case has been reviewed and does not contain technical data in the issue description.

### Problem Resolution:

Sikorsky Rotors engineering has reviewed the case details and advises if re-greasing the bearing on 761064 results in only short term improvement, with levels rising again, the bearing should be replaced.

This email notification is provided as the case has been reviewed and does not contain technical data in the resolution.

**David P. McConnell**

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