

Pete Krok's Splined Shaft Survey Notes (5/25/14)

Overview:

1. Total of 83 Gen3 responders
2. 62 had the dual mass flywheel
3. 19 had still had solid flywheels
4. 2 replied "Unsure"

How many Gen3's are flying?

1. There are 46 Gen3's now flying
2. Of the 16 remaining Units...
 - a. 7 are within a year of finishing
 - b. 1 is 18 months of finishing
 - c. 6 are more than 2 years out
 - d. 2 have given up (switched)

How many hours are on the Gen3's with dual mass flywheels?

- 1 = 600 (Thomas Simpkinson, RV-9A, H4 SOHC, Quinti 3 Blade). Reported very light dusting of fretting corrosion. No photos.
- 5 400 to 460
- 8 300 to 400
- 4 200 to 300
- 9 100 to 200
- 6 30 to 100
- 13 0 to 30

What type of spline grease is being used?

1. No common grease or paste
2. Honda Moly 60 seems most popular
3. Various anti-seize compounds

What other failures have occurred?

1. Weld cracks on internal gears
2. Bearing failures
3. Please review "Notes" column in spreadsheet for more details

What about Fretting Corrosion?

1. Red dust has been commonly seen in Gen3 solid flywheels
2. Some dual mass spline inspections have shown clean. Others have reported some red dust. It's very subjective without photos. Some photos now being posted on Subenews forum. Some photos were sent to NTSB for analysis.
3. No spline failures have been reported in dual mass Gen3's so far...
4. However, only six of these flying units have over 400hrs and 28 of the 46 flying with these dual mass flywheels have less than 200 hrs. It is too early to tell.
5. The photos shown of Nathan Jordon's splined shaft assembly shows significant fretting corrosion at 460 hours. Photos posted on Subenews forum (5/24/14) and Wiki.