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To: [REDACTED]
Subject: N369MH
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As I recall and with the limited pictures I have, here are the answers to your questions

Both left-side TRGB attach bolts fractured? **Yes**

Both TRGB right-side attach lugs fractured? **Yes**

Therefore NO attach hardware retaining TRGB. **The TRGB was still attached to the tailboom. NOT secured but attached.**

TR driveshaft continuous to TRGB? **Yes**

Pitch controls continuous to TRs? **Yes**

Im working on finishing up this investigation and am trying to make sure that I have everything correct & documented

Heres my best reconstruction of the sequence of events:

The TR gearbox (TRGB) that was installed on the helicopter at the time of the accident was the one installed on 8/17/16

Per HAS WO 4674, the fork of that gearbox was replaced on 9/22/16 with an overhauled fork from Heli-Tech (SN 043765-0209, Heli-Tech WO 15303) due to a fractured TR /blade hub bolt. That overhauled fork was provided with its 4 teeter bearings already installed
Aside from changeouts of 2 boots & 4 pitchlinks (4/26/18) and an outboard blade (6/19/18) no other component/hardware changeouts were accomplished on the TR assembly

Is that sequence of events accurate? **Yes except for the changeouts. As OUR standard practice whenever we need to perform maintenance which requires the removal of the hinge bolt that bolt is changed. For example when the boots are changed or when the swashplate gets repacked. So you know the last time the bolts were changed was on 3-21-2018 under work order number 4998**

Was the reason for the 9/22/16 fractured TR hub bolt ever determined (if so what was it?)

NO it was not and this is why we change out the bolt everytime we remove it. I ever sent them the bolt to have it inspected/tested/analyzed and I got nothing from MDHI but I did get the bolt back.

Did HAS/Magnum etc ever do any other work or parts replacements on the TRGB or the fork (if so what was it?) **Only regular maintenance**

Do you have a copy of the Heli-Tech WO 15303. **No. We usually don't get the work orders from vendors unless we request them**

Do you have a copy of the 8130 from the accident TR fork ? **No**

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