

Silliman James

From: [REDACTED]
Sent: Monday, May 1, 2017 1:26 PM
To: Silliman James
Subject: FW: Xenon IV

FYSA (see below)

From: Chris Lord [mailto:[REDACTED]]
Sent: Monday, May 01, 2017 12:56 PM
To: Abel, Jeremiah (FAA)
Subject: Xenon IV

Hello,
The Xenon IV with a Modified Rotax 912 engine.

My background:

I have flown more than 25 models of gyroplanes, approximately 500-1000 hours per year in gyroplanes, Test pilot for Carter Copter, currently hold the contract to train the FAA in gyroplanes (3year with 2 years left), and have over 800 hours in Xenon.

The engine is a Rotax 912 ULS modified with a Mitsubishi turbo to produce approximately 130hp 30 more than the standard 912 engine.

The turbo is vacuum driven, and has a control to manually override the wastegate for more power.

For the fuel delivery modification, there is an orifice that is in between the turbo and airbox. This orifice senses the pressure and adapts the fuel to match the need.

In many cases the engine is perfect, however in other cases the possibility of the orifice getting bypass oil from the turbo, or the orifice getting offset from the intended alignment can cause the engine to not run properly, especially at full power.

Possibly since this was a larger individual (passenger) the engine may have been utilizing more power and may have caused a droplet or other fod to obstruct the orifice and cause a lack of typical power available.

Let me know if this is in detail enough or if I can provide additional information.

Best,
Chris

From: [REDACTED]
Sent: Thursday, April 27, 2017 4:19 PM
To: Chris Lord <[REDACTED]>
Subject: Test

V/R

Silliman James

From: [REDACTED]
Sent: Thursday, April 27, 2017 1:59 PM
To: Silliman James
Subject: FW: N912XV

FYSA

From: Dwight Loomis [mailto:[REDACTED]]
Sent: Monday, April 24, 2017 2:53 PM
To: Abel, Jeremiah (FAA)
Cc: Miles Loomis
Subject: Re: N912XV

Jeremiah Abel

After the carb. work by Craig Martin the engine would not rev up in the higher RPM. correctly. I made a call to Chris Lord who said it was probably a dirty orifice in the turbo. He said orientation was critical and was probably marked, and should be reassembled with the same orientation. We could not find any marking but I did remove, clean and reinstall. The engine did then rev up correctly. Craig synchronized the carbs.

Within the next several hours of flight time the orientation was changed slightly several times. The last change was on 4/10/17 After Miles reported to me he did not fly on 4/7/17 because it was not running well.

Since 4/10/17 I have logged 4.4 hours and Miles 3.5 for a total of 7.9 hours since the last change.

If I can be of any help don't hesitate to email or call me.

Dwight

On Apr 24, 2017, at 1:19 PM, "[REDACTED]" wrote:

Dwight,

Per our conversation on Friday (4/21/2017); any additional specifics you could provide regarding reduced engine performance/ adjustments required.

Particularly the period subsequent to the "200 hour Rotax carb inspection requirement", including replacement of carb bowl floats, that occurred @ 266.2 hours as well as synopsis of the logbook entry (4/7) "Not running right – missed at high RPM".

Thanks for your time and cooperation throughout this process. I'll be happy to answer any additional questions you might have.

V/R

<image001.png>

Jeremiah W. Abel

Aviation Safety Inspector

DSM FSDO



<image002.png>