

From: [Folkerts Michael](#)
To: [Folkerts Michael](#)
Subject: FW: N891LL Engine Run information
Date: Wednesday, January 10, 2018 5:37:45 PM

-----Original Message-----

From: Johnson, Jack (Indy) [REDACTED]
Sent: Wednesday, November 9, 2016 10:37 AM
To: Folkerts Michael [REDACTED]
Cc: Grigsby, Timothy L [REDACTED]
Subject: RE: N891LL Engine Run -- background information

Mike (and Tim).

After the engine run, our mechanic disassembled the fuel pump to inspect the pump elements. Our service engineer (who incidentally used to be a pump inspector at United Airlines), examined the pump elements and said there was no evidence of any cavitation (or any other malfunction). The pump's internal components were all in excellent condition. The other members present agreed.

The pump was re-assembled and re-installed back onto the engine, and the engine placed back in its shipping container.

At this point, there is not much left for the engine to tell us. I agree it appears a slug of air got into the fuel supply to the engine, but the source of that air is not yet determined. The vacuum check we performed on the fuel system ruled out an air leak between the engine's fuel pump and the aircraft's shut-off valve.

That said, I would like to return the engine to the Illinois Dept. of Transportation with your permission.

Let me know if you have any questions.

From: Johnson, Jack (Indy)
Sent: Tuesday, November 08, 2016 1:48:11 PM
To: Folkerts Michael
Subject: RE: N891LL Engine Run -- background information

Mike,

After our phone call, the test cell mechanics got together and came up with a way to run the engine. We were not able to perform a full calibration run. We did successfully start the engine and accelerated the engine manually. The Soloy engine controls setup locks the engine's governor control at 40%, and relies on the propeller to prevent the engine from over-speeding. Without the propeller, we risked overspeeding the engine, so we only accelerated above ground idle just enough to demonstrate that the engine was capable of acceleration. The engine's light-off was normal; it ran smooth with very low vibration and accelerated immediately. Once the engine cools, we will remove the fuel pump and examine the gears for evidence of cavitation.