From:	Craig.Roberts
то:	Jones Patrick
Subject:	FAA Report on N521AR Accident (WPR17LA093)
Date:	Tuesday, May 30, 2017 2:08:51 PM
Attachments:	image001.png N521AR FAA accident report.docx

Good afternoon, Patrick.

Attached is the report I put together for the investigation Mark and I did at Jarmin's on May 18th for the engine on N521AR.

I have numerous photos of N521AR I can send you if you have a means I can do it with.

Please let me know if there's anything else you need from me.

Best Regards,

M. Craig Roberts Aviation Safety Inspector (Airworthiness)



Federal Aviation Administration Scottsdale Flight Standards District Office 17777 N. Perimeter Dr., Suite 101 Scottsdale, AZ 85255-5453 On April 27, 2017 at approximately 1000 MST, N521AR, a Schweitzer 269C helicopter, serial number S1785, made a hard landing in a cow pasture near Florence, AZ. The helicopter sustained substantial damage and the pilot, who was the sole occupant, sustained minor injuries. In a statement from the pilot, he reports that just prior to the accident while in cruise at approximately 2000-2100 feet MSL and 65-70 knots the engine "sounded different" and he noticed the engine and rotor RPM's had dropped. He then twisted the throttle to increase engine power, but there was no response from the engine. He had lost altitude and picked a spot to touchdown. He flared and impacted the ground hard at which point, the helicopter rolled onto its right side. The tail rotor gearbox and blades departed from the tailboom and the tailboom was broken from the fuselage. The landing gear skids exhibited impact damage.

The helicopter was transported to Air Transport, Inc. in Phoenix, where on May 18, 2017 a closer inspection of the wreckage was performed. The bottom spark plug from each cylinder was removed. The plugs had normal wear and no abnormities with the exception of engine oil on the number 2 and 4 plugs due to the engine being on its side for a number of hours after the accident. A "thumb compression" check was performed successfully. The magnetos were checked with a "buzz box". The right magneto indicated a setting of 20° BTDC, but there was difficulty getting a consistent indication from the left magneto. A continuity check of the throttle on the collective control to the servo throttle lever was unsuccessful. The throttle cable at the engine end is attached to a bellcrank that actuates via linkage the servo throttle lever. That end was moved by hand and exhibited no resistance. The cable end was then disconnected from the bellcrank and the cable end came out of the sheathing. The flexible cable portion was discovered to be worn and severed approximately 1 inch from where it was swaged to the rigid portion. The engine was then successfully run up controlling the engine power by hand. A magneto check was performed and both magnetos individually exhibited an RPM drop indicating proper operation.