

Hicks Ralph

From: Nicole L. Charnon [REDACTED] >
Sent: Thursday, September 27, 2018 2:51 PM
To: Hicks Ralph
Cc: Barclay, Jennifer
Subject: Sound Spectrum Analysis

Hello Ralph.

We ran the video through a sound spectrum analyzer provided by Hartzell (Les Doud) and could see a 127.5 Hz frequency that belonged to the propeller. With the propeller frequency (PF) of 127.5 for the three bladed propeller, we were able to determine that the engine was rotating around 2,550 RPM during the recording.

$$\text{RPM} = \frac{\text{PF} \times 60}{\text{No. of Blades}}$$

$$\text{RPM} = \frac{127.5 \times 60}{3} = 2,550$$

Let me know if you want Les to provide a screen shot of that frequency.

Thanks again for letting us work with Les on that.

Cheers, Nicole

Nicole L. Charnon
Senior Air Safety Investigator
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[REDACTED]
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