

6/3: ComancheZOOM - Engine Health Check with Steve Ells

First in a series on Condition Management and Maintenance of Lycoming and Comanche Aircraft

Your engine is your life, literally. It's health is your health. Your engine is also your pocketbook. An unscheduled overhaul is the biggest cost you can incur, typically ranging from \$30,000 to \$80,000 depending on the Comanche model you fly - and this does not include the other factors (such as insurability or the long-term effect on your right seater, should the need for that overhaul or maintenance become apparent in the air!)

Yet, Lycoming engines can and do regularly go well beyond TBO (which many pilots and even mechanics are unaware does not apply to Part 91 operations). When this happens, your cost per hour goes down dramatically, and your reliability, strangely, statistically goes up!

Find out more from Steve on how to check the condition of your engine, how to better maintain its health, how to prevent premature overhauls, and how to reduce your costs while increasing your reliability.

Steve Ells is credited by Mike Busch in *Maintenance Manifesto* as one of his key mentors in on-condition maintenance. Steve is a longtime Comanche owner, and an A&P/IA for 45 years. In addition to being a recognized expert on "on-condition maintenance" and how it applies to making Part 91 operations cheaper and more reliable, he also really "gets" our type. In particular, Steve's expertise in the application of on-condition maintenance to Lycoming engines (which are different from Continental) makes him an invaluable resource to the Comanche fleet.

Steve's generosity with knowledge, and patience with questions, is legendary, and his reputation is similar those of Zach Grant and Kristin Winter: "If you hear it from Steve, you can take it to the bank". We are looking forward to taking Piper Comanche ownership and operation to a new level of greater efficiency and reliability, and lower cost!

Steve Ells served in the US Navy as an Aviation Structural Mechanic. He attended A&P school at Northrop aircraft, and later went to work for Robertson aircraft (creators of the Robertson STOL kit installed on many of our Comanches) when they were in based in Washington.

Steve served as Director of Maintenance for several DC-3 operations and became fascinated with tailwheel aircraft, including a 9-year stint flying and maintaining aircraft in Alaska! After all that, Steve's chosen personal aircraft is a PA24. Steve is a commercial pilot with instrument and multi-engine ratings. He's a former tech rep and editor for Cessna Pilots Association and served as associate editor for AOPA Pilot until 2008. He also writes for Piper Flyer, KitPlane, and EAA. Steve is the owner of Ells Aviation (EllsAviation.com) and lives in Templeton, California, with his wife Audrey.

Steve is a superb and clear writer and a great sampling of his articles, most extremely relevant to our Comanches, can be found at: <https://www.cessnaflyer.org/maintenance-tech/itemlist/user/1805-steveells.html>



Presenter: "The" Steve Ells

To view/hear the recorded ZOOM session of June 4 click on:

- <http://meetings.northeastcomanche.org/zoom/2020-06-04/video.mp4>
- <http://meetings.northeastcomanche.org/zoom/2020-06-04/audio.m4a>

Pete Morse