

Lycoming Engines



Ian Walsh, Senior Vice President and General Manager

Ian Walsh is Senior Vice President and General Manager of Lycoming Engine. Walsh is responsible for developing business strategies to drive long-term growth. Prior to joining Lycoming Walsh served as a Cobra attack helicopter pilot in the U.S. Marine Corps. Ian earned an MBA from the Harvard Business School.

FA: We keep hearing stories that 100LL is going away, maybe within the next few years. As one of the world's major engine manufacturers, what is your take on the future of avgas and what is Lycoming doing to meet the challenges?

IW: The Environmental Protection Agency has been petitioned to rule on the health effects of lead in 100LL (avgas). We know that doesn't bode well for the future of leaded aviation fuel in the U.S. The situation is similar outside the U.S. Manufacturers as well as owners and operators need to understand how this will impact their business and lives. Lycoming is helping lead the way with the search and certification of alternative fuels for General Aviation. We're also taking leadership positions throughout the industry – as a voting member on the ASTM avgas committee, a board member to the General Aviation Manufacturers Association fuel efforts and a research partner with the FAA fuel testing facility. We have our own strategy to prepare our products for this new fuel environment. The first major effort is one that has actually been underway for over a decade. Lycoming Service Instruction S1070 indicates a range of allowable fuels by engine model, including

an unleaded 91/96 grade produced in Scandinavia. The second major effort is the advent of our new iE2 fully integrated electronic engine capable of operating on a range of fuels. Our O- and IO-360 are on schedule to be approved for mo-gas in the near future. Our new Light Sport engine, the IO-233-LSA, will be FAA certified on a broad variety of fuels and will not require 100LL. Finally, Lycoming continues to work on a purpose-built heavy fuel capable engine.

passes. Still, some changes are not well known but quite significant. Improved metallurgical properties of all our parts for lighter weights; improved reliability; alternative (unleaded) fuel capability; the introduction of roller tappets for smoother operations and less cam and tappet wear; tighter test, quality, and certification standards: These are just a few examples. Other changes are more widely recognized and breakthrough such as our new iE2 integrated electronic engine.

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FA: Some pilots argue that aviation engines haven't really changed in 50 years. What would you tell a pilot to convince him there have been significant improvements?

IW: It's true that the aviation engine has remained fairly stable in its development. The laws of physics apply no matter how much time

FA: The Cessna light sport aircraft, the Skycatcher, was originally announced to feature a Continental O-200. Is that still the plan or will Lycoming offer Cessna an alternative?

IW: We are very enthusiastic about our new LSA IO-233 engine. If you look at the stats of our engine compared to the TCM LSA

O-200, we know that OEMs and customers will prefer a Lycoming because we will have the right weight, higher Time Between Overhaul, electronic spark ignition, broad fuels capability, be FAA certified, and have the world's best service and support.

FA: Every pilot wants his engine to reach TBO, but not all do. What can pilots do to enhance their engine's longevity and where do you recommend they look to get smarter?

IW: We believe all owners and operators need to fully understand the operating manual and preventive maintenance of their Lycoming engines. Lycoming has built more than 350,000 engines since 1929. We have the data to statistically know exactly how each one of our engines can reliably make its TBO, as long as the engine is properly maintained and uses genuine Lycoming parts designed to our original specifications.

FA: We've heard it said that the next major evolutionary moment in aviation will occur when there's a new 'breakthrough' power plant for airplanes. Your thoughts?

IW: Most recognize the eternal dynamic between computing software versus hardware. Each one continues to leap frog the other based on higher requirements. I think the same dynamic exists between airframers and engine manufacturers in general aviation. Let's just say it's time for engine manufacturers to leap ahead and Lycoming is doing that with our iE2, the fully integrated electronic control system created by our Advanced Technology Center. People generally are underestimating the impact of a world without 100 octane aviation grade fuel. Electronics may enable higher power density engines using inferior fuels. [FA](#)