"Nobody knows better than I do how an inferior oil can wreck a $40,000 engine. That's why I recommend AEROSHELL® W Oils."

Meet Ed Rachanski—a man at the top of his field. Even his staunchest competitors rate him as one of the best. An aviation magazine described Ed's FAA-approved Blueprint Aircraft Engines, Inc. in Hickory Hills, Illinois: "One of the nation's finest."

Ed Rachanski is one of general aviation's preeminent piston engine rebuilders. His knowledge is encyclopedic.

"I'm astounded at the condition of some of the practically new Lycomings and Continentals coming in here to be rebuilt," says this well-known expert who also works on Indy 500 Cosworths and Chevy 350's. "It's awful to see people pouring so much money down the drain when strict attention to lubrication could have avoided the problems.

"Look at the spalling," says Ed, pointing to six valve lifters. "$360 to replace those, and they're from an engine with only 300 hours.

"And these worn cam lobes—you couldn't put this camshaft back in an engine. That will cost $700. What an unnecessary expense. Dangerous, too."

Faulty lubrication is the cause

Asked why mechanical problems like this occur so frequently, Ed says, "It's traceable to poor lubrication. Many pilots just aren't particular about oil. Some have used multigrade oil in their automobiles for years but still limp along in winter with too heavy a single grade in their aircraft engine. It makes no sense at all to me.

"Only a thin film of oil stands between a $40,000 engine and an early trip to my shop," Ed observes. "Or worse, an unplanned landing in a cornfield."

What can owners and pilots do to remedy this? Start by reading some important facts about piston engine aviation oil.

A lubrication lesson that could save your engine

Before introducing AEROSHELL® Oil W Multigrade, Shell spent *several years* testing an all-mineral-oil base product, a pure synthetic and a semisynthetic oil. Shell could have used a less expensive mineral oil base, but tests showed we would have ended up with carbon deposits on the exhaust valves and guides, and considerable low-temperature plugging. Those are problems Ed Rachanski is seeing in his rebuild shop today.

The semisynthetic base

Instead, Shell went to a completely different blend chemistry—50% high-quality *synthetic* hydrocarbon oil, and 50% mineral oil. A semisynthetic. The synthetic hydrocarbon oil allowed us to use heavier mineral oil base stocks.

Because it is semisynthetic, AEROSHELL W Multigrade has the dual capability of providing the lubricity, dispersancy and antiwear properties of a compounded petroleum base oil *plus* the performance advantages of synthetic oil at *both ends* of the temperature scale. At 0°F, it is *50% less viscous* than a 20W-50 all-mineral-oil base product; and *15% more viscous* at 300°F—major differences that make a *substantial* improvement in engine performance.

AEROSHELL W Multigrade runs cooler, too—up to 20 degrees cooler than a single grade in extensive tests at the University of Illinois. It excels at dissipating heat. And because it's 50% synthetic, it also resists oxidation better than an all-mineral-oil base 20W-50.

"To maintain my warranty, AEROSHELL Oil W must be used."

"I don't want my workmanship looking bad, and my customers pouring money down the drain," says Ed. "That's why I give them written notice that to maintain the Blueprint Aircraft Engines warranty, they must use AEROSHELL W Oils."

Both AEROSHELL Oil W 15W-50 Multigrade and the Single Grade 100 are sold in leakproof, resealable one-quart plastic containers. Available at most FBO's, and at Shell Jobber/Resellers listed in the Yellow Pages under "Oils-Lubricating." Call us toll-free at 1-800-231-6950 for the name and phone number of a Jobber/Reseller in your area. In Texas call 713-241-2366.