



# THE ENGINE BEAT

## Lycoming flies to new horizons.

By John M. Larsen

**S**ometimes it is easy to overlook the obvious! Here at KITPLANES®, we are constantly on the lookout for the latest—and hopefully the greatest—in new aircraft engine design. While this will always be our quest, we need to acknowledge that as of February, 1998, the Number 1 homebuilder choice for engines over 100 hp is still Lycoming.

### IFR Conditions

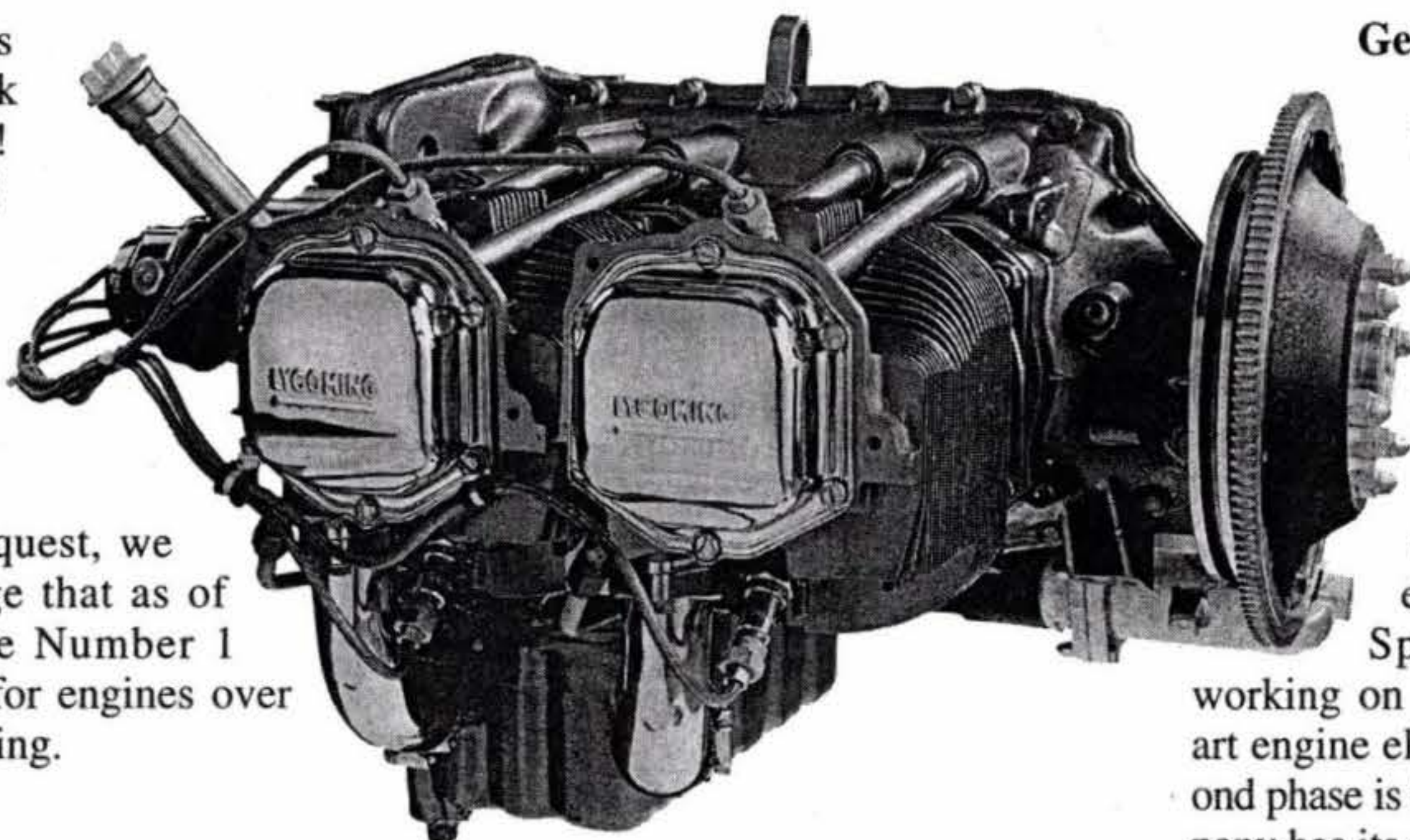
In the fall of 1997, the Lycoming plant in Pennsylvania was under siege by striking union workers. Managing Editor Keith Beveridge returned from an on-site visit to the factory where numerous pieces of equipment were up for auction. Striking workers showed their discontent, both with their old contract and with the company's trend toward the out-sourcing of parts and assemblies.

One of the energy sources that keeps the rumor mill turning is the perception that Lycoming intends to have many of its engine parts built by companies outside the United States. When interviewed, company spokesman Michael Wolf said that whatever new out-sourcing is done will be with U.S. companies, with the majority of these vendors located in the eastern United States. All Lycoming pistons have been made in Brazil for the past 25 years, so foreign out-sourcing is not new.

Customers with a new Lycoming on order need not worry because even during the strike, the company faithfully filled orders with the labor of salaried people and personnel with certified engine training.

### On the Move

Lycoming has realized for some time that there is a big market in homebuilt aircraft. The company has gone after major kit manufacturers in a big way,



**Thousands of 150-160-hp Lycoming O-320-series engines like this are found in homebuilts including Van's RVs, Stoddard-Hamilton Glasairs, Lancairs and Murphy Aircraft kits.**

evidenced by the fact that some prominent companies such as Stoddard-Hamilton (Glasair), Lancair, Van's and Murphy offer new Lycoming engines at OEM (original equipment manufacturer) prices. This means that if you buy a qualifying kit from one of these kit makers, you can get a new O-320 for about \$19,000.

This is significant, as Lycoming dealers will ask for about \$10,000 more for the same engine in a *remanufactured* configuration. In my area, the OEM price is only about \$3000 more than the local engine-rebuilding shops want for zero-timing your old engine. It also gives Lycoming's competition something to consider when counting the cost of tooling up for their 160-180-hp offerings.

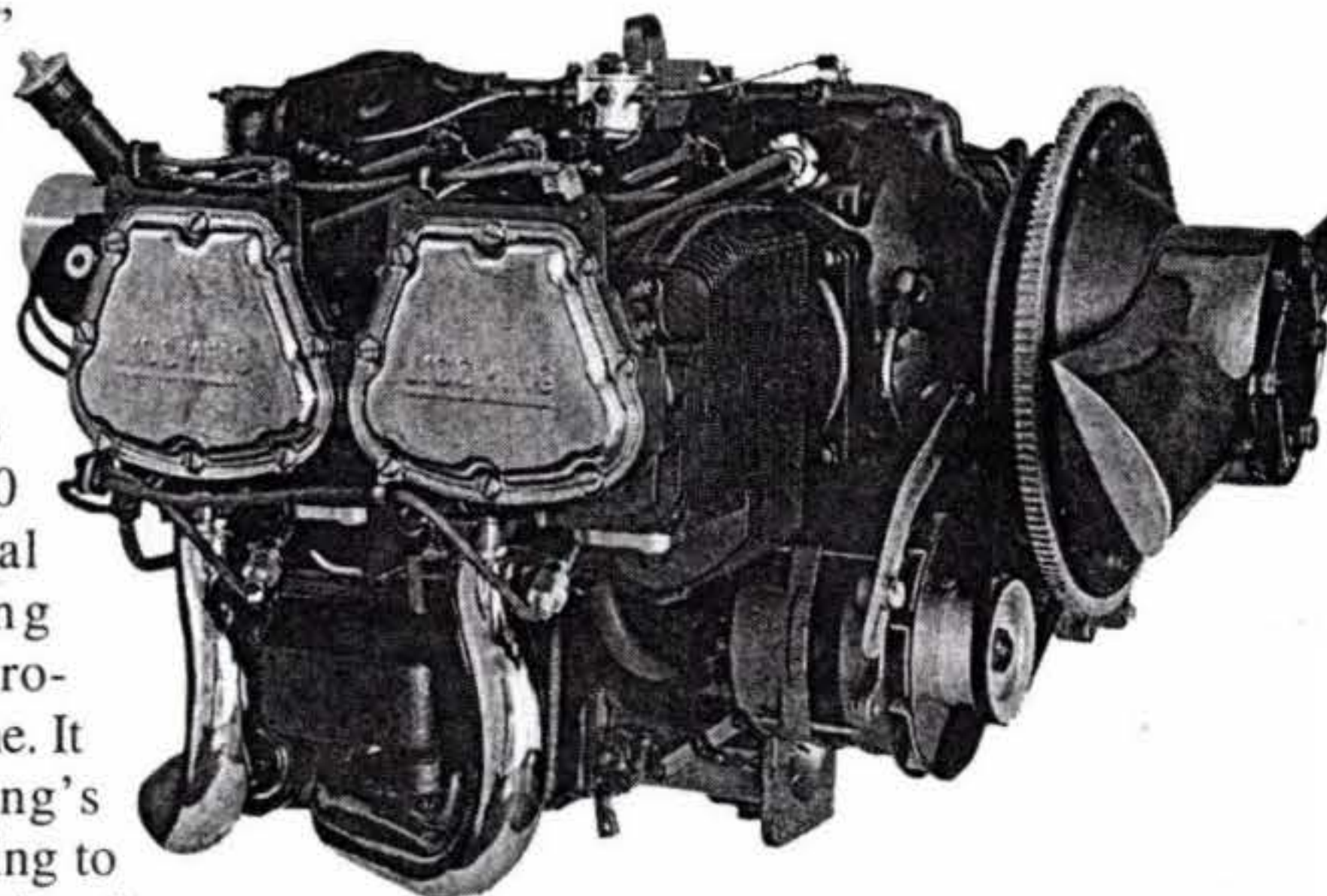
### Getting Competitive

On its new models, Lycoming is offering the semi-automatic LASER ignition as an option. The system is made by Unison, the current manufacturer of Slick magnetos. Wolf said that Lycoming is taking a two-phase thrust at the future, with electronics being Phase 1. Specifically, Lycoming is working on implementing state-of-the-art engine electronic controls. The second phase is fuel management. The company has its eye on ultimate fuel economy by doing what it takes to give the pilot the most for his avgas dollar.

The ultimate goal is to offer one-lever automatic piston engine control similar to that used on turbine engines. This would give a big improvement to economy and performance. Cost is the barrier, so Lycoming is moving slowly to come up with the right package with price-conscious marketability along with the electronic benefits.

### Why Do They Cost So Much?

The real driver of high aircraft engine cost is low volume. Lycoming makes many engine models—but only in quantities of a few hundred each. Total pro-



**This is a representative of the Lycoming O-360 four-cylinder series.**