



Eipper, the largest ultralight manufacturer in the nation, has only one dealer in Oregon — Larry Willis of Eugene — and has ultralight kits available that cost less than a new car.

Daring young pilots in their flying machines

A quick pull starts the two-cylinder engine and the wooden propeller blades begin to chop the air. We strap ourselves into the open bucket seats and begin to taxi down the grass runway.

At 20 yards and 40 mph we begin to pull away from the earth, climbing 800 feet per minute. At 1,500 feet the engine is shut off and we begin a slow, seemingly effortless glide.

There is nothing around or beneath us except space, and the only sound is that of the wind. Off to the right are the green Coburg Hills and the bank of a grey cloud slowly enveloping Eugene.

This is flying, ultralight style.

Ultralight airplanes are miniature flying machines of aluminum tubing and Dacron sailcloth so simple that some affectionately refer to them as the "flying bicycle."

Requiring as little as 50 feet to take off and land, the low and slow flying aircraft have brought the wonder of flight to the common person, and as many as 20,000 are circling the earth.

The ultralight has a history almost as long as the airplane.

Otto Lilienthal, a German aeronautical pioneer whose work later influenced the Wright brothers, designed the first "ultralight" of willow and silk linen and recorded more than 2,000 flights.

In 1951 Francis Rogallo of NASA patented an airfoil design shaped like a wide V. Originally designed as a sort of flying parachute for space capsules reentering the atmosphere, the new wing was made from readily available materials including Dacron and tubing.

By the 1970s California ski slopes were busy with the colorful gliders.

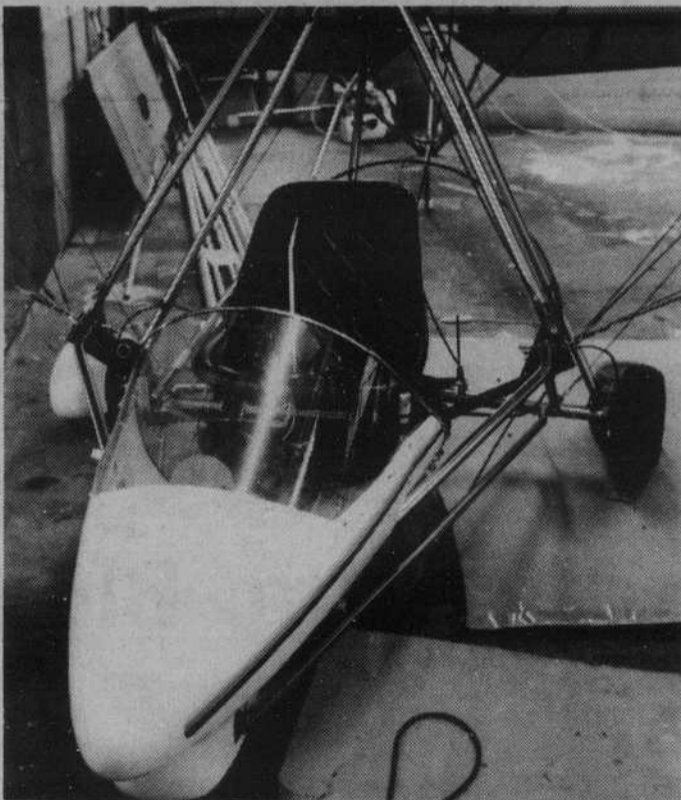
It was not too long before adventurers began to crave for more than just a downhill glide. Some began to mount chainsaw engines and propellers to the glider's frame while others strapped the engines to their own bodies.

None of these experimental crafts worked well until 1975, when John Moody started from level ground on a frozen lake and had the first successful flight of a powered hang glider.

Moody's idea quickly took hold, and today there are 50 ultralight manufacturers in the United States. The top three companies currently do a multimillion dollar business in a field that did not exist seven years ago.

Eipper, probably the biggest manufacturer, did \$9 million worth of business in 1982 alone.

Larry Willis, Oregon's first and currently only Eipper ultralight dealer, sells Eipper's most popular model — the Quicksilver — in Eugene.



Assembling an ultralight kit can be time consuming — one kit has over 1,200 parts.

"The Quicksilver is sold as a kit for about \$5,500 and has 1,200 parts," explains Willis. "It takes about 40 hours to assemble. The manufacturer does all the welding, cutting, drilling, and sewing necessary for assembly by the do-it-yourselfer, or I'll do it for \$400."

According to Willis, the Quicksilver uses stick and throttle controls, climbs 800 feet per minute, takes off and lands in 50 feet and stalls at 23 mph.

"The glide ratio is about six to one, that is, for every foot the plane drops, it glides six," Willis says.

One of the big issues surrounding the increasing popularity of ultralights is safety.

Although accurate statistics are unavailable because ultralights don't have to be registered, there were 48 reported fatalities in 1981 among the 1,200 to 1,500 planes flying. In the same year there were 1,251 fatalities among 213,267 private aircraft. When the ratios are compared, the accident rates for ultralights are about a third less than for private aircraft.

"The Quicksilver is very safe," says Willis. "When you consider that the pilot, passenger, and

ultralight weigh about 500 pounds and land at about 25 mph, the likelihood of a fatal crash is remote. These planes fly with much less weight and speed than a conventional private aircraft like a Cessna which weighs about 1,600 pounds and lands at 55 mph.

"These planes are equipped with a chest-mount parachute that lowers both pilot and plane to the ground," says Willis. "But, they don't work below 300 feet."

Although operators do not currently need a pilot's license to fly an ultralight, the FAA will make mandatory the registration of ultralights and the licensing of pilots later this year.

Ultralights, like so many other devices made by man, have the potential for both good and bad. On March 7, 1981 two Palestinian in powered gliders took off from Lebanon for Israel on a terrorist mission. Although both pilots were captured, the ultralights served their purpose of getting the Palestinians into Lebanon.

Both Israel and Saudi Arabia have bought large numbers of ultralights. So many, in fact, that the CIA has asked leading manufacturers not to sell to certain countries.

Ultralights have many other military applications. Virtually invisible to radar, ultralights can be easily adapted for remote control and fitted with television cameras and machine guns.

Aside from these ominous uses, ultralights have found themselves in many domestic applications. Farmers have found the planes to be an economically sound investment. Crop dusting expenses are reduced to a fraction as compared to conventional aircraft, and ranchers too expound the virtues of the inexpensive aircraft.

Many police departments across the country are listing ultralights among their equipment. Last year Marion county in Oregon borrowed an ultralight from Willis' company.

"They recovered \$400,000 worth of drugs in one month," he says. "They considered it a good investment."

There is, of course, a great deal of fun to be had with the "flying bicycle." Currently available are stunt, performance, and leisure models. For each type, accessories of all kinds are available to keep even the most avid enthusiast busy.

Included in the list of accessories are pontoons with retractable wheels.

"It puts a whole new dimension on remote lake fishing," says Willis.

By Mike Duncan
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