PrivatePilot PRESENTS

CustomPlanes™

FOR AIRCRAFT BUILDERS, DESIGNERS, RESTORERS AND PILOTS

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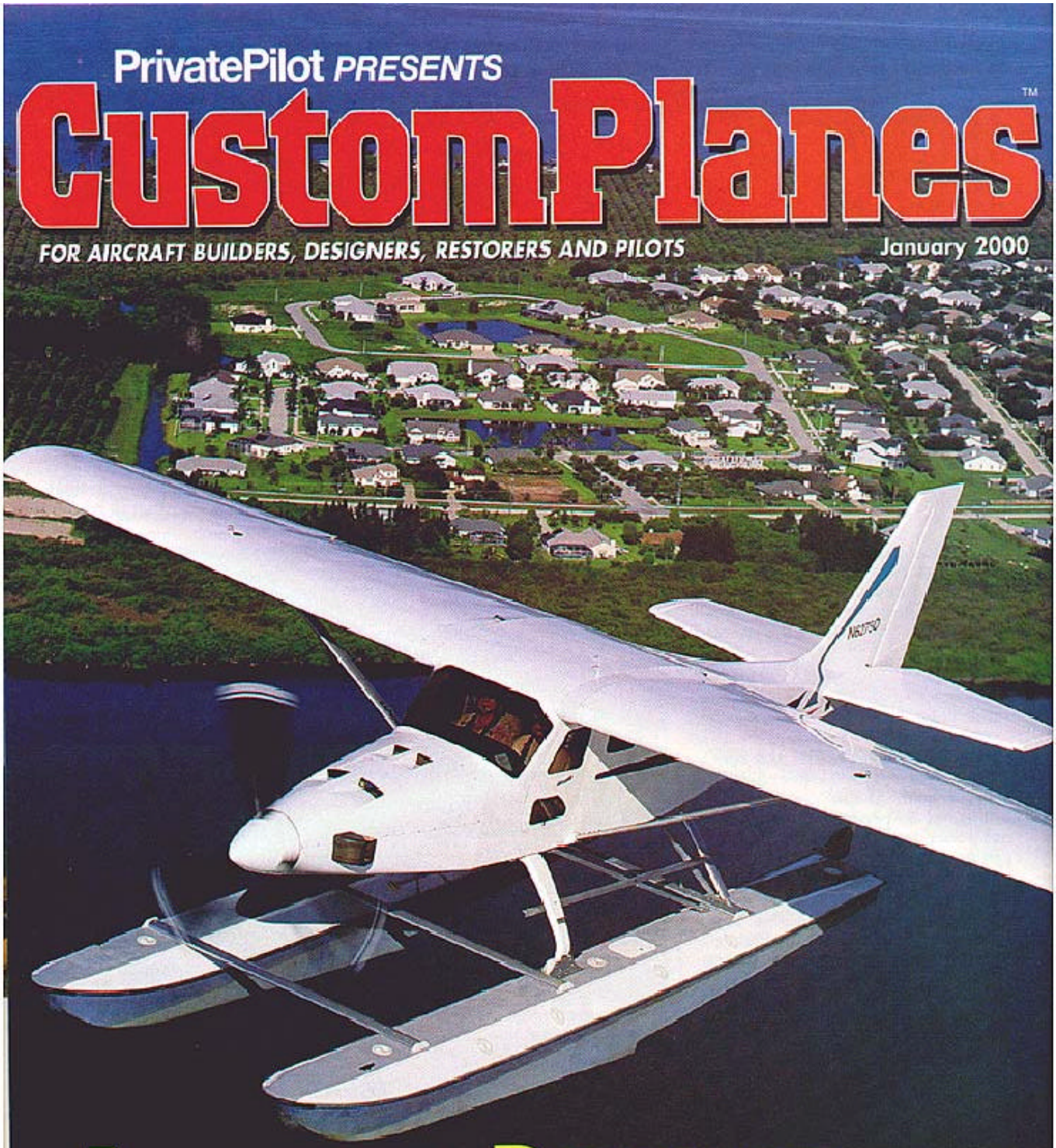

AEROCOMP ROUNDUP

Monster Comp Air 7

Comp Air 8 Comp Air 10

ABOVE: The instrument panel of the Comp Air 4 is so large that it can easily accommodate your choice of modern avionics. LEFT: A variety of interior configurations may be used when building the Comp Monster, and it can be powered with your choice of a number of engines.

Turbines for the Year 2000

Text and Photos by Norm Goyer

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MY PERSONAL ASSOCIATION with turbine-powered aircraft has not been extensive. I've handled the controls of a few turbine-powered military aircraft, Learjets and Convair 580's. There were also the hundreds of hours I spent as a passenger in commercial airliners. At no time during those flights was I ever worried about engine failure. Turbines have earned a reputation for reliability. Whenever somebody plans an aircraft project of the right size and type, if the funds are available for it, a turbine engine is usually the powerplant of choice. This is true for today's aircraft and undoubtedly for the majority of aircraft in the future.

For the past several years, there has been an increasing umber of surplus and imported turbines installed in a wide variety of aircraft, including homebuilts, acrobatic planes and even homebuilt helicopters. That's because turbines are becoming available at prices that are more affordable. Last year at Sun 'n Fun, I spotted three composite aircraft of unique design, all of which were powered by turbines. These unusual planes from a company called Aerocomp, based in Merritt Island, Florida, were capable of carrying seven, eight and 10 people. The eight-seat Aerocomp was especially intriguing, not only because of its unusual design, but also because it was on floats, and I had never flown a turboprop seaplane before.

Aerocomp has a great deal of experience in composite construction. The company began by building seaplane floats for aircraft of every weight and configuration, offering both regular floats and amphibious floats. Aerocomp designed all its floats using the latest available aerodynamic and hydrodynamic technologies. Not only are the floats attractive, Aerocomp designed them so that all the seams are above the waterline, and this feature greatly minimizes the need for the seaplane pilot to pump out water that inevitably accumulates in floats. Another great feature of Aerocomp floats is their ease and speed of assembly. The straight floats can be assembled in about 20 hours; the amphibious versions go together in about 50 hours. What's more, the composite construction of Aerocomp floats allows the owner to make repairs quite simply, using commonly available materials. To keep the floats lighter and easier to build, the tailwheel type is available instead of the nosewheel. An added advantage is that it's more difficult to flip the plane over if the pilot should accidentally try to land it with the wheels extended (which is certainly not a recommended maneuver in any seaplane).

The first aircraft the company obtained the rights to build floats for was the two-place Merlin sport aircraft that was originally designed in Canada for flight training. I'm quite familiar with the Merlin, having flown examples of the aircraft with several different engines, including one with a Rotax 532, another with a Rotax 912 and a third with a converted Honda engine. The Merlin is one of the best-flying small homebuilts I've ever flown. Whenever I had a photographic assignment at an airshow or flyin, I used to do my best to find a Merlin to use as a camera platform. Its fuselage is wide, the cabin is roomy, and the plane literally flies itself from takeoff to landing.

Upon a recent visit to the Aerocomp factory, I saw all these airplanes, including a Merlin in a crate that was ready to be shipped to a customer. I toured the factory, where the parts for all the aircraft are laid up in the various molds, and I was truly impressed when I saw that the very latest materials and techniques in composite construction were being used.

Once Aerocomp had secured the rights to the Merlin, company owners decided to expand operations to include aircraft of different sizes.

Aerocomp spent over a year conducting marketing surveys at airshows and flyins all over the country. They also contacted people by phone. The results of that survey caused the company to alter its direction. It seemed that potential customers wouldn't buy a two-place, fabric-covered sport aircraft. A great number of surveyed pilot/owners wanted a composite aircraft, one that flew like the Merlin, just much

faster and a lot roomier. It had to have seating for at least four people. Aerocomp designers immediately got to work on the project. As soon as the new design, called the Comp Monster, was produced and released, it became very popular.

The Aerocomp Comp Monster, or Comp Air 4, is a high-wing, strut-braced, all-composite monoplane. It can be powered by a number of engines from 150 to 180 horsepower. The next-larger aircraft is the all-composite Comp Air 6, which can be powered by 220hp to 300hp engines. The Comp Air 6, designed with business people in mind, is capable of cruising at 150 to 200 mph, depending on the engine installed. This makes it ideal for those who want to make long cross-country trips comfortably and reliably.

The flagships of the Aerocomp line are its turbine-powered fleet composed of the Comp Air 7, the Comp Air 8 and the Comp Air 10. We were eager to find out how it felt to fly one of these turboprops, so we traveled to the Aerocomp facility in Florida and spent many enjoyable hours meeting the staff at Aerocomp and flying the various aircraft. It was an enlightening visit that gave us a look into the future of homebuilt aviation.

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