

# INTRODUCTION

In the summer of 1982 the AVID FLYER design was begun. By spring of 1983 the prototype N99AF made its first flight. In the following months it was extensively flight tested and its performance met our expectations. In May of 1983 this corporation was formed and the business of manufacturing and selling AVID FLYER kits was begun. While the prototype was under construction, we began building the production tooling. N99AF made its first appearance at Oshkosh that summer. The response to our new design was tremendous, and upon returning, we were prepared to ship complete kits immediately.

We have made it our goal to provide you with a "first rate" aircraft kit with quality, precision parts that fit. We make every effort to provide a complete kit, so the builder does not have to wait for parts and can build at his own speed. We have a very friendly and helpful customer service department ready to answer any questions not answered to your understanding in our manual.

We have an active Research and Development Department with plans for developing new options and aircraft designs, so that we may maintain a progressive business and introduce exciting new alternatives in flying to the home-builder and general aviation public.

#### WHY THE AVID FLYER WAS DESIGNED

There is a need in general aviation for an alternative to ultralights and the more expensive type-certificated light aircraft. There are many pilots or would-be pilots who have a love for flying and want something more than an ultralight, but just cannot afford it considering the cost of aircraft ownership, maintenance, fuel and licensing. These pilots are interested in flying for the sheer pleasure of it and do not fly often enough to warrant an expensive-to-own aircraft.

The AVID FLYER was designed to be inexpensive to own and operate, easy and fun to build and exhibit fantastic STOL capabilities, making it a fun airplane.

Design criteria used to develop the AVID FLYER included:

-light structure with high fatigue life making it strong in the air (at least as strong as standard category) and strong for towing -easily folded wings with no controls to disconnect and connections readily visible from the cockpit to determine that the airplane is ready to fly (a reassuring safety feature)

-high lift wings

-gentle stall and flight characteristics -STOL with steep angle of climb capabilities

-payload of at least 350 lbs.

-stall speed under 30 mph

-wing design to achieve low stall speed with 350 lb. payload and maintain at least a 5 lb. wing loading (airplanes with less than a 5 lb. wing loading could easily be blown over in wind)

-FAA approved aircraft quality materials and processes

-materials that anyone can work with

-amateur experimental home-built kit so builder could qualify to do his own inspection and maintenance

-highest performing engine/propeller/gear reduction combination

-exceptional ground visibility
-feasible for mass production
-easy and fun to build and fly

These all came together to create the fantastic performance of the AVID FLYER!

# MEET THE DESIGNER

Contrary to what you may read in various flying publications, the AVID FLYER did not have a co-designer nor was it originated by anyone else.

The AVID FLYER with all of its exciting and special features was designed by Dean Wilson. Dean has spent over 35 years in various aspects of aviation from crop dusting, sailplanes, flight instruction, charter flying and back country flying to restoring antiques, designing modifications to improve load carrying capabilities of spray planes, STC approvals and aircraft design for type certification. Dean is also the designer of the Eagle applane and dry sreader.

His interest in aviation began with his first airplane ride at the age of 3. He started flying lessons at age 13 and soloed when he was 16 years old. He has been an active participant in the field of aviation since then. He received his airframe mechanics license from Spokane Technical and Vocational School at 18 years of age.

He has had some most interesting experiences in aviation and thoroughly enjoys talking and reminiscing with like-minded people. He is 49, married and has 3 children. Very much a family oriented person, safety ir aviation if of utmost importance to him. All of his designs and modifications have stressed safety and high structural fatigue life.

From the very beginning of his introduction to aviation, Dean dreamed of designing and building high performing aircraft. He fulfilled his dream with the AVID FLYER.

Let the AVID FLYER make YOUR dream come true. If you have dreamed of building your own airplane for fun flying, but do not want to

spend years achieving the finished product....build an AVID FLYER and make it uniquely your own. Let the craftsman in you free!

#### FUN FLYING!

The AVID FLYER is an experimental aircraft kit for the amateur home-builder. At least a student pilot's license signed off for solo is required to fly it. It was accepted as meeting the 51% requirement and placed on the FAA Approved Kit list on May 10, 1983. The average builder can complete this kit in 200-400 hours.

Home-building fulfills a lot of the creative desires in individuals who would purchase this type of airplane, but flying it is the frosting on the cake.

The AVID FLYER is truly a delight to fly. Its STOL performance and steep angle of climb capabilities are quite dramatic and can get you in and out of places where other airplanes can not go. And it's two place so you can tak a friend along to share the fun of flying! and new adventures. You cruise along at 80 mph, turn around in a very short radius circle, slow down to near stall speed and enjoy the scenery. The full span flaperons give light and responsive roll control. Stalls are quite gentle with positive rudder, elevator and aileron control throughout the stall. spot some cozy meadow just right to land on, slip down and investigate. This airplane can be slipped very easily. Land and roll out in about 150 feet. Ground handling is very easy with good directional control (very docile) and excellent forward visibility. An IDEAL airplane for the low time pilot. The doors swing out and up to lock against the wing, so photographers can get some good shots from the air. This also makes flying more comfortable in the heat of summer. It has cabin heat for winter flying. Does your flying territory have lots of windy days? Experienced pilots have flown both the taildragger and tri-gear in 15 mph direct crosswinds, on take-off and landings. High altitude? At full gross weight, this airplane jumps off the ground in 300 feet at 6000 feet above sea level and climbs right out.

### CABIN INTERIOR

The AVID FLYER is two place, side by side with enclosed cabin. Comfortable for two average size adults. The width of the cabin is 36 inches. Because of the change in gear reduction units which moved the propeller forward, we were able to move the seat back for more leg room than the prototype had. Also, the firewall on the left side only can be moved forward, if desired, for additional leg room for the pilot. Instruction are available on how to do accomplish this. The one-piece upholstered, cushioned seat sets on a heavy canvas sling that laces to the airframe tubing and can be adjusted for short or tall pilots. The rudder pedal cables are also adjustable. Fiberglass seats have been installed by some builders. The floorboards are plywood and can be stained dark or left natural birch and varnished. Aluminum wear plates can be added at the rudder pedals to protect the floorboards from marring. The lexan windshield extends over the top of the fuselage to the