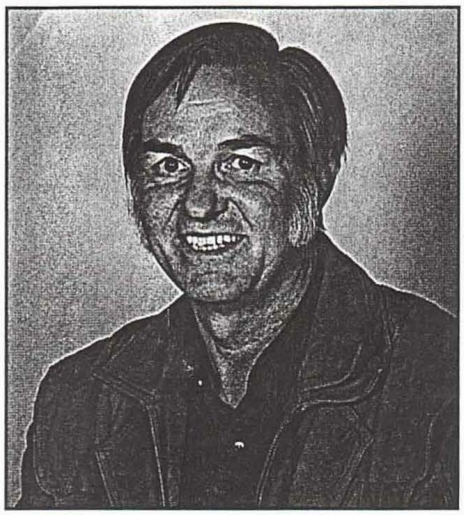
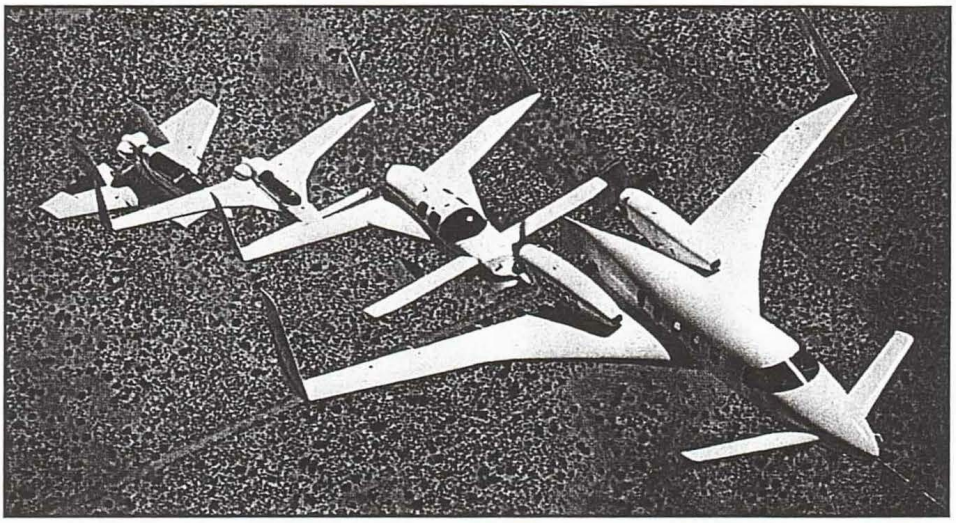
Homebuilders HALL OF FAME





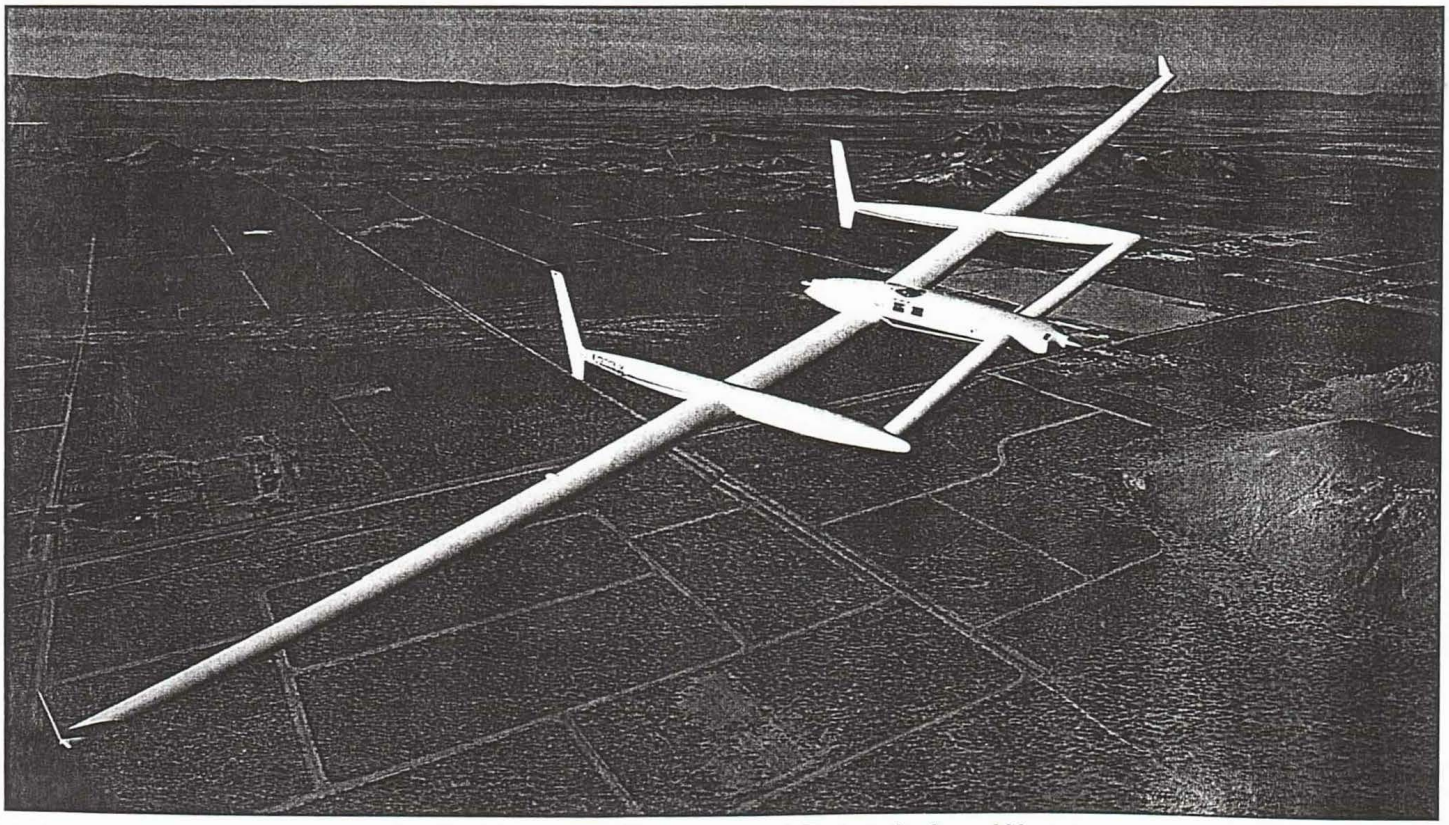
An echelon of Burt Rutan designs. From bottom to top: VariViggen, Long-EZ, Defiant and Starship.

BURT RUTAN

Aircraft homebuilding had been popular as a hobby literally since the days of the Wright brothers, but it was Burt Rutan who elevated the activity to the cutting edge of lightplane technology. The loaded canard he perfected on his VariViggen and VariEze/Long-EZ designs gave homebuilders a series of high performance aircraft without the susceptibility to stalls and spins of conventionally configured aircraft with higher wing loadings . . . and his "moldless" composite construction method made it easy and affordable for individual builders to create natural laminar flow airframes that provided greater performance for a given amount of power. VariEzes and Long-EZs were built in large numbers, and similarly configured spinoffs by other developers continue to be popular today.

The ultimate application of Burt's loaded canard and composite construction methods was the Voyager, purpose designed and purpose built to fly around the world non-stop without refueling. When Dick Rutan and Jeana Yeager set out on their historic and ultimately successful circumnavigation of the earth, they were aboard the only aircraft ever designed and built that was efficient enough to complete such a flight. Today, 12 years after the flight, that statement is still true.

Another highly significant contribution Burt made to the world of aircraft homebuilding was his simplified, step-by-step "cookbook" approach to aircraft building instructions, rather than traditional blueprints. It changed forever the way building instruction manuals were written and opened up the hobby to people who had not had



One for the history books — the Burt Rutan-designed Voyager.

Klaus Savier, shown here in his ultra-efficient VariEze at the start of the 1999 Sun 100 air race, had an interesting flight to Florida from his home base at Santa Paula, CA. Climbing to 17,500 ft. to take advantage of a lower level jet stream with steady west to east winds averaging between 50 and 60 knots, he cruised nonstop to Memphis, TN in six hours and twenty-six minutes. His ground speed over the 1,450 nautical mile straightline distance averaged out to 224 knots (257.94 mph). The total fuel burn was 25 gallons, and the average fuel burn, from take-off to landing, including taxi and warmup/checkout, was 3.88 gph.

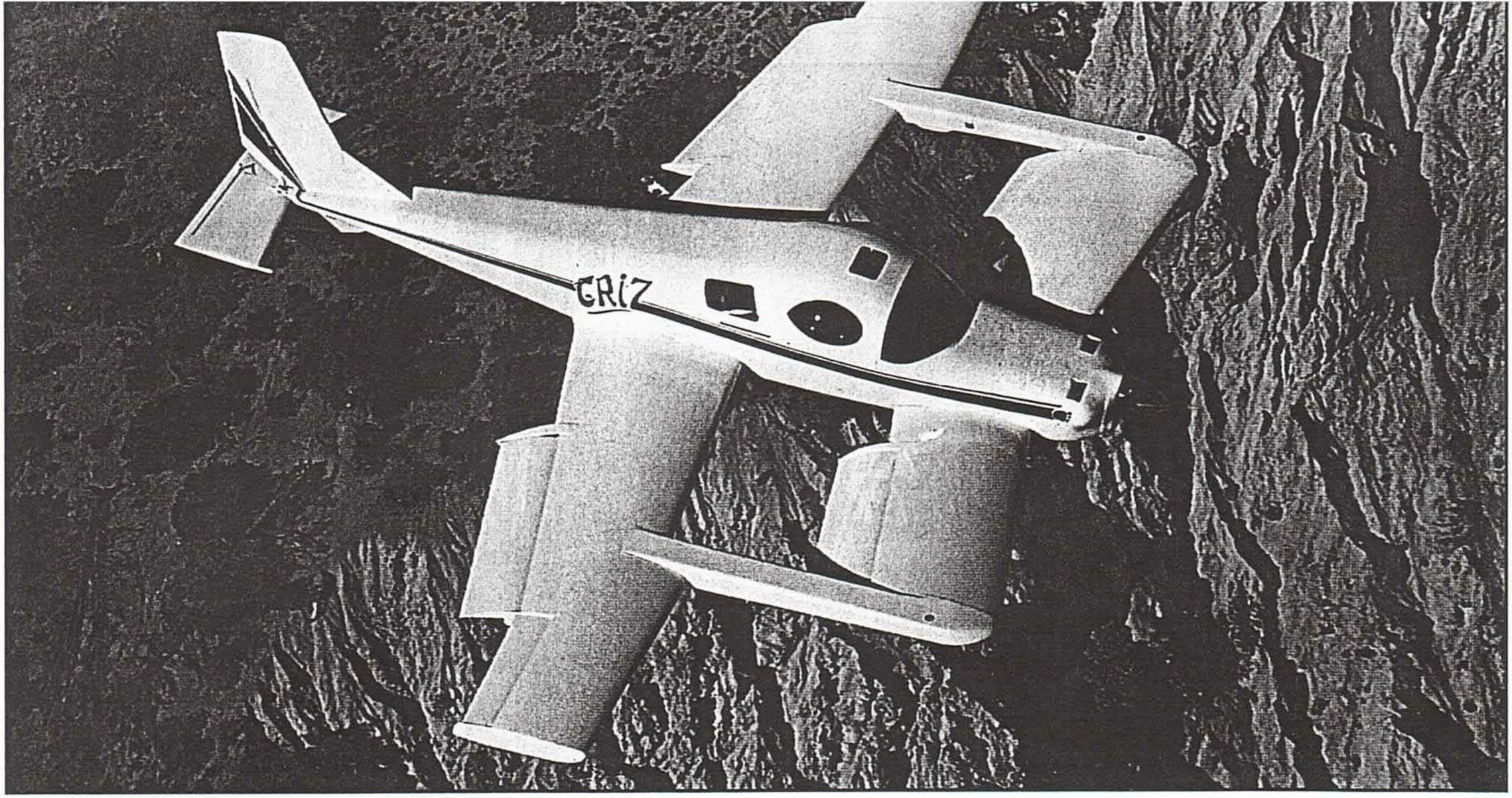
Tailwinds were, of course, a major factor, but the ability to take advantage of them is in part due to the large diameter propeller Klaus has designed and built for the airplane's non-turboed Cont. O-200. It allows him to climb to altitude quickly and continue to pull a lot of power - on this

GOLDA COX

flight, 2,600 rpm at 15 inches of manifold pressure. True airspeed was 190 knots.

Klaus's VariEze is one of the most highly refined airplanes in the world, benefitting from extensive but subtle aerodynamic tweaks, his experimental propellers and, of course, his Light Speed Engineering Plasma capacitive discharge ignition system (check www. lsecorp.com for info) which automatically optimizes the spark timing for rpm, MP and altitude conditions to maximize fuel economy and power.

Klaus and his VariEze, N57LG, currently hold two FAI Class C-1.A world records: 1,000 and 2,000 km speed without payload (203.67 and 200.12 mph, respectively). They have been consistent CAFE and air race winners for years.



Burt Rutan's *Grizzly*, an R&D aircraft used to determine the feasibility of flaps on a canard aircraft.

technological training of any sort, which is the vast majority today.

Burt Rutan was the first to use the experience and reputation he gained in the EAA world as a springboard to the more complex arena of aerospace design, development and manufacturing. Today, the company he heads is involved in some of the most daring, innovative aerospace concepts society is yet privileged to know about . . . and there is much more to come!