



EZ DOES IT



Rutan Long-EZ

BY MARC E. COOK

TO say that Burt Rutan has been influential in matters of aircraft design vastly understates the case. From reexamining the precepts of aeronautical design to blazing a new construction trail, Rutan has shifted the axis of the entire homebuilt universe. ■ His designs, including the VariEze and Long-EZ, have been among the most popular of all homebuilts. Among the myriad ways these designs depart the norm, two are perhaps the most significant: the canard and the method of moldless fiberglass construction. A canard airplane is designed to be unstallable, with the forward lifting surface intended to stall before the main wing does. In this sense, Rutan played on the virtues of safety, but there are other benefits. A conventional tail balances the airplane by opposing the wing's lift; in the canard, all surfaces combine to provide lift. This, together with light weight and the reduced frontal area of tandem seating, makes the Long-EZ quick for the power. ■ And by instigating new construction methods, Rutan forever broke the mold of the typical homebuilt being a tube-and-fabric or familiar aluminum construct. Acceptance of current composite airplanes is in some ways due to the strides made by Rutan and his far-flung band of builders. ■ Rutan, ever the prolific



designer, has concocted other, more unusual steeds in recent years, from a cannon-wielding attack jet to bush models to corporate transports; one, the Beech Starship, even made it into series production. And that's to say nothing of the daring round-the-world *Voyager*. ■ But the world of the homebuilder has been without Rutan's direct influence for more than a decade, since the

Rutan Aircraft Factory ceased selling plans. This, thanks to liability concerns and Rutan's desire to embark upon new projects. Into the void have stepped a number of new and derivative designs, some remaining quite true to the Long-EZ ideal with others landing far afield, in concept and execution. ■ If imitation is indeed the sincerest form of flattery, Rutan ought to be beaming.