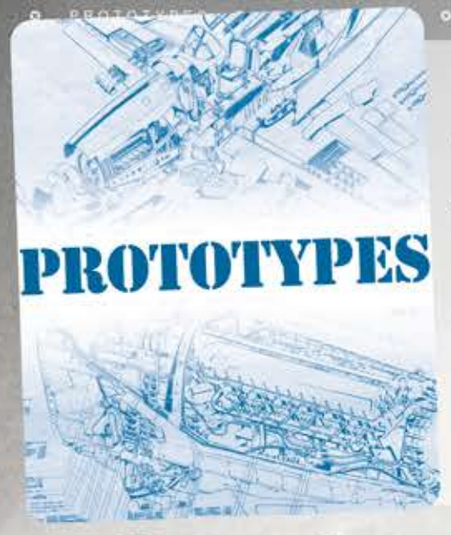
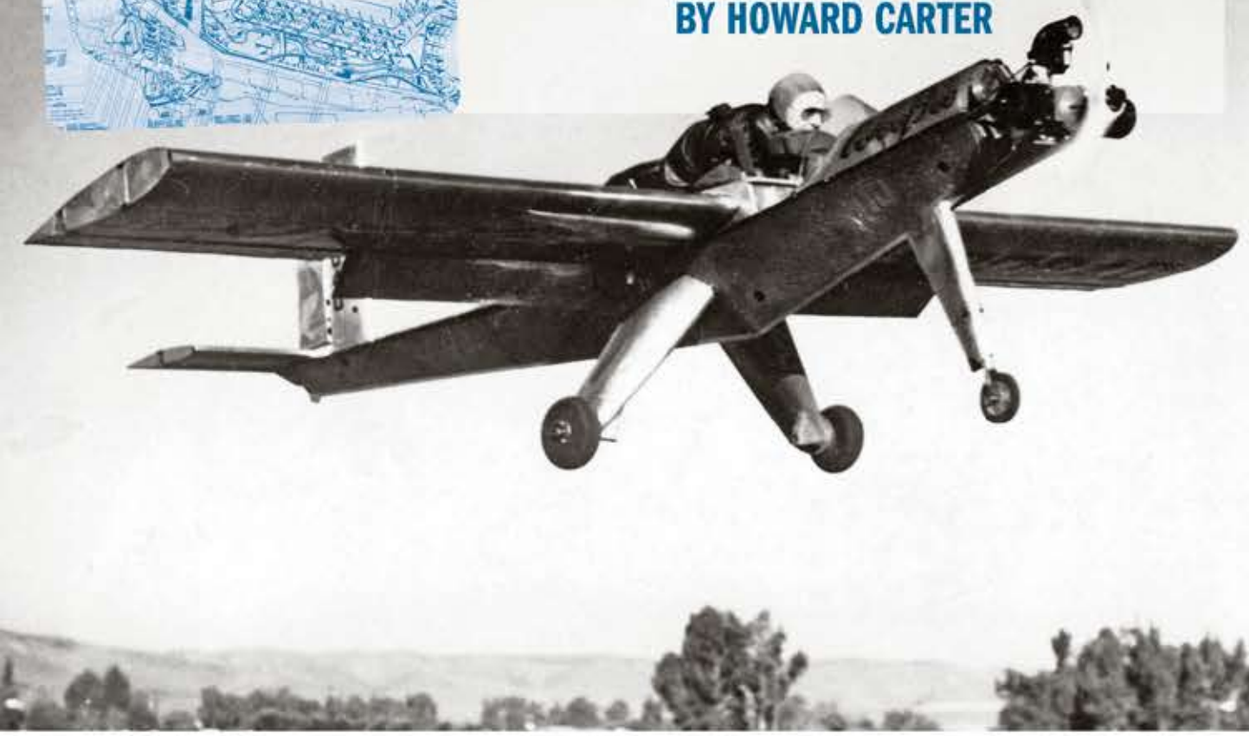


FLIGHT OF THE WEE BEE

CREATING THE WORLD'S SMALLEST AIRCRAFT WAS NOT A PARTICULARLY EASY TASK

BY HOWARD CARTER



The Wee Bee thunders aloft from Gillespie Field on one of its 13 test flights. In this view, the wing has not been extended.

For both military and civilian aviation, the post-WWII era was a time of excitement and development. The end of the war had seen massive cuts in military contracts, but new planes were being designed and built. The military was digesting all the German aeronautical advances and companies were spewing forth a variety of planes that seemed to be breaking records on a weekly basis. Also benefitting from wartime development and the massive surge in air travel, the major aeronautical concerns were constructing new generations of airliners. The general aviation market foresaw a vast increase in aircraft ownership because builders knew that every returning military pilot would want to have his own private plane. Dozens of new lightplane designs (some were just revamps of pre-WWII aircraft) flooded the market but sadly it was not a market that would develop as predicted.

Talented young engineers were putting in long hours at major companies but in their limited spare time they also wanted to keep the aeronautical creativity moving ahead and began designing their own flying machines.

In sunny San Diego, California, a small group of such engineers had an idea. Why not build the world's smallest flying aircraft? Not only would the project be fun but it might also have general aviation applications. At Convair, Ken Coward sketched out an aircraft that would be built with, of all things, extensive use of balsa wood. Yes, the wood that builders of model planes have utilized since the beginning of that hobby (and also what de Havilland incorporated in building the wooden "sandwich" of their famed Mosquito).

Coward wanted a machine that would have an empty weight of just 70 pounds. His enthusiasm for the project soon attracted other Convair employees including Karl Montijo, James Wilder, Tom Bossart, A.B. Mandeville, and Bill Chana — all pooling their considerable talent in search of the miniscule aircraft. It must be remembered that at this time, Convair was building monster aircraft such as the B-36 bomber and XC-99 transport.

The Wee Bee in its original taildragger configuration. By examining the photos in this article, one can see the constant changes that took place with the design.

Coward was the main designer but Bill Chana soon took on the leading role. Fascinated with aircraft from an early age, he became an accomplished model builder and then went to Purdue University to study aeronautics before going to work at Consolidated (to become Convair). He would fly/participate as a flight test engineer on an incredible series of planes including the XB-24, XB-32, XPB4Y-2, XC-99, and TBY-2 along with the XF-93A. XFY-1, XF2Y-1 and the company's series of innovative airlines.

For someone that loved aviation, it could not get much better. With the war, he wanted to become a USAAF pilot but he had received bad burns during the crash of the XB-32 and these injuries would preclude military service.

The small group would gather on many evenings and always on Saturdays.

The pilot looked directly down on the Wee Bee's few instruments.