The Schneiders

CONCLUSION

WE CONCLUDE OUR BOOK-LENGTH HISTORY OF THESE IMPORTANT RACES WITH PART FIVE. THE FINAL RACE WOULD LEAD DIRECTLY TO THE DEVELOPMENT OF ONE OF WORLD WAR TWO'S MOST IMPORTANT AIRCRAFT AND ENGINES

BY PETER M. BOWERS

PHOTOGRAPHS FROM THE WILLIAM T. LARKINS COLLECTION AND THE ALPHA ARCHIVE

When Al Williams failed to get the biplane Kirkham Williams Racer to the 1927 Venice contest, he found new investors to create a company that would build an entirely new aircraft to compete in the 1929 event and it would be a beast with the simple name of the Mercury-Williams Racer. Powered by a geared version of the Navy's Packard X 1A-2775, the project was kept completely secret and through his Navy connections he gained support to use the Naval Aircraft Factory to design and build the wooden racer. Fuselage, wings, and tail were wood but the floats and control surfaces were metal and the wings were fitted with surface radiators of zero drag. The engine was worked on to develop 1500-hp and the plane was rolled out on 24 July 1929. It was shipped to Santee Wharf near the Naval Academy for further testing and viewing by investors of the Mercury Flying Corporation. Attempted flight-testing did not go well and stormy weather kept delaying the program. On 18 August, Williams managed to get the plane a couple feet in the air. The clock was ticking and the Navy was making plans to help rush the aircraft to Britain if testing could be completed. On 25 August, Williams made three unsuccessful attempts to takeoff. Later, Williams told the press that the engine was not developing its rated power and that the Schneider attempt would be abandoned.

1929 BRINGS MORE CHANGES

The rescheduling of the Schneider competitions to two-year intervals was expected to result in some entirely new designs, and it did, but many of the expectations were not fulfilled. The US did not enter officially, but the persistent Lt. Williams prepared a new private entry. Britain, the 1927 winner, was again a serious contender, as was Italy.

France reappeared as a potential Schneider contender for the first time since 1923 and Germany showed interest but did not actually enter. The seriousness of France's effort was reflected by the fact that it followed the British and Italian leads in establishing a special training center for the military pilots that were to fly the new high-performance seaplanes. The government also gave contracts to three airplane manufacturers and to three engine manufacturers for special racing airplanes and the engines to power them. As international rivalry grew, great sums of money for research were raised by the competing powers and an ominous and dangerous factor was introduced.

As the technology advanced and the airplanes acquired higher wing loadings and lower power loadings, they became harder to handle and the chance of fatalities — always associated with the Schneider competitions — became more frequent.

The 1929 race was held at Calshot, on England's south coast, near both Bournemouth and Cowes, sites of the previous British-conducted events, and accidents mushroomed.

1929 RACERS AND PILOTS

Some of the 1929 hopefuls were simply upgraded variants of well-established designs; some were new but followed the prevailing standard, and a few were truly daring innovations.

BERNARD H.V.40: The French Bernard H.V.40, the letters standing for *Haute Vitesse,* or High Speed, was designed by the *Societe Industrielle des Metaux et du Bois,* the Industrial Society for Metal and Wood. This was abbreviated SIMB, but was popularly called Bernard. In 1928, the firm was reorganized as *Societe des Avions Bernard,* but was still the organization that built the record-setting V-2 of 1924.

Bernard constructed two similar racers to the order of the French government but powered by different engines. The H.V.40 was a cross between the 1925 Supermarine S.4 and the 1927 Short Crusader in having a cantilever mid-wing and a radial engine, a Bristol Jupiter built under license in France by Gnome-Rhone. By 1928, this was producing 800-hp. The structure was all wood, and an oddity was the use of wire bracing from the metal floats to the underside of the wing only, to stabilize the float assembly.

The H.V.40 flew during June 1929, but experienced chronic engine problems that could not be overcome in time for the contest. That, and the death of a French pilot in another racer, caused France to withdraw from the 1929 Schneider.

BERNARD H.V.42: The H.V.42 was a sister ship of the H.V.40 except for the engine, a special 1000-hp water-cooled V-12 Hispano-Suiza. The H.V.42 shared the H.V.40's continuing engine problems and contributed to the French decision to withdraw.

DORNIER TANDEM: Germany and the Dornier *Metallbauten,* located in Friedrichschen on Lake Constance, also showed interest in the 1929 Schneider. Although the Dornier airplane was not built, it got to the model stage and deserves mention