



Bob Benjamin's monochrome sketch of the Aeronca Champion captures the spirit of this classic aircraft. See page 100 for ordering instructions.

CAL SMITH'S **AERONCA CHAMPION**

A classic scale design from the mid-50s which disappeared along with the magazine in which it was originally published. Complete building instructions included with plans. Background story by Bill Northrop.

• To the new generations of modelers who came into the hobby over the past 25 years and may not have heard of him, we introduce the late S. Calhoun Smith. Cal Smith was a former designer of control line and R/C models during the post-World War II years, and his work mostly appeared in *Air Trails* magazine. At the time that his R/C Aeronca *Champion* was published, the magazine was using one of its less than model-type aliases, "Young Men". To be exact, it was the July 1956 issue.

In the July 1956 issue of ... er ... "Young Men", just to give you an idea of the status of R/C at the time, there were only ten ads that had anything to do with R/C materials in the whole magazine,

and of the companies represented, only three exist today ... Ace R/C being the most prominent. There were 65 other model advertisers in the 68-page magazine.

As this was an era when rudder-only was the primary control system in use, most designs published featured this meager arrangement. And of course, the model pretty much had to be an inherently stable design that could fly well without any control, as this was the normal condition! It's funny, but old-timer free flight with radio assist, the perfect type of model to use as a start in R/C, was unknown in those days! Certainly, scale R/C was very limited in the choice of subjects, with cabin-type light-

planes such as the *Champ* being almost the only way to go.

Cal Smith mentioned in his article that the *Champ* structural design was based on the famed J-3 *Cub* design by Chuck Hollinger, which had previously appeared in *Air Trails* (or whatever). This *Cub* went on to be a popular kit by Berkeley, and eventually, with improvements, became the early Sig J-3 *Cub*.

Rather extensive building instructions were included with the full-size plans for the "Air-Knocker", and not published with the article. We'll follow the same procedure. The scale is 2" = 1'0", and the only deviations were the span,

Continued on page 95



From the original construction article comes this photo of the *Champion* model. Engine doesn't have to be mounted vertically as shown.

stab outline, and dihedral. Plans are quite accurate, as they were developed from dimensions taken from the real aircraft. The span had been reduced to increase wind penetration (by raising wing loading), an important feature when flying rudder-only. The stab area and dihedral had been increased to improve stability. Dotted lines provide the necessary modifications for scale outlines. Control surface hinge line locations are fairly easy to guesstimate. Other mods to suit modern construction materials and adhesives are up to the individual builder.

If any of our readers would like to see other "lost" designs from the old *Air Trails* publication, or have full-size plans they would like to share with other readers, drop me a line. Famous designs never die, they just fade away for a couple of generations, only to return again, just as new now as they were then . . . ●