

Wing and Stabilizer Incidence Angles for the Scratch-Builders

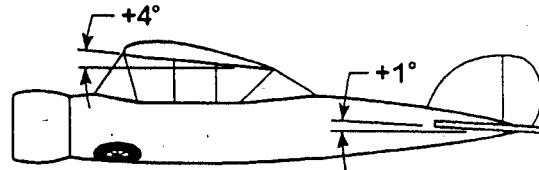
One of the great failings of many early model kits and magazine plans was to show both wing and stabilizer at zero degrees incidence. The likelihood of a model being able to fly if built to plan with both wing and stabilizer set at zero degrees (as shown on most old "Dime Scale" plans) is slim to none. As an assist for builders of Dime Scale models built from these old plans, and for scratch-builders drawing up their own plans, here's some rules of thumb for inci-

dence angles that can be used as a starting point.

In almost all cases, there should be a difference in incidence angle between the wing and stabilizer of about three degrees. The three degrees is relative, depending on the location of the wing with respect to the thrust line of the model. Here are three generic sets of incidence angles, depending on whether the model is a high wing, mid-wing, or low-wing model, that can be used as a starting point.

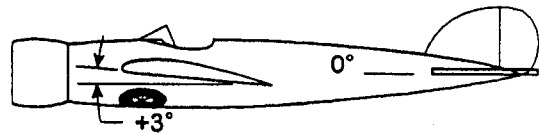
high wing model:

wing: + 4 degrees
stab: + 1 degree
wing inc. - stab inc.: $4 - (+1) = 3$ degrees



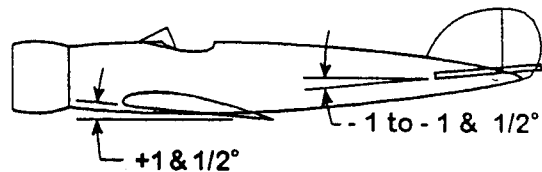
mid wing model:

wing: + 3 degrees
stab: 0 degrees
wing inc. - stab inc.: $3 - 0 = 3$ degrees



low wing model:

wing: + 1.5 degrees
stab: - 1.5 degrees
wing inc. - stab inc.: $1.5 - (-1.5) = 3$ degrees



The above is from the September/October 2005 issue of the Flying Aces Club News, Lin Reichel
Editor

While intended for scratch builders, it is worth paying attention to when building from plans of all types of models, which often show either incorrect or no incidence at all in wings or stab.