

OLDTIMER VS. MODERN HLG DESIGN

abstracted by Mike Nassise

Even with a basic model such as a "chuck" glider there have been many design developments over the years. In the drawing below, a typical HLG glider design from the pre-war period (WWII) has been superimposed over a modern contest design. The differences between the two are immediately apparent. The modern design has straight, lower aspect ratio wings (less span and greater chord for the same area), a longer horizontal stab moment arm, a polyhedral wing and a "stick" type fuselage, as opposed to the "pod and boom" form of the earlier design. All these changes have come as the result of practical experience. The older design would still be a good model. The modern design, however, should have a higher overall average performance.

HLG launching technique demands a spiral climb from the model after it has been thrown, or a substantially straight-up climb with the model rolling out at the top into a natural glide without losing any height by looping or stalling. Provided certain basic requirements are met by the model, practice and adjustment alone can produce the desired type of launch with almost any design layout, but some will be found much more controllable, and therefore more consistent, than others. As a rule, modern glider designs are more likely to do the job better than Vintage

Via an article in the 1953 AeroModelier Annual by Ron Warring

