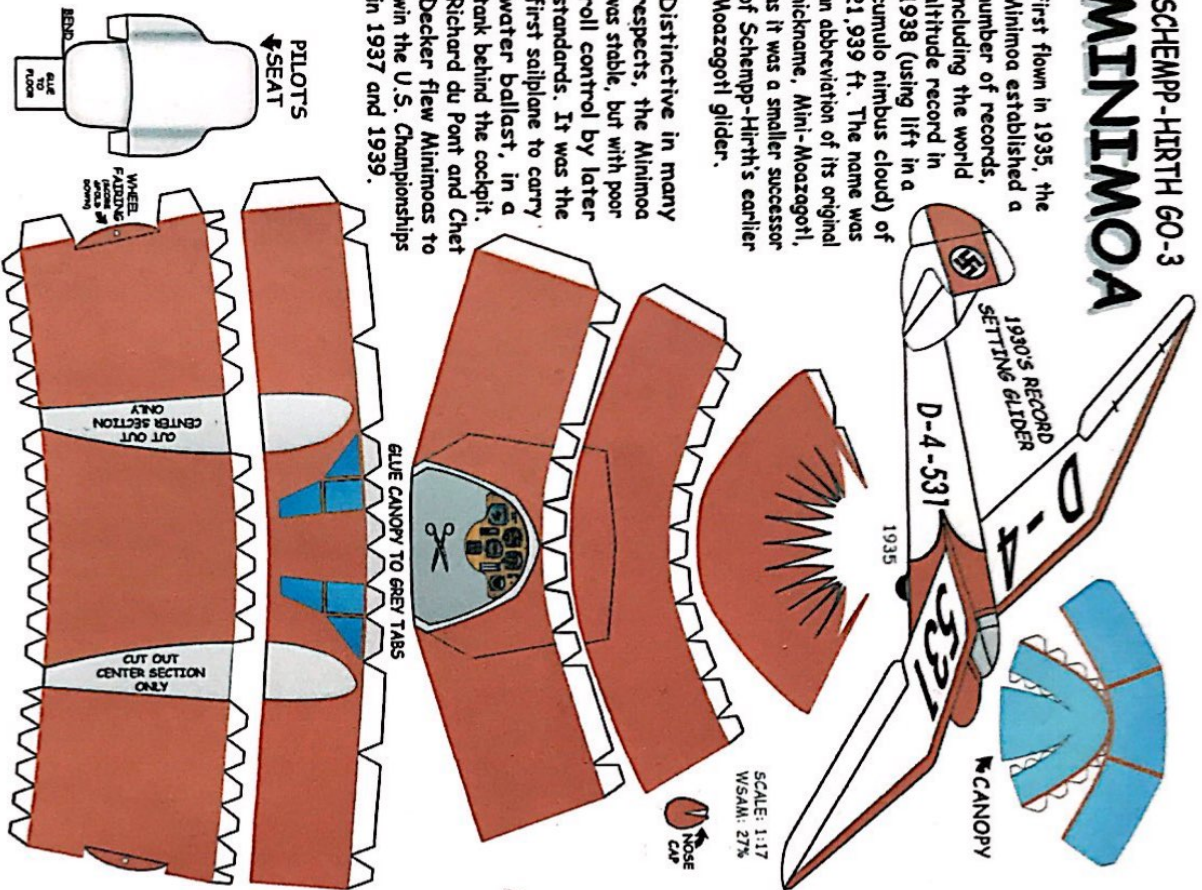


SCHEMP-HIRTH 60-3 MINIMOA

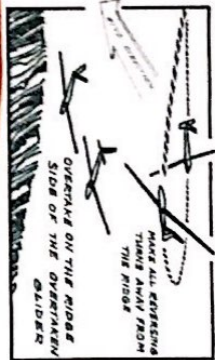
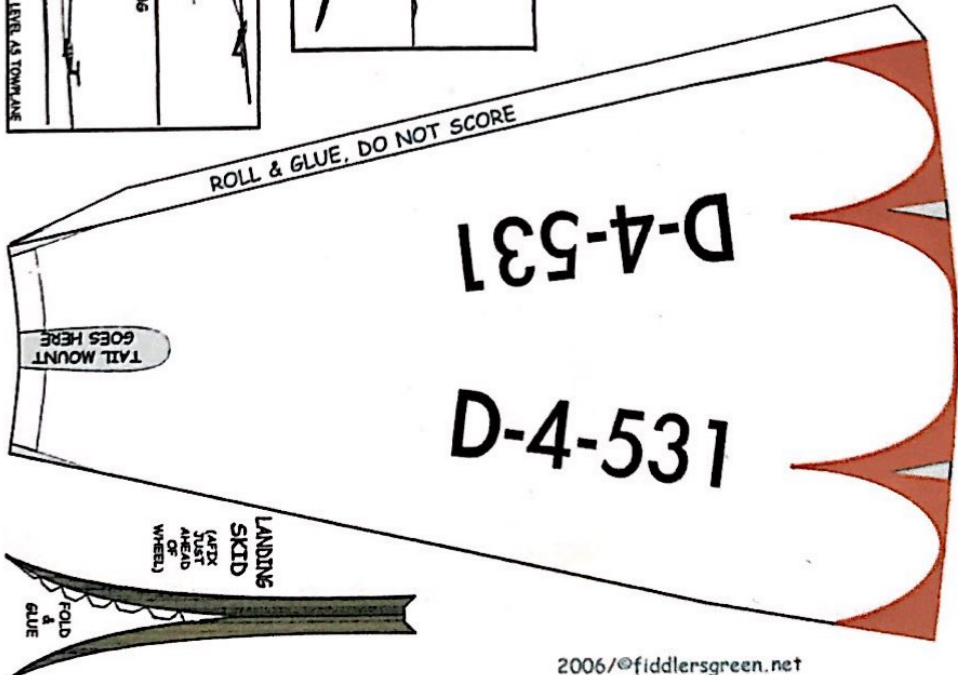
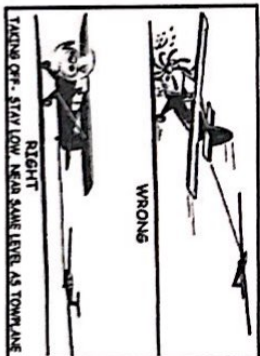
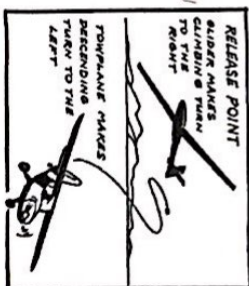
First flown in 1935, the Minimoa established a number of records, including the world altitude record in 1938 (using lift in a cumulo nimbus cloud) of 21,939 ft. The name was an abbreviation of its original nickname, Mini-Moazogotl, as it was a smaller successor of Schempp-Hirth's earlier Moazogotl glider.

Distinctive in many respects, the Minimoa was stable, but with poor roll control by later standards. It was the first sailplane to carry a water ballast, in a tank behind the cockpit. Richard du Pont and Chet Decker flew Minimoas to win the U.S. Championships in 1937 and 1939.

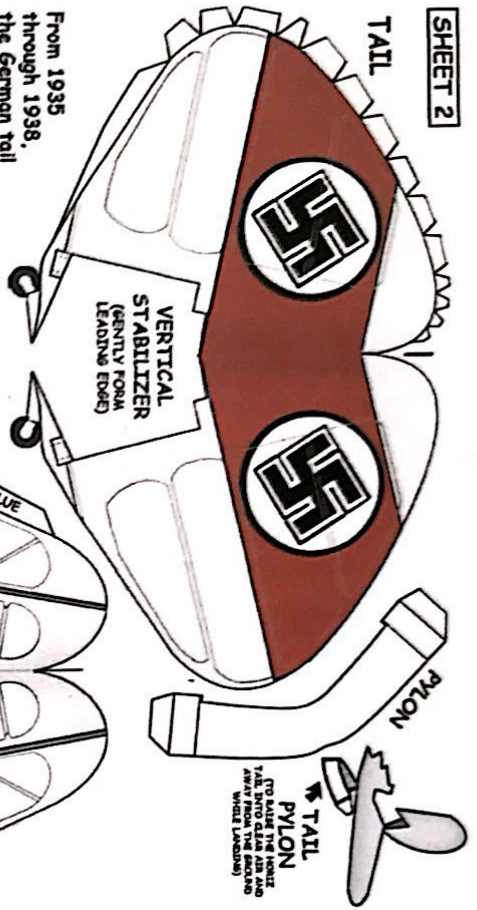


WHAT IS SLOPE SOARING?
Slope or hillside soaring is where the airplane, model or full-size, is kept airborne by lift generated when the wind is blowing on to the face of a hill or cliff. The air, unable to go through the hill, is deflected upwards and over it. The lift generated is dependent on the size and shape of the hill, the terrain in front of it and of course, the strength of the wind. If the wind is too light it does not produce very strong lift but likewise, if the wind is too strong the lift gets 'flattened' making it difficult to fly lower performance sailplanes

THE TOW...



TAIL



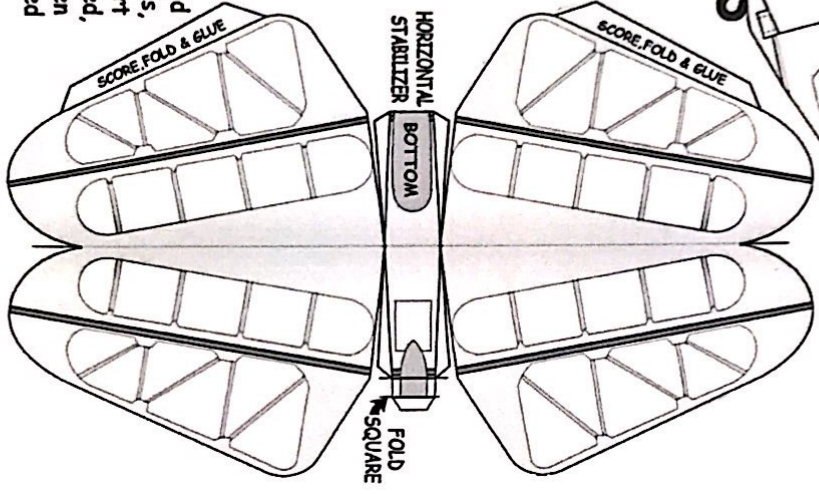
From 1935 through 1938, the German tail marking for all airplanes was a wide red band that covered the full width of the fin and rudder. A white circle containing a black swastika standing on its corner was centered on the red band.

Before the war started, the red band and white circle were deleted from German Military airplanes only. Some military prototypes were subsequently tested with civil markings, but camouflaged planes retained the band and circle.

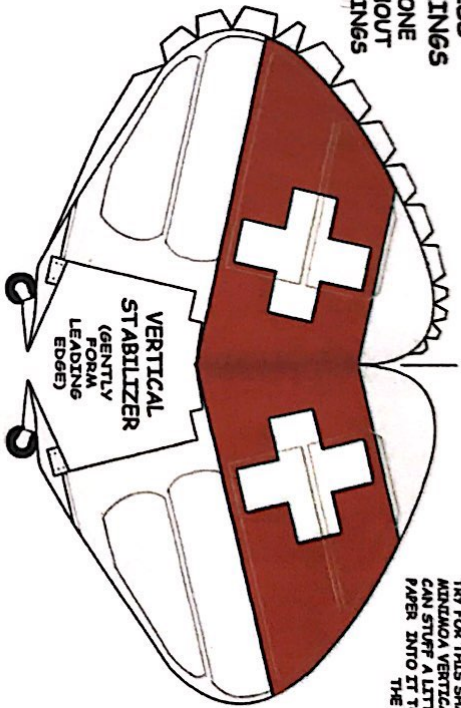
GERMAN AIRCRAFT MARKINGS



The swastika was laid out to very rigid specifications, and on dark backgrounds, it had a narrow white border. For a short time after the red band had been removed, the swastika remained centered between the fin and the rudder. It was soon moved to the fin on most planes

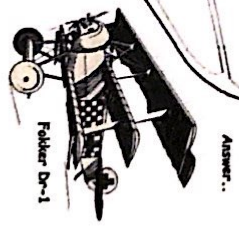
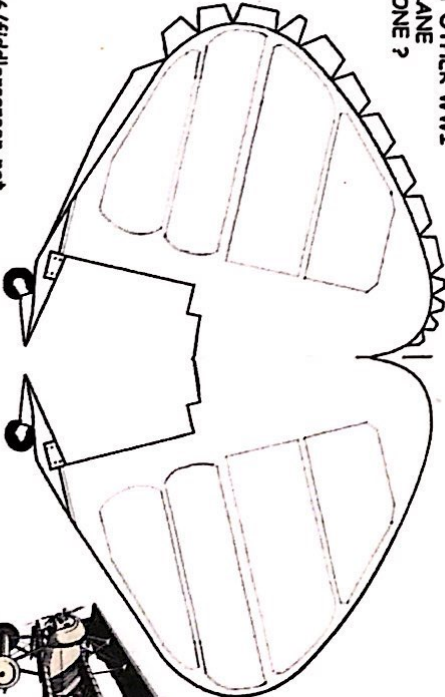


SWISS MARKINGS AND ONE WITHOUT MARKINGS

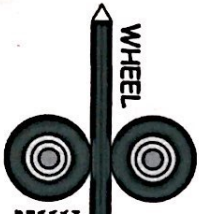
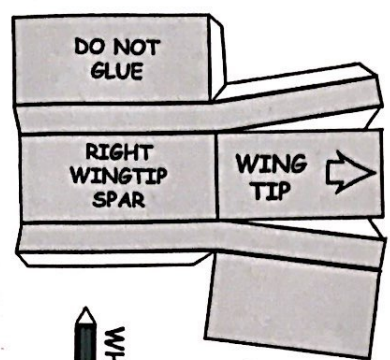


TRY FOR THIS SHAPE FOR THE MINIMUM VERTICAL TAIL. YOU CAN STUFF A LITTLE TISSUE PAPER INTO IT TO HELP KEEP THE SHAPE

NOTICE THAT THERE IS NO NORMAL RUDDER AS WE KNOW IT AND THAT THE ENTIRE VERTICAL STABILIZER TURNS TO GUIDE THE MINIMUM AROUND ITS VERTICAL AXIS. THERE'S AN AREA AHEAD OF THE HINGE LINE WHICH HELPS TO KEEP CONTROL PRESSURES DOWN. OTHER FAMOUS AIRCRAFT HAD A VERTICAL STABILIZERS LIKE THIS - ONE WAS THE AVRO 504 WWI TRAINER. WHAT OTHER WWI AIRPLANE HAD ONE ?

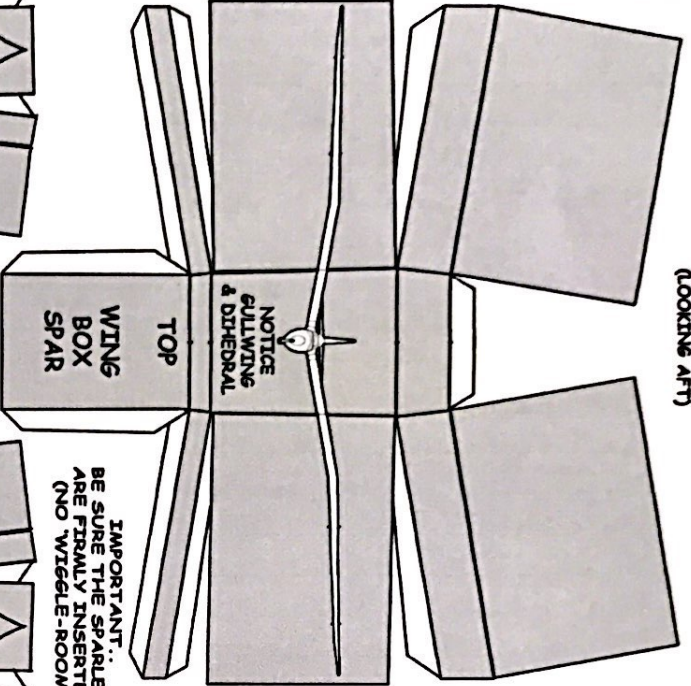


THE MINIMOIA WING WAS A GREAT EXAMPLE OF GERMAN AIRCRAFT ENGINEERING



NOTE: YOUR HOBY SHOP WILL HAVE EXACTLY THE SAME WHEELS BUT THE RIMS ON THIS ARE LONGER SO MUCH BETTER THAN THE OTHER

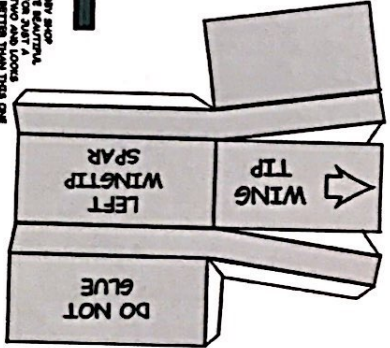
WING TO WINGTIP SPARS (USE TO REINFORCE MAIN WING TO WINGTIP JOINTS)



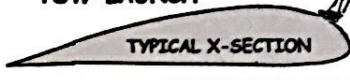
IMPORTANT: BE SURE THE SPARLETS ARE FIRMLY INSERTED (NO WIGGLE-ROOM)



THE GULL WING CONFIGURATION REQUIRED ADDITIONAL SUPPORT NEEDED FOR BOTH FLYING AND LANDING



STRAIGHT TOW-LAUNCH

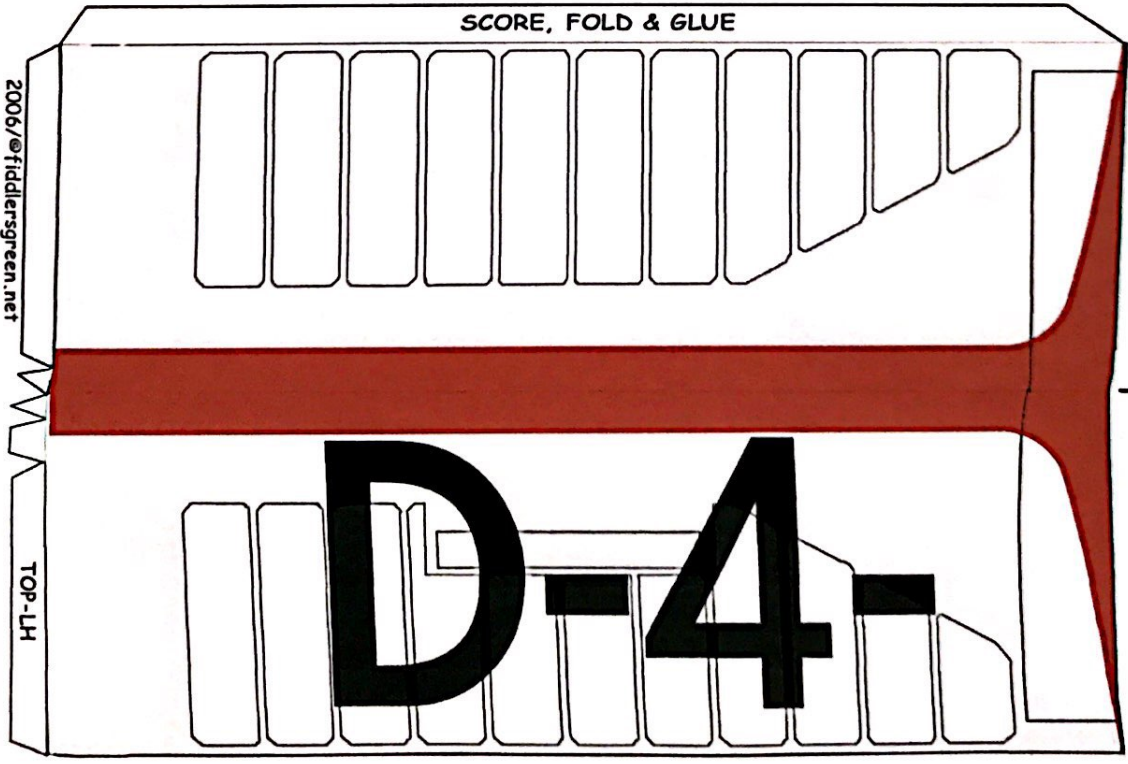


THE PURIST FORM OF LAUNCHING 350 FEET APART

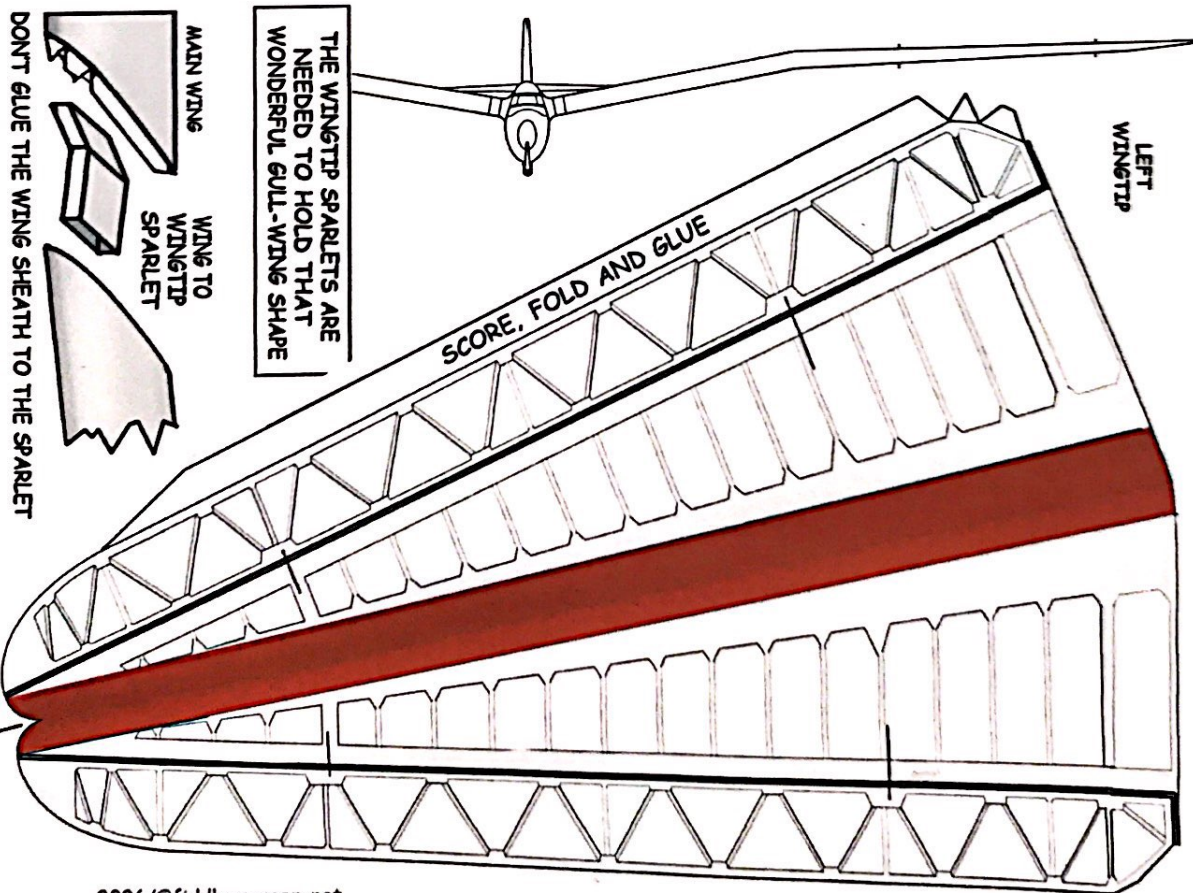
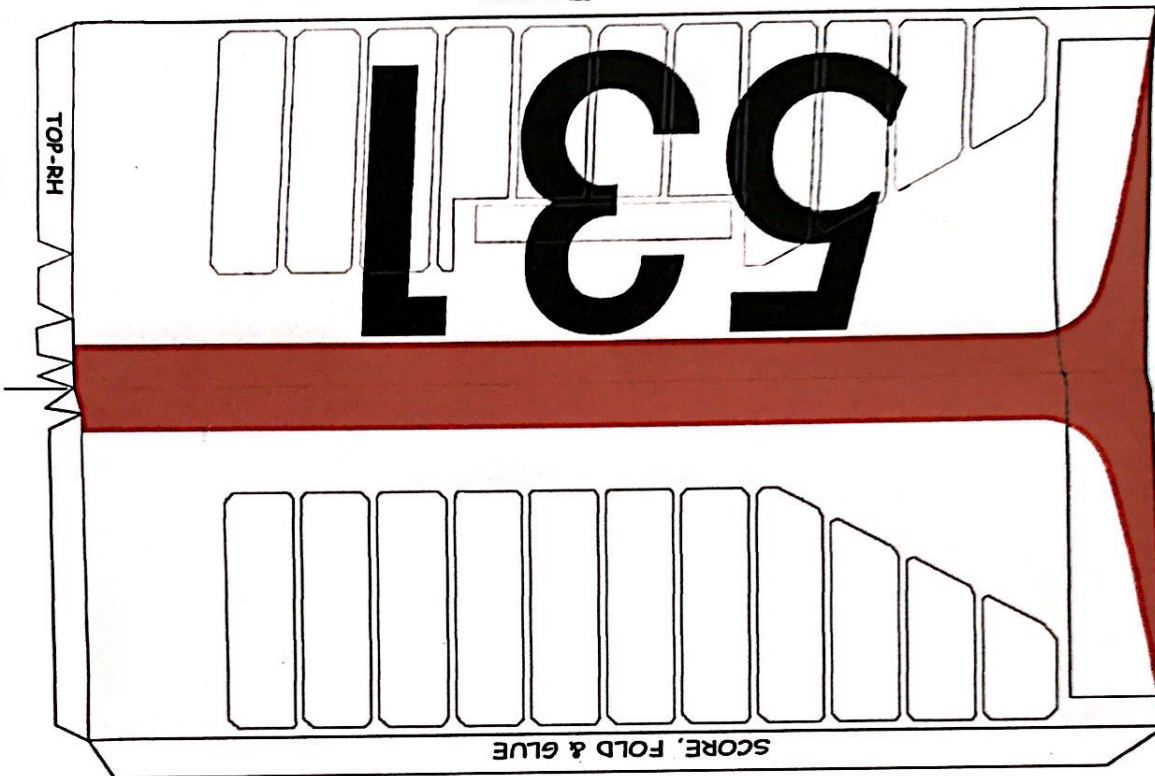
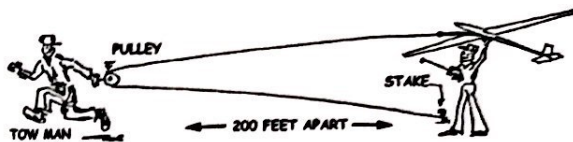


LEFT WING

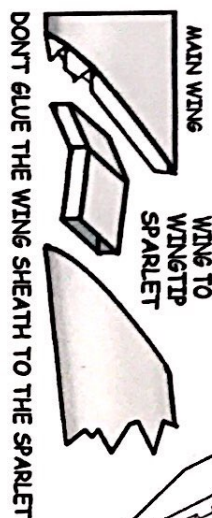
SCORE, FOLD & GLUE



A PULLEY TOW LAUNCH REDUCES THE AMOUNT OF LINE BUT DOUBLES THE LINE SPEED AS WELL AS THE LAUNCH SPEED



THE WINGTIP SPARLETS ARE NEEDED TO HOLD THAT WONDERFUL GULL-WING SHAPE



SHEET 5

The Designer of the Minimoa, Wolf Hirth, patterned the wings after those of a seagull.

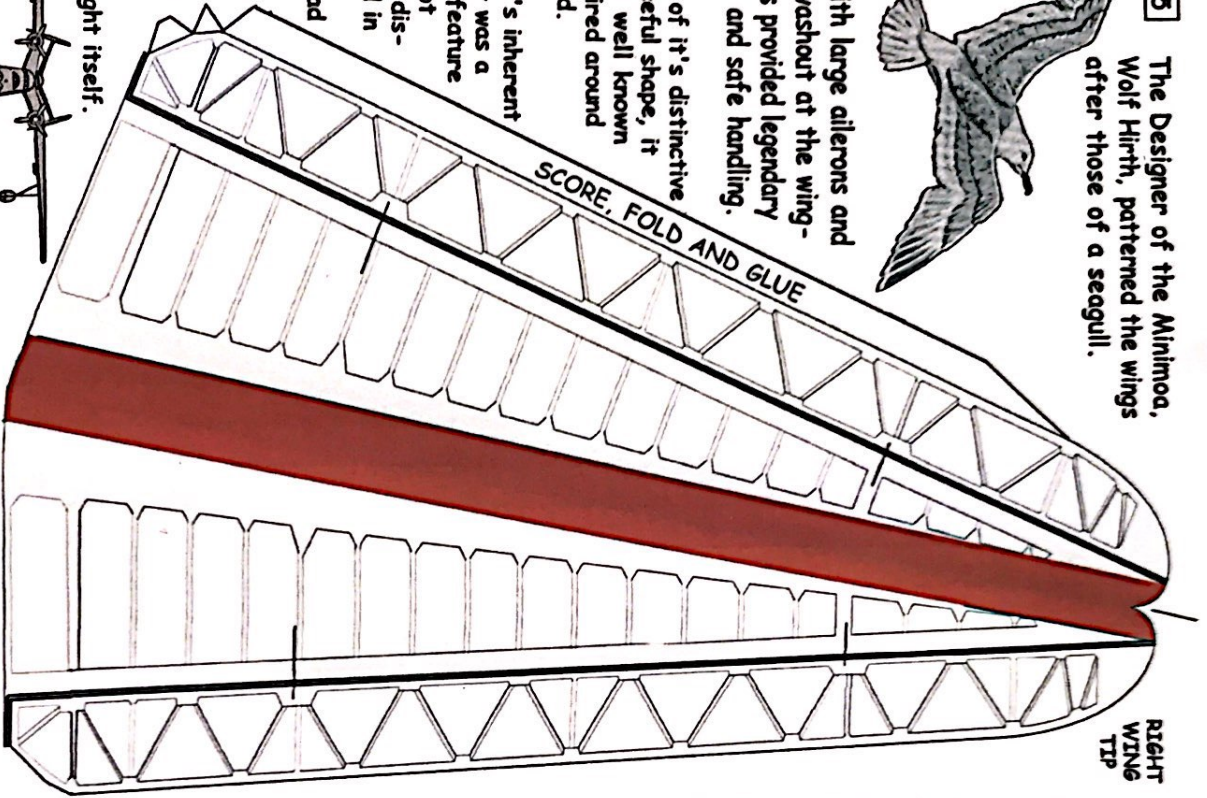


Along with large ailerons and strong washout at the wing-tips, this provided legendary stability and safe handling.

Because of its distinctive and graceful shape, it became well known and admired around the world.

Minimoa's inherent stability was a popular feature. If a pilot became dis-oriented in a cloud, all he had to do was release the controls and the Minimoa would right itself.

GULL WINGED SEAPLANE



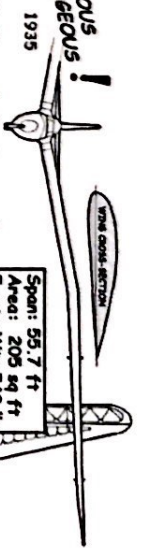
RIGHT WING TIP

SCHEPP HIRTH d.1.1 MINIMOA SAILPLANE

gorgeous!
gorgeous!
1935

Production on the Minimoa began in 1936. It was built strong and stable and had a good performance. Its glide ratio was measured at 25.7:1 in 1938. Because of its distinctive and graceful shape, the Minimoa became very well known and admired around the world. Its inherent stability was an especially popular feature. About 110 Minimoas were built by the time production was stopped in 1939.

The Minimoa has striking general features, a swept back wing tip with pronounced gull dihedral, large ailerons and strong washout, mounted mid-high on the fuselage. When seated, the pilot's head is inside the wing, so outward vision was less than wonderful until a small window was added in the roof. Launchings were with a dolly while landings are on a skid.



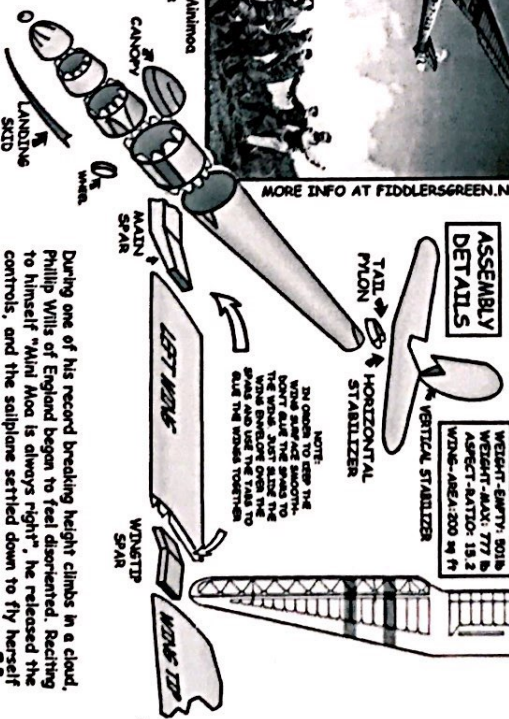
MORE INFO AT FIDDLERSGREEN.NET

Bungee launch of the Minimoa from the Wasserkuppe



Minimoa wingtip showing recessed slotted ailerons ©2006/fiddlersgreen.net

THANKS TO ANCHO FOR HIS HELP



During one of his record breaking height climbs in a cloud, Phillip Willis of England began to feel disoriented. Reaching to himself "Mini Moa is always right", he released the controls, and the sailplane settled down to fly herself perfectly!!



This is a photo of the Fiddlersgreen version of the Minimoa. The red band around the sweetika was used on civilian aircraft in the 1930s and 40s.