**AIRTRONICS**
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# FLYING R/C SAILPLANES

R/C Sailplanes are generally easy to fly, and provide a good way for the novice flier to gain confidence in his ability. The experienced flier will discover the unending challenge and new skills gained by flying on silent wings. If you are new to this hobby there are several excellent books available at most hobby dealers which explain the basics of flight and introduce the beginning enthusiast to flying R/C models, and we suggest you study one of these. The magazines which are such a vital part of our hobby also regularly publish articles which will be very helpful in gaining more information. We hope that these notes will help you to share the pleasure we have enjoyed in developing and flying these designs.

## SLOPE SOARING

In this type of flying the model is launched from the crest of a hill or slope directly into the wind, and is supported by lift generated by the upward flow of air against the face of the slope. The amount of lift generated is dependent on the angle of the slope and velocity of the air blowing on it. The hill need not be large or particularly steep to generate sufficient lift to support a light model. We realize that some areas are perfectly flat and that slope soaring is impossible, but feel that in many places potential sites are overlooked. The face of a dam or rolling countryside with rounded hills will provide excellent slope lift if the wind direction is suitable.

A wind velocity of 2-15 mph will be most enjoyable for most slope flying with our designs. Higher winds require more skill since the lift is quite strong and the air becomes excessively turbulent, making the model difficult to handle. For these conditions a different type of model is more suitable for most fliers. We have flown the Olympic and Esprit series in winds up to 30 mph successfully but have not found it relaxing – and do not recommend these conditions to the inexperienced flier.

These models are excellent for marginal slope conditions and will stay airborne when others fall out of the sky. We particularly enjoy flying in the early morning or late evening when the air is smooth. It is a real challenge to fly the model a few feet from the ground, picking up the whispers of lift from a dying breeze as the sun sets.

For the first flights the model should be balanced on the point of the large arrow shown on the plans. Make certain that the control surfaces are at neutral and that the wing is properly aligned. Toss the model directly into the wind in a nose down attitude with the wings level. **Don't point the nose up!** If the lift is strong the model will rise rapidly and you should be prepared to apply down elevator to gain penetration. Use transmitter trims if necessary to achieve straight and level flight. Turn model into the wind and fly along the face of the slope. Turn again into the wind and fly back in the opposite direction. The normal flight pattern is a Figure Eight with both turns into the wind.

Watch the model closely and adjust transmitter trim if necessary to prevent excessive climbing. If the model continues to climb with full down trim we suggest that you land and add ballast to the nose. If the model turns to one side constantly then land and check alignment of the tail surfaces. Be sure that there are no warps in any surface.