

craft with the wing roots modified showed a major improvement in the low-speed performance and we knew that at last we had a base on which to build our new generation of sailplanes.

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It is now accepted that the rumors which surrounded the low-speed performance of the Dart were largely unfounded, but their effect had been to advance the development of the series almost two years.

Design work was already in hand for a 17-metre (55.8 ft.) version of the Dart for Open Class flying and we also produced a version with removable tips for flying at either 15-metre or 17-metre span. The first three of these aircraft were completed in time for the World Championships at South Cerney, two for the British Team and one for the OSTIV Design Competition. In the Open and Standard Class the sailplane placed seventh and fifth respectively, sufficiently high to prove that the aircraft was fully cured. Our entry for the OSTIV Prize was placed first and we had achieved our goal after two and a half years of endeavour.

Also at South Cerney was the 15/17-metre convertible-span Dart supplied to John Brittingham of Colorado Springs. This idea has not been fully accepted, probably due to the fact that the value of the 15-metre aircraft in strong conditions is not realized. This glider has a payload of 340 pounds and when bolstered to this weight the wing loading is 6.22 lbs./sq.ft. compared with 5.22 lbs./sq.ft. on the 17-metre version.

Dart orders are now flowing in. Over 80% are for the 17-metre version. There is no doubt that the 1966 soaring pilot wants the best and is not willing to accept the limitations of the 15-metre aircraft.

In the autumn of 1965 we produced the next development in the series with the introduction of retractable gear. The wheel on the Dart is large and is fitted with an internal expanding brake. Nevertheless we decided to extend the wheel a further six inches in the down position. The advantages of this were two fold: it gave the aircraft excellent ground clearance and rough-landing capability and permitted a reduction in the wing incidence of five degrees whilst retaining satisfactory take-off performance.

This reduction in incidence improved the flight angle in high-speed flight and produced a measured performance increase of six percent at 80 mph. Subsequent flight testing showed that the take-off characteristics were satisfactory with the fixed wheel version at the reduced wing incidence and it is now incorporated in this version.

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The story of the Dart is typical of the development of any high-performance sailplane. Although the aircraft we now offer represents the present ultimate in production high-performance sailplanes and sets new standards in handling qualities, ease of rigging and maintenance, this has only been achieved by long and painstaking development. There are no short cuts in the search for perfection.

Through the coming years we shall continue to develop the Dart in a similar manner to the Skylark series until a stage is reached where further evolution is no longer possible. Then, sometime in the 1970's, we shall start the process once more with the birth of yet another series.

