



J. A. Simpson, President of the Soaring Association of Canada, in the "Robin" before a take-off

THE ROBIN

By W. Czerwinski

A New Utility Designed by Mr. Czerwinski and built by
Canadian Wooden Aircraft, Ltd., Toronto, Ont.

THE DESIGN of the "Robin" was planned in such a way as to enable the simplest replacement of some of its component parts in case of damage. It is very well known to the management of all training schools and bigger clubs how important the problem of quick repair to damaged gliders is during short periods of training, as favorable flying weather is limited. Therefore, this type of glider should be designed in such a way that the damaged part can easily be replaced by a new one which may be taken from stock or obtained from the manufacturer. In our case the "Robin" glider was designed so that even with severe damage to some of its parts it can be quickly repaired. The most often damaged part is the front part of the fuselage; therefore, the fuselage of the "Robin" is composed of four separate parts, namely; pilot's cockpit, upper and lower booms of rear part of the fuselage and fin. This type of structure possesses the following advantages:

1. It consists of parts which can be bought separately from the manufacturer.
2. The pilot's cockpit has the smallest possible dimension—retaining complete comfort—for the

purpose of reducing to a minimum the quantity of plywood required for its manufacture, because plywood is one of the most expensive wooden aircraft materials in this country. The cockpit was designed in such a way to reduce manufacturing time to a minimum.

3. The structural system, cockpit, two booms and fin joined with bolts and stiffened by wiring, produce a very elastic frame hardly damageable during hard abuse in training.
4. The whole glider is very thoroughly shock mounted against landing loads. On the fuselage this is achieved by means of a wheel and tire, and a skid mounted on an inflated rubber tube; while on the tail an elastic steel skid is mounted under the fin in this way assuring long life to the glider.

By suitable collaboration between the firm producing the "Robin" and the customer an extremely economical exploitation of the "Robin" could be achieved. The firm could have in stock all parts which are damageable and could supply them at a moment's notice, shortening in this way the idle periods in training to a minimum. On the other hand these parts if produced in quantity