left side of both the front and rear instrument panels for tow hook operation. Both seats are hinged so that inspection of the control systems may be easily checked and inspected.

The construction of the BG 8 is of wood. The wings are of the mono spar type with built up and plywood ribs. Wing covering is of 3/32 to 1/16 poplar plywood. The fuselage is semi monocoque with three spruce longerons and 1/8 to 3/32 plywood skin. The elevators and rudder are provided with controllable trim tabs accessable from either cockpit. These trim tabs were found to be quite adequate through all speed ranges.

The BG 8 was designed originally for home builders. However, it is not as simple a ship to build as its predecessors the BG 6 or BG 7. But clubs and schools having a glider or aircraft construction background will find little trouble with this larger ship.

For the final flight tests, permission was obtained to use the Army Air Forces glider training center at 29 Palms, California. An auxiliary field, "mile square dry lake" was used and some 113 flights were made. These ranged from 10 minutes to two hours. The majority being by auto tow. It was discovered that from 10 in the morning until 3 in the afternoon, thermal conditions were such that sufficient altitude for spins could be obtained much more rapidly by auto tow than by aero tow. Flights to over 10,000 feet were made from auto tows of less than 1,000 feet. On several occasions these flights were made and the complete spin tests run within 45 minutes, from time of takeoff to time of landing. All stability tests were run very early in the morning or late in the evening in accordance with C. A. A. practice.

Frequently the sailplane was slope soared on very gentle winds not exceeding 12 m. p. h. This is considered unusual for a glider with a wing loading of nearly 4½ lbs./sq. ft. Several tests were run to check the sinking velocity and glide angle. The best gliding angle was at 48 to 50 m. p. h. and appeared to be over 23 to 1. On two separate occasions, the glider angle was over 25 to 1 and this leads to the conclusion that our calibrations were not entirely precise. The best sinking velocity was obtained at 42 m. p. h. and was 3 ft./sec.

The BG 8 is quite responsive to the controls and with its wide speed range makes it an ideal ship for training and high performance soaring. Mr. Roy Caldwell of the C. A. A. completed the flight tests on the 2nd of October, and shortly thereafter the C. A. A. notified us that all tests were satisfactory and the type certificate would be granted. The sailplane was then shipped to Wright Field and demonstrated for the Army Air Forces for acceptance. Due to the change in the glider training program no additional models were built and the BG 8 plans have since been released for public sale.

One of the greatest thrills the author encountered during the entire flight testing was the final demonstration flight at the materiel center at Wright Field which took place between thunder showers. Towing up to 6,000 feet behind a Stinson 1-A at speeds ranging from 45 to 105 m. p. h., the tow plane at times was obscured by huge cumulus clouds. With huge mountains of white on either side of us, we towed down the broad valleys at the bottom of which could be seen the thread-like streets of Dayton, Ohio. Upon releasing from the tow over the eastern end of Wright Field, a series of control free spins, wingovers, and inadvertant stalls were demonstrated. It is interesting to note that this ship gives a decided stall warning at 42 m. p. h. through buffeting in the empenage. After cruising around over Wright Field the standard approach was made and a spot landing accomplished under the eyes of the Army personnel.

(Continued on Back Cover)