



# THE J-10

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**T**HE J-10 HAS been flying regularly for more than two years since its first flight in September 1981. Soon after a few test flights, the plane was flown to Bloom Airport, a 1400 foot strip in Jamestown, OH, where it has been based ever since. The climbout has always been excellent and 200 pound passengers have been flown from the field with plenty of altitude over the end of the runway. Performance was by design.

The airplane's empty weight is 760 pounds with a design gross weight of 1600 pounds. Fully equipped, the empty weight would be about 800 pounds with a useful load of 800 pounds. The plane has room for two small jump seats in the rear and the weight and balance will permit 340 pounds there. A larger airport should be used if more than two persons were to fly, so the aircraft has been used only as a two-place airplane.

The J-10 is constructed entirely of metal with some fiberglass and is powered by a Lycoming 150 hp engine. It is 18 feet long with 22 feet of wing span and uses a GA(W)-2 airfoil. When first constructed, there were ideas of speeds between 150 and 200

miles per hour. As the fuel crisis developed and the propeller was being ordered from Ray Hegy, we dropped our speeds to an operational speed range between 100 and 150 mph, but it has flown at 160 mph. Some of the good performance besides speed are climb rate which has reached 2000 feet per minute, and there is no problem going in and out of small fields. For economy flying, the engine consumes only four gallons per hour at 90 knots and five gallons per hour at 110 knots. Instead of flaps, the aircraft

uses strakes on the cowling, which slow it five mph, whereas full flaps on the Grumman two place airplane slow the aircraft only two mph. The J-10 touches down at 52 knots.

The aircraft was designed for the regular six Gs, not for aerobatics, which accounts for its light weight, but the controls are very responsive, so there is no difficulty flying in high or gusty winds.

Only one stick exists in the airplane - between the two pilots - which has caused no problems for those flying from either side.

The configuration of the airplane seemed a most practical one and when first designed, it seemed that it could be completed in six months. As it turned out, nearly a year and a half were required. Making the entire cowling, battery box, controls, gas tanks, specially designed wing fittings which allow for quick wing removal for towing and the like, plus powerplant and instrument installations required more time than was anticipated.

It is a fun plane with good performance . . . and every few days, it is a delight to see the excellent over-the-nose visibility while taxiing and to feel the acceleration when you open the throttle and point it skyward.

**ABOUT THE AUTHOR** - Lewis Jackson (EAA 3190) is a retired college and university administrator who began flying in 1930. He holds a Commercial pilot's license with Instructor and Instrument ratings, plus an A&P and Ground School ratings. His Ph. D. dissertation at Ohio State was entitled "A Study of Aviation Courses and Facilities in Higher Education in the United States with Predictions and Future Trends." Dr. Jackson is president of EAA Chapter 382 in Springfield, OH.

