5. PERFORMANCE

1. Stall Speeds- Power Idle.
   Flaps Up- No changes to 3650 lbs.

WEIGHT	Knots, CAS	Knots, IAS
3650	65.5	62.5
3700	66	63
3833	67.5	64.5

   Flaps Down – No change up to 3650 lbs., maximum landing weight.

2. Takeoff at all heights to 50 Ft. – At weights of 3,650 pounds and lower, use the POH information. For takeoff weights above 3650 pounds, increase takeoff distance 5% for every 100 pounds above 3650 pounds.

3. Climb – Flaps up configuration

   At weights of 3,650 pounds and lower, use the POH information.

   At weights above 3650 lbs, reduce 3650 lbs published rate of climb at 3780 lbs as follows:

   Sea Level 100 Ft/Min
   10,000 Ft 150 Ft/Min
   Linear Variation between Sea Level and 10,000Ft

   The balked landing climb remains unchanged since the maximum landing weight is 3650 lbs.

4. Range and Endurance - The addition of the Osborne wing tip tanks allows for additional fuel which increases range and endurance when filled in conjunction with the main tanks. The range and endurance for fuel loads with the tip tanks empty will be less than published in the POH.

6. WEIGHT AND BALANCE

The net weight change for the installation is 27.3 lbs., the C.G. of fuel in the tip tanks is 89.5 inches aft of the datum.

USABLE FUEL (Arm 89.5 in., symmetric distribution)		
Gallons	Weight (LB)	Moment /100 (lb-in)
5	30	26.85
10	60	53.7
15	90	80.55
20	120	107.4
25	150	134.25
30	180	161.1
25	210	187.95
40	240	214.8

C. G. Range

CENTER OF GRAVITIY LIMITS
(Landing Gear Extended)

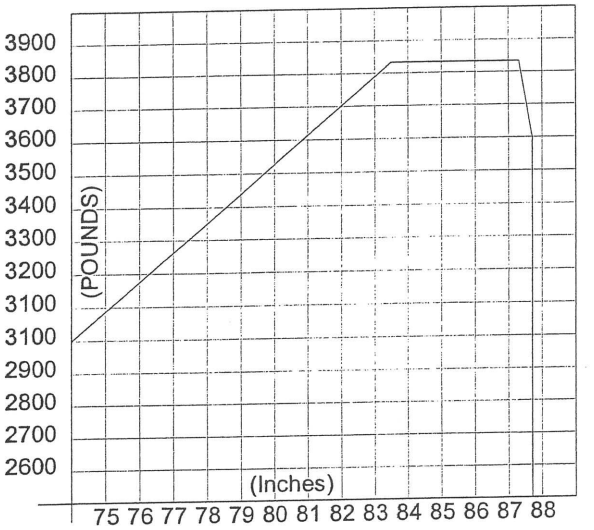
FORWARD LIMITS
74.0 inches aft of datum to 3100 lbs. with straight line variation to 83.3 inches at 3833lbs.

AFT LIMITS
87.7 inches aft of datum of 3650 lbs., to 87.3 inches at 3833lbs.

Straight-line variation between points.

C.G. of tip tank fuel is 89.5 inches Aft of datum.

6. WEIGHT AND BALANCE Cont.



7. SYSTEM DESCRIPTION

FUEL SYSTEM

TIP TANKS

The tip tanks have a net usable capacity of 20 gallons each (40 gallons total), and are designed to transfer tip tank fuel to the corresponding main tank via a transfer pump system. Each transfer pump is controlled by a separate instrument panel mounted switch. (Transfer pumps are powered by Bus 1)

When the pump is turned on, fuel will flow from the tip tank to the main tank until the switch is turned off. A pressure/flow switch in the supply line will also turn off the pump if the flow is interrupted or the tip tank is empty.

The quantity of the fuel in each tank is indicated by either a single fuel quantity gauge (a selector switch will display quantity of the selected tank) or a dual quantity indicator gauge. Quantity is measured by a float sender in each tank.