

AIR TRACTOR, INC.

Olney, Texas

SECTION 4 - PERFORMANCE

GENERAL:

Take-off and climb performance has been demonstrated at 7,000 pounds (3175 kg.) gross weight from a dry smooth hard runway and under standard day conditions for all RESTRICTED CATEGORY operations. Density altitude, runway surface, weather conditions and airplane condition must be given special consideration during all RESTRICTED CATEGORY operations. Climb performance (Sea level, standard day) has been demonstrated to exceed 600 FPM at the best rate of climb airspeed with maximum rated take-off power.

AIRSPEED DEFINITIONS:

The airspeed terminology is presented below in what is called the normal airspeed sequence. This sequence begins with the airspeed actually seen by the pilot and progresses through the several airspeeds which can be derived from the airspeed indicator and other information. All airspeed values presented in terms of indicated airspeed assume a zero instrument error.

1. Indicated airspeed (IAS) is the number actually read from the airspeed indicator which has a zero instrument error.
2. Calibrated airspeed (CAS) is the result of further correcting the indicated airspeed for error of the pressure inputs to the airspeed indicator, which are termed position error.

AIRSPEED CALIBRATION:

The variation of calibrated airspeed with indicated airspeed is shown on the next page.

ASSOCIATED CONDITIONS:

Power:	Sufficient for level flight (Nominal)	
Configuration:	Clean	Landing
Wing Flaps:	0 Deg.	26 Deg.

POWER AVAILABLE:

The following equation may be used to calculate horsepower (SHP) desired with various combinations of Torque and propeller RPM

$$\text{SHP} = \text{Propeller RPM} \times \text{Torque LB-FT} \times .00019$$