

EAA FTM Test Card 7

Determine V_x & V_y

Risk Designation: Low

Date

Time

Fuel

Weight/CG

Procedures

CG: Heavy forward.

Possible Emergencies: Engine overheat. Target airspeeds: Between $1.1 V_s$ and $1.5 V_s$ in 5-knot/mph increments.

1. Normal takeoff and climb to 1,000 feet AGL; check for traffic above.
2. Set GPS to distant waypoint perpendicular to wind aloft.
3. Note engine readings.
4. Record pressure altitude, if possible.
5. Apply full power and raise nose to target airspeed.
6. When speed stabilizes on target, start stopwatch and note altitude.
7. Record data at 30-second intervals.
8. Note engine readings after climb run.
9. Descend below the base altitude; repeat climb on reciprocal heading.
10. Normal landing and shutdown.
11. Refuel and repeat test at next airspeed until series complete.



Stabilized Engine Readings (Before Takeoff)

	Cyl 1	Cyl 2	Cyl 3	Cyl 4	Cyl 5	Cyl 6	Comments
CHT							
EGT							
Oil Press					Volts		
Oil Temp					Amps		
Fuel Press					Fuel Flow		

Use winds aloft forecast for OAT if no gauge is available in the aircraft.

Target Airspeed:				Climb Test Heading:		
Time	IAS	Press Alt	OAT	Rpm	MAP	Comments
0:00						
0:30						
1:00						
1:30						
2:00						
2:30						
3:00						

Target Airspeed:				Reciprocal Heading:		
Time	IAS	Press Alt	OAT	Rpm	MAP	Comments
0:00						
0:30						
1:00						
1:30						
2:00						
2:30						
3:00						



Stabilized Engine Readings (After Climb)

	Cyl 1	Cyl 2	Cyl 3	Cyl 4	Cyl 5	Cyl 6	Comments
CHT							
EGT							
Oil Press					Volts		
Oil Temp					Amps		
Fuel Press					Fuel Flow		