Performance.

The best climb speed is [**57 MPH** IAS]. While in general, at speeds different from that performance will be worse, when selecting a climb speed, always remember that should anything go wrong, more speed gives you more time to sort your problems out. Although climb performance may change between aircraft and with conditions, the best climb speed should not change significantly.

The best glide speed is [**53 MPH** IAS], at which a glide ratio of **7.5:1** may be expected.

Because light aircraft are very strongly affected by weight, engine condition, propeller matching, wind and air temperature, it is very hard to give any reliable information concerning the cruise performance of the Highlander. The captain is encouraged to plan very conservatively until sufficient experience is gained of the fuel consumption and cruising speeds at the conditions in which s/he normally flies the aircraft.

The following additional safety factors should be applied to the distance to clear a 50' obstacle. If unsure, always use these factors to ensure you have sufficient take-off distance available.

10% increase in weight	Multiply take-off distance by 1.2
Per 1000 ft runway height above Sea Level	Multiply take-off distance by 1.1
Per 18 F increase in temperature above 60°F	Multiply take-off distance by 1.1
Wet grass	Multiply take-off distance by 1.1
Dry Tarmac or concrete	Divide take-off distance by 1.1
Per 2% uphill slope	Multiply take-off distance by 1.1
Per 5 knot tailwind component	Multiply take-off distance by 1.2
Soft ground or snow	Multiply take-off distance by 1.25

Using the figures above, the following additional safety factors should be applied to the distance to clear a 15 yard obstacle on the approach. If unsure, always use these factors to ensure you have sufficient runway for a safe landing.