

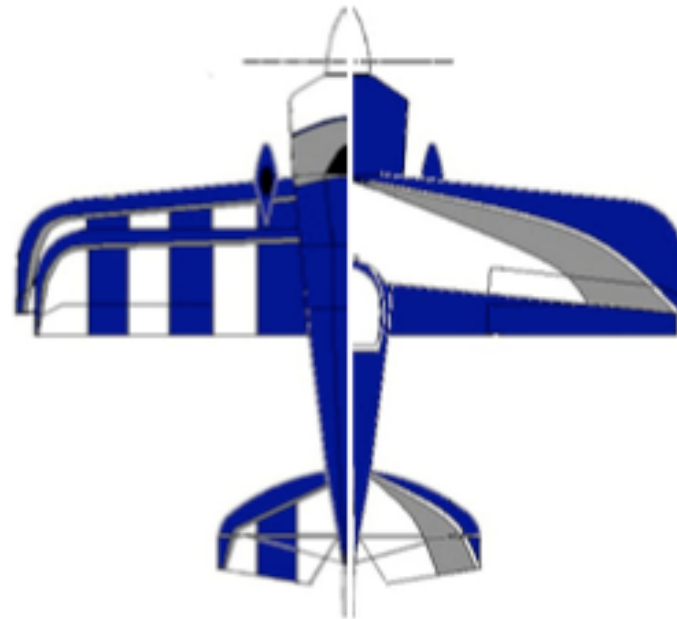
Project Aircraft Background

- **Engine:** Lycoming 200 HP (180HP)
- **Propeller:** 76" dia 62" pitch (76" X 56")
- **Gross Weight:** 1150 lb
- **Empty Weight:** 830 lb (850 ± lb)
- **Useful Load:** 320 lb (300 lb)
- **Fuel Capacity:** 20 US gal
- **Length:** 16 feet (15 ft 6 inches)
- **Wing Span:** 17 feet 4 inches
- **Wing Area:** 98.5 square feet
- **Seats:** 1
- **Top Speed:** 190 MPH (176 MPH)
- **Vne:** 205 mph
- **Max Cruise:** 155 MPH (2700 RPM limit)
- **Stall Speed:** 63 MPH
- **Rate of Climb:** 2,812 fpm (2500 FPM)
- **Rate of Roll:** 225 deg/sec (180 deg/sec)
- **Range:** 437 miles (300 Miles)

* Stock Pitts S-1S



Pitts



Stall Speed: 63 Mph (The stall is completely straight with no roll off)

Vy @ 2,000 ft Hp: 2,812 ft/min at 114 mph

Vx @ 2,000 ft Hp: 84 mph at 20 deg flight path angle

Best Glide @ 2,000 ft Hp: 96 mph with 7.7:1 glide ratio

Vmin Rate of Descent at 2,000 ft Hp: 90 mph at 1,050 ft/min

Max Endurance no reserve 4,000 ft : 4.3 hours at 88 mph

Max Endurance No reserve at 6,000 ft Hp: 4.1 hours at 93 mph

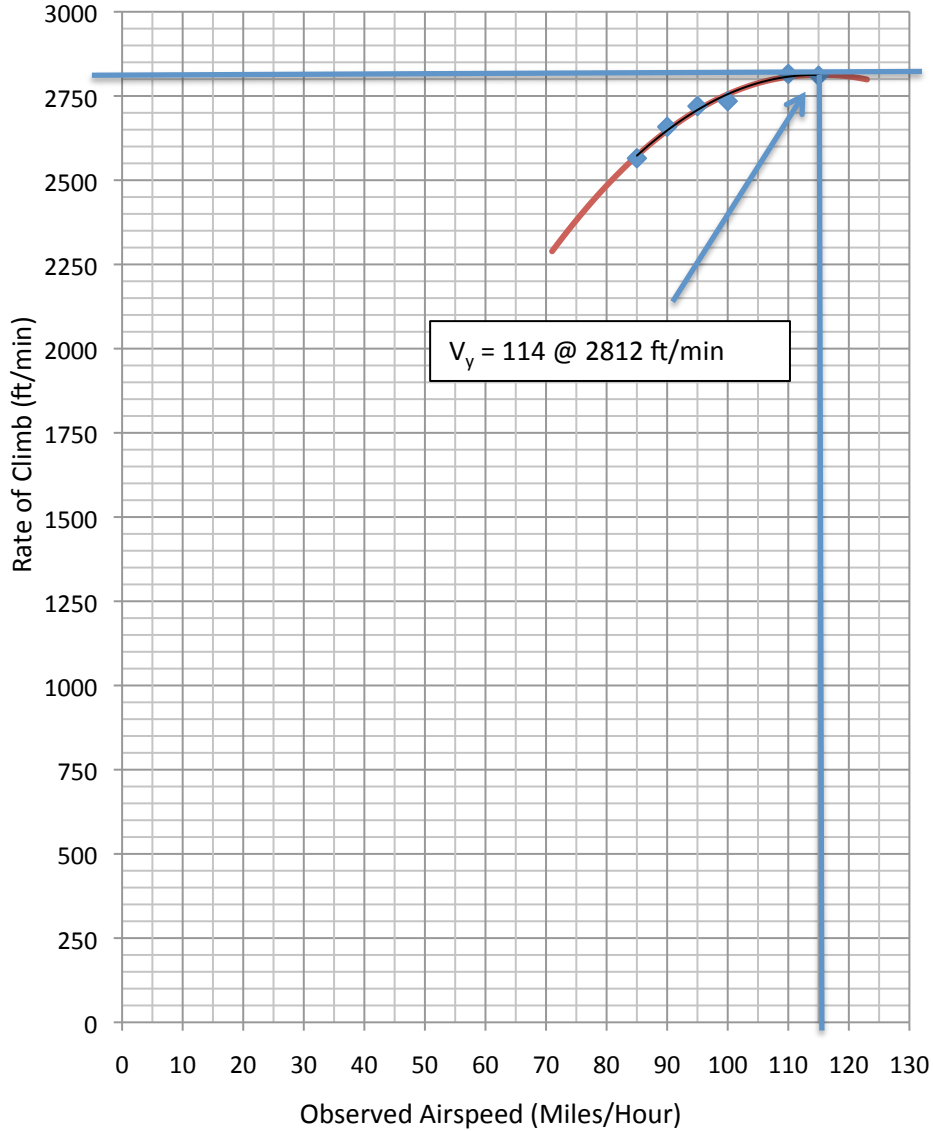
Max Range No reserve @ 4,000 ft Hp: 437 Miles at 116 mph

Max Range No reserve @ 6,000 ft Hp: 427 Miles at 117 mph

Pitts S-1SX Climb Performance

Data Source: Flight Test
Gross Weight: 1,048 lb
Thrust: Max Power
Density Altitude: 2,500 FT

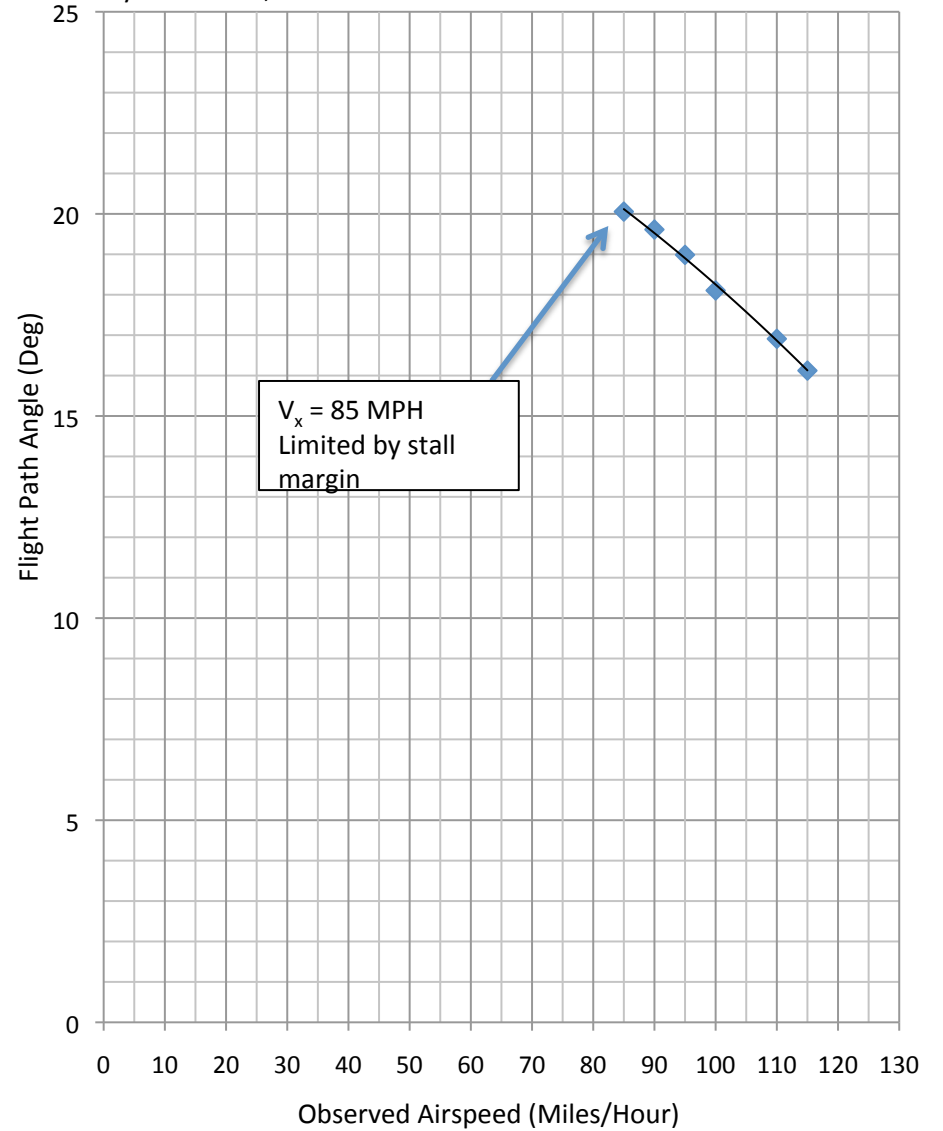
Engine: Superior IO-360-A1AD2
Propeller: Twisted Composites 76X62
Method: Saw Tooth Climb



Pitts S-1SX Climb Performance

Data Source: Flight Test
Gross Weight: 1,048 lb
Thrust: Max Power
Density Altitude: 2,500 FT

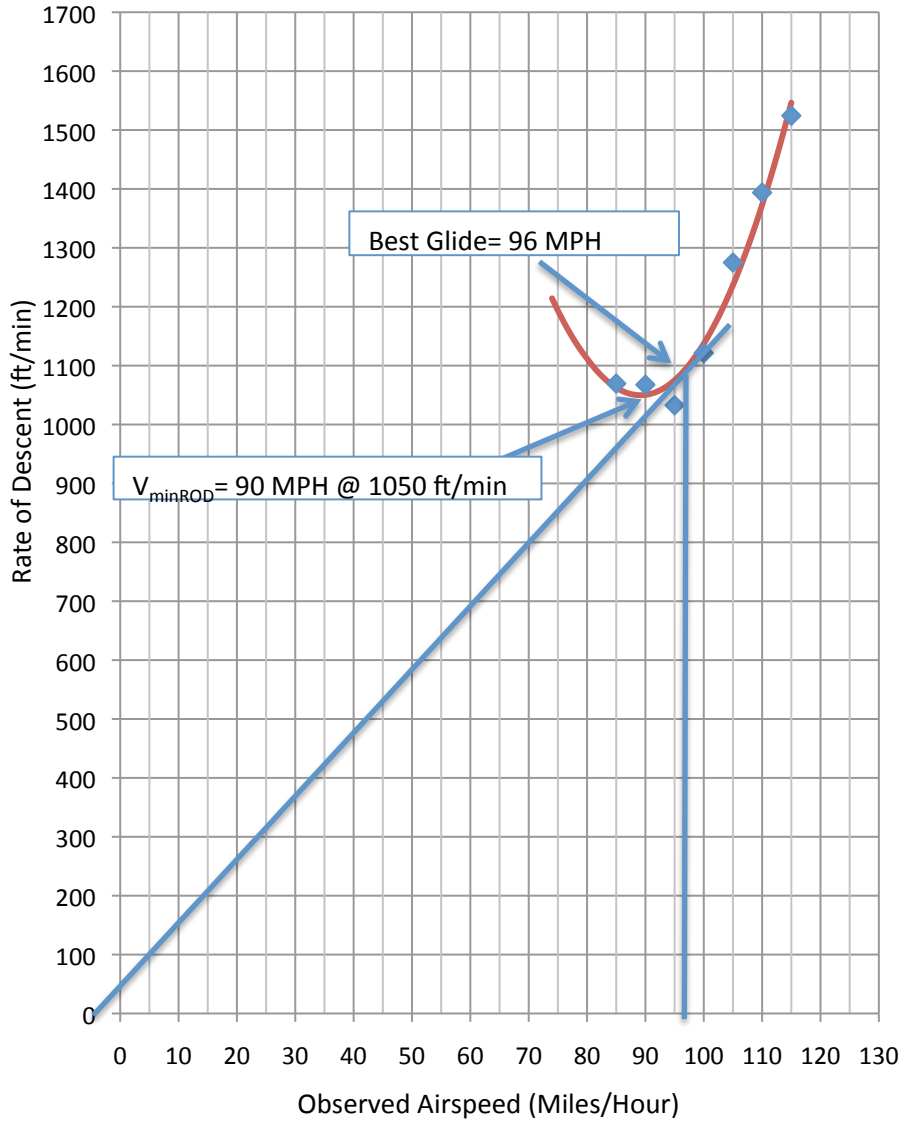
Engine: Superior IO-360-A1AD2
Propeller: Twisted Composites 76X62
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Pitts S-1SX Rate of Descent Performance

Data Source: Flight Test
 Gross Weight: 1,040 lb
 Thrust: Flight Idle
 Density Altitude: 2,250 FT

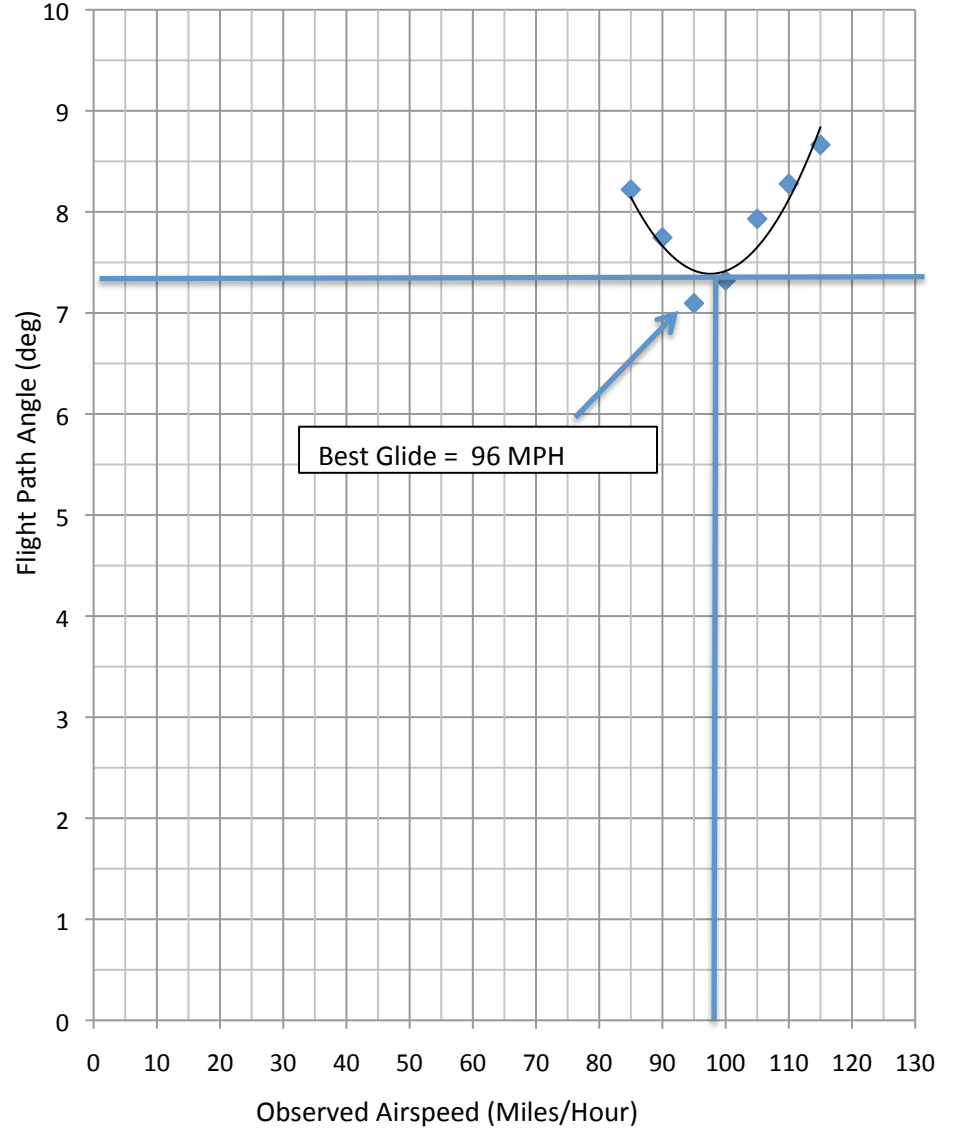
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Pitts S-1SX Descent Performance

Data Source: Flight Test
 Gross Weight: 1,040 lb
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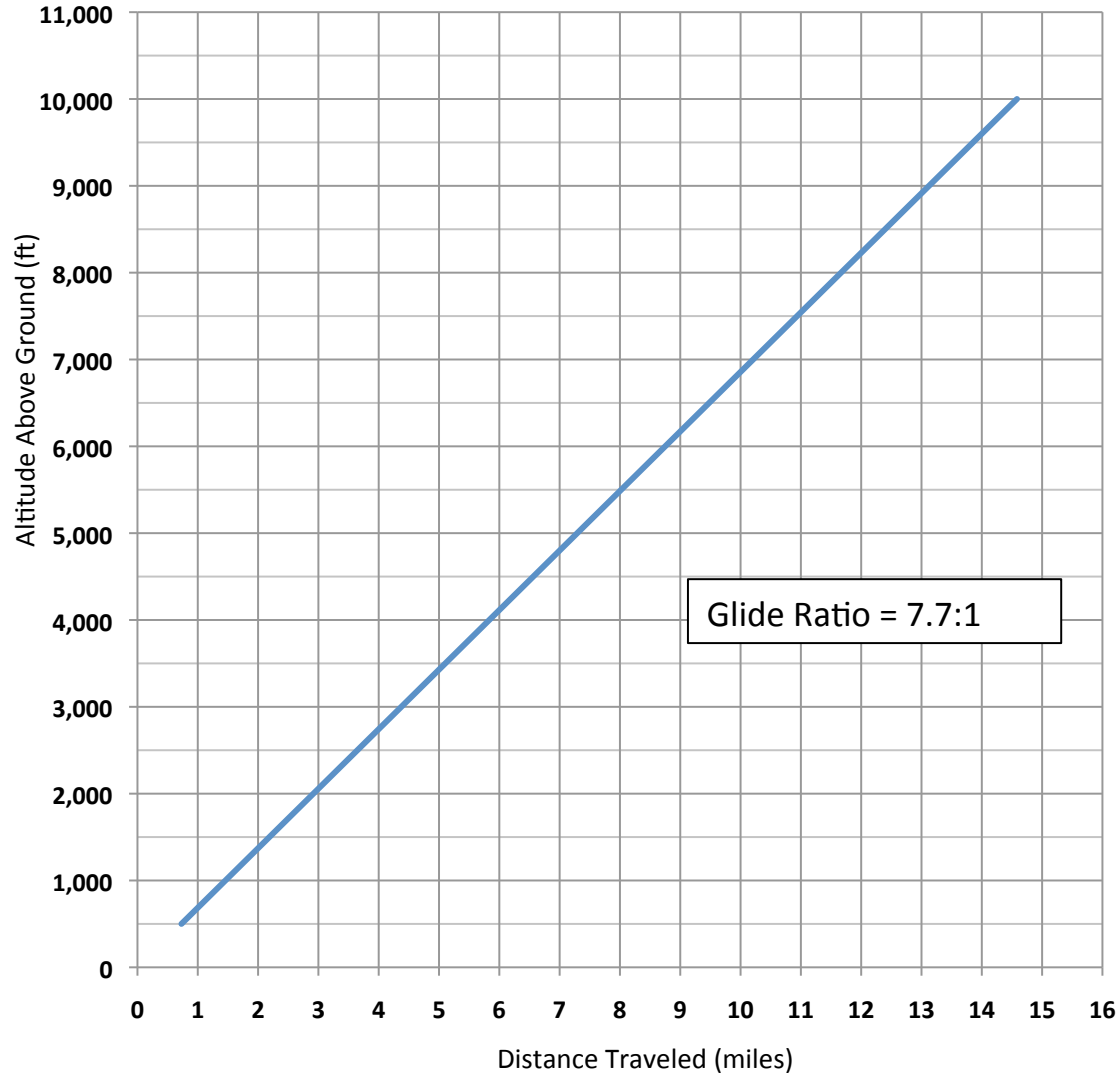


Pitts S-1SX

Engine Idle Glide Range

Data Source: Flight Test
Gross Weight: 1,048 lb
Thrust: Flight Idle
Density Altitude: 2,250 FT

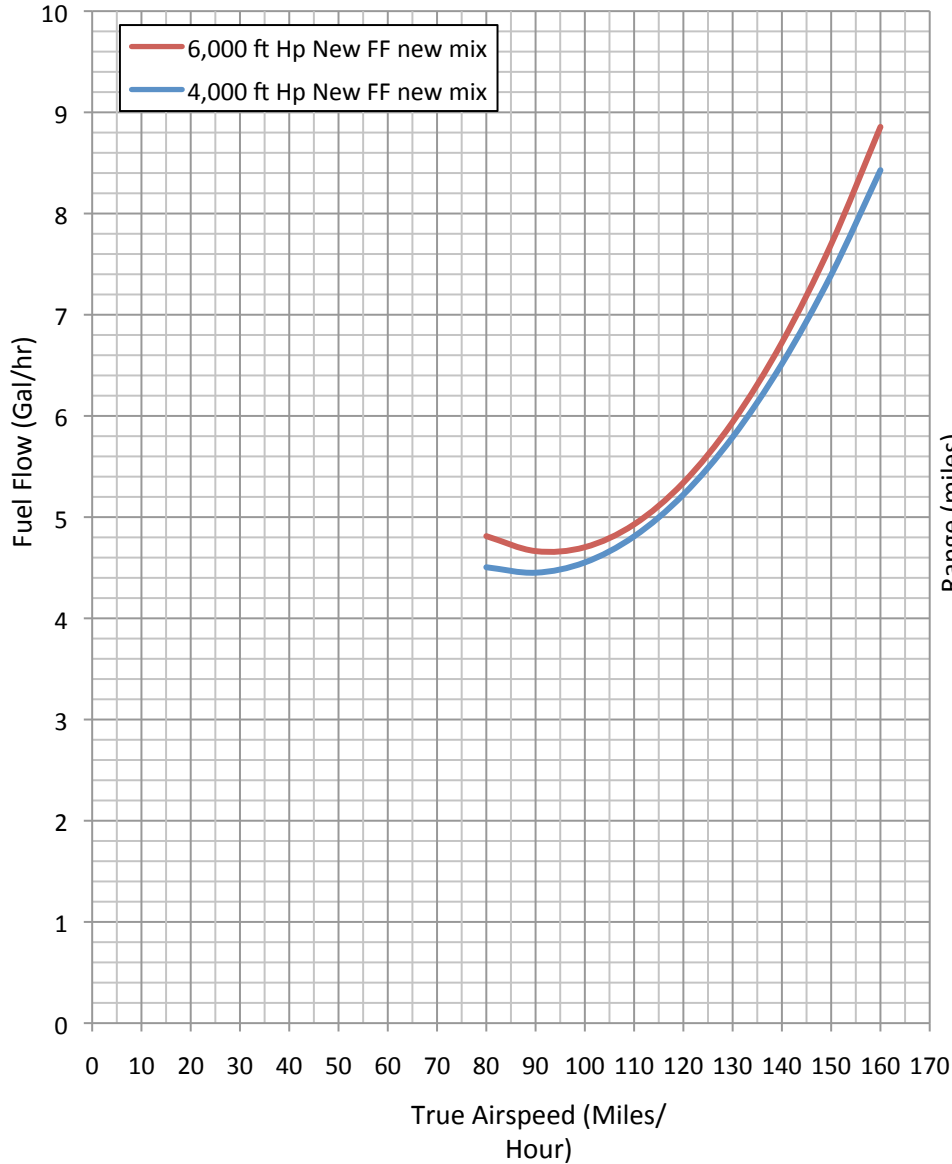
Engine: Superior IO-360-A1AD2
Propeller: Twisted Composites 76X62
Method: Saw Tooth Descent
Airspeed: Best Glide 96 MPH (No Wind)



Pitts S-1SX Level Flight Performance

Data Source: Flight Test
Gross Weight: 1,048 lb
Thrust: TLF

Engine: Superior IO-360-A1AD2
Propeller: Twisted Composites 76X62
Method: Steady
Mixture: Lean to Peak at 2700 one turn rich



Pitts S-1SX Level Flight Performance

Data Source: Flight Test
Gross Weight: 1,048 lb
Thrust: TLF

Engine: Superior IO-360-A1AD2
Propeller: Twisted Composites 76X62
Method: Steady
Mixture: Lean Peak at 2700 RPM one turn Rich

