SECTION XII: Cross Country Flight Planning

TIME/DISTANCE/FUEL TO DESCEND

Parameters:

Descent Rate: 500 FPM

Descent Speed: 90 KTS (Warrior) | 100KTS (100i)

Power Setting: 2000 RPM (Warrior) | 1900 RPM (100i)

Fuel Burn: 9.2GPH (Warrior) | 9.5GPH (100i)

Descent Time: (Cruise ALT – TPA*)/ 500

Distance: (Ground Speed x Descent Time)/60 + 2 **

Fuel Burn: GPH x Descent Time

*Consider if overflying airport is needed
**Allows traffic pattern entry 2 miles from airport

Warrior Example: Cruise ALT = 4500 feet |TPA = 2200 feet | NO WIND

Descent Time: (4500-2200) / 500 FPM = 4.6 min

Distance E6B : Set speed at 90, Above 4.6 read 7 NM, add 2 to get 9 NM

Fuel: Set Fuel to 9.2, Above 4.6 read .7 gallons

WHY this method?

The POH has you begin your descent fairly far out from the destination. The OU method has the pilot maintain cruise airspeed until closer to the destination and then descent at a slower airspeed. The OU method also keeps the aircraft at or under V_A/V_O for all phases of flight.