Tecnam P2006T Cruise Performance

Weight: 1150 kg (2535 lb)											
Pressure Altitude: 9000 ft											
		ISA – 30°C (-33°C)			ISA (-3°C)			ISA + 30°C (27°C)			
RPM [*]	MAP [inHg]	PWR	KTAS	F.C. ** [lt/hr]	PWR	KTAS	F.C. ** [lt/hr]	PWR	KTAS	F.C. ** [lt/hr]	
2388	21.1	75%	137	20.9	71%	139	19.7	67%	140	18.7	
2250	21.1	73%	136	20.3	69%	137	19.2	65%	138	18.2	
2250	20	65%	130	18.3	62%	131	17.2	58%	131	16.3	
2250	18	53%	118	14.9	50%	119	14	48%	118	13.3	
2100	21.1	69%	133	19.4	65%	134	18.3	62%	135	17.4	
2100	20	62%	127	17.4	59%	128	16.4	56%	128	15.6	
2100	18	51%	116	14.2	48%	116	13.4	46%	116	12.7	
1900	21.1	64%	128	17.8	60%	129	16.8	57%	130	15.9	
1900	20	57%	122	16	54%	123	15.1	51%	123	14.3	
1900	18	47%	112	13.2	44%	112	12.4	42%	111	11.8	
* Propeller RPM											

[•] Fuel Consumption for each Engine

Weight: 1150 kg (2535 lb)

Pressure Altitude: 12000 ft											
		ISA – 30°C (-39°C)			ISA (-9°C)			ISA + 30°C (21°C)			
RPM [*]	MAP [inHg]	PWR	KTAS	F.C. ** [lt/hr]	PWR	KTAS	F.C. ** [lt/hr]	PWR	KTAS	F.C. ** [lt/hr]	
2388	18.8	67%	135	18.8	63%	136	17.7	60%	136	16.7	
2250	18.8	65%	133	18.2	61%	134	17.2	58%	134	16.3	
2250	18	60%	129	16.8	57%	129	15.9	54%	129	15	
2100	18.8	62%	130	17.4	59%	131	16.4	56%	132	15.5	
2100	18	58%	126	16.1	54%	126	15.2	51%	126	14.4	
1900	18.8	57%	125	15.9	54%	126	15	51%	126	14.2	
1900	18	53%	121	14.8	50%	121	13.9	47%	121	13.2	
* Propeller RPM ** Fuel Consumption for each Engine											

EXAMPLE

Pressure Altitude: 10,500 feet Temperature: 10°C RPM: 2,100 Manifold Pressure: 18"

Because our temperature and pressure altitude is between two charted values, we'll need to interpolate. We can average four values each for power, true airspeed, and fuel consumption. Note, however, that finding an exact number for each is relatively poitnless in real-operations. Understanding your approximate true airspeed and fuel consumption is the real necessity.

Power: $(48\% + 46\% + 54\% + 51\%) \div 4 = 49.75\%$ power. So about 50%.

KTAS: (116 + 126) ÷ 2 = 121 KTAS

Fuel Consumption: (13.4 + 12.7 + 15.2 + 14.4) ÷ 4 = 13.92 liters/hour

So, we can safely say that we'll be operating at approximately 50% power, at 120 knots, and consuming 14 liters per hour per engine.

CONSIDER

There are multiple cruise performance charts for various pressure altitudes. At times it make be necessary to interpolate.

Consider how non-ISA will affect your performance. Lower-than-standard temperature air will increase fuel consumption for a given TAS.

Unanticipated winds can dramatically affect fuel burn over a fligth, even when TAS is as expected. Be sure to monitor fuel consumption relative to your TAS and your groundspeed.