



FLIGHT PERFORMANCE SYSTEM

The **Flight Performance System (FPS)** of Slot Consulting is a new solution tailored to the needs of general aviation pilots and navigation officers. It provides performance calculations for user defined flights, taking into account payload, meteorological information and aircraft performance.

FPS was developed by a team of experts, including RSZINFO, and it is ready to support pilots who are keen on safety and efficiency.

The FPS is web based, providing fast and reliable performance calculations. Each aircraft type has its own Airplane Information Manual and the FPS has separate calculation algorithms for each type based on the respective AIM. Calculations are done on-line, with the pilot required to provide only some data and select where the baggage is located, where the passengers are sitting and so on.

Safety in aviation is a very different thing from that in other transportation means.

Imagine that you run out of gas or have a flat tire while driving your car. Having to call for help and being late from work is annoying but not the end of the world. Aviation has higher stakes.

Flight Performance calculations will tell you whether your aircraft is capable of performing the flight you are planning. Mandatory in commercial operations, strongly advised for all. Your life may depend on it!

Many things can go wrong.

Not enough fuel, too much fuel (excess weight), weather conditions, runway pavement conditions...

The manufacturer provides you with an Airplane Information Manual of a few hundred pages, including 60-80 pages of graphs and tables for performance calculations.



The following items are typically included:

- Associated Conditions Affecting Performance
- Demonstrated Operating Temperature
- Airspeed Calibration - Normal Static Source
- Airspeed Calibration - Alternate Static Source
- Altitude Correction Normal Static Source: Primary Flight Display
- Altitude Correction Normal Static Source: Standby Altimeter
- Altitude Correction Alternate Static Source: Primary Flight Display
- Altitude Correction Alternate Static Source: Standby Altimeter
- Temperature Conversion
- Outside Air Temperature for ISA Condition
- Stall Speeds
- Wind Components
- Take-off Distance
- Take-off Climb Gradient
- Take-off Rate of Climb
- Enroute Climb Gradient
- Enroute Rate of Climb
- Enroute Rate of Climb Vs Density Altitude
- Time, Fuel and Distance to Climb
- Cruise Performance
- Range / Endurance Profile
- Balked Landing Climb Gradient
- Balked Landing Rate of Climb
- Landing Distance

Contents may vary but it takes hours to manually calculate them all...

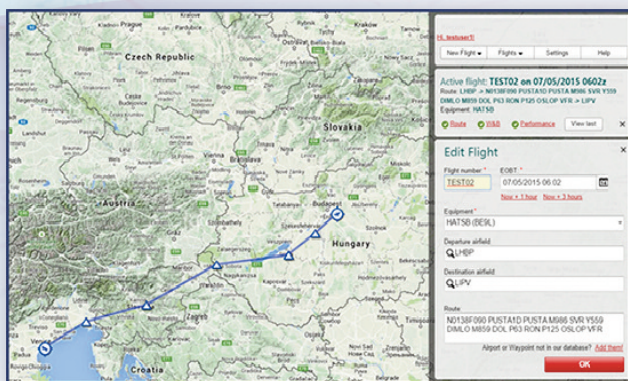




THE FLIGHT PERFORMANCE SYSTEM (FPS) IS AN EASY TO USE, FAST AND RELIABLE SOLUTION.

Web based, it provides fast and reliable performance calculations. Results are there in minutes rather than hours! Data input is simple. Part of the information has to be typed in and the system offers completion options. In other cases a drop-down list is provided.

After typing in the flight number, date is entered via the date picker. After selecting the aircraft type, the origin and destination aerodromes are entered, helped by an autocomplete feature.



The route description from the flight plan can be pasted into the appropriate text field.

Result

Optimal settings with MaxPower profile

MaxPower	FAST!	green
Optimal cruise altitude:	[FL] 290	180
Optimal cruise RPM:	[1/min] 1900.0	1900.0
Optimal cruise Torque:	[ft/lbs] 1039.0	1520.0
Average cruise wind:	[deg/kt] 000/00	000/00
Average OAT on cruise level:	[C] -42	-21
Speeds, gradients, distances:		
Average climb rate to cruise alt:	[ft/min] 2107.4822	2425.8516
Wind-affected average climb gradient:	[%] 5.2548766	9.683021
Approx. ground distance to Top of Climb:	[nm] 89.272415	29.759923
Average descent rate to destination:	[ft/min] 1000.0	1000.0
Wind-affected average descent gradient:	[%] 2.4547803	1.9230769
Approx. ground distance to FAF:	[nm] 184.28442	141.0974
Deviation from ISA on cruise altitude:	[C] 9	9
True airspeed on cruise level:	[kts] 260	270
Ground speed on cruise level:	[kts] 260	270

Flight Segment Times:

Required data is entered in an easy and intuitive way. Results are shown in a tabular format for the fast flight mode and the green flight mode.



There is a printable and a pdf version of the results for further use.

More information on our website at www.slotconsulting.eu/solutions/flight-performance
Test drive the FPS? Drop us a line to fps@slotconsulting.eu and we will tell you how.

www.slotconsulting.eu