

## PERFORMANCE CALCULATIONS

The purpose of a performance calculation is to give pilot sufficient data for safe take-off and landing. Performance data provided in aircraft flight manual should be used whenever available. If AFM data is not available or it does not exist, pilot may use his own estimate based on experience.

When making performance calculation, following aspects should be taken into account: aircraft load and performance, air pressure and temperature, wind direction and velocity, runway properties, obstacles in take-off and landing sectors.

- ❑ Calculate take-off and landing distance by using shortest runway available
- ❑ Take-off distance over 15 m (50 ft) obstacle should not exceed 80 % runway available (Recommendation in Finnish regulation OPS M2-1)
- ❑ All obstacles in take-off sector should be passed with at least 15 m (50 ft) vertical clearance (OPS M2-1)
- ❑ Landing distance from 15 m (50 ft) should not exceed 70 % runway available (OPS M2-1 suositus)

**Example 1:** Calculated take-off distance to 15 m/ 50 ft is 433 m. Runway available is 600 m.  $600 \text{ m} \times 0,8 = 480 \text{ m} \rightarrow$  take-off may be commenced.

**Example 2:** Calculated landing distance is 418 m. Runway available is 550 m.  $550 \text{ m} \times 0,7 = 385 \text{ m} \rightarrow$  landing should not be commenced!

Approved for operational use 23.9.2011

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