

QCM Annual Information & Discussion Event

SIMPLE STEPS FOR MAXIMUM FUEL SAVINGS

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Topics

- Definitions
- References
- Fuel Planning
- Aerodrome selection

Definitions

- EU 965/2012 - Annex I
 - (49d) ‘flight following’ means the recording in real-time of departure and arrival messages by **operational personnel** to ensure that a flight is operating and has arrived at the destination aerodrome or an alternate aerodrome;
 - (49e) ‘flight monitoring’ means, in addition to the requirements defined for flight following:
 - (a) operational monitoring of flights by **suitably qualified** operational-control personnel from departure throughout all phases of the flight;

...suitably qualified...

- AMC1 ORO.GEN.110(c)&(e) Operator responsibilities
 - (a) When a CAT operator uses flight monitoring or flight watch as functions of a system for exercising operational control, FOOs/FDs should perform those functions.
 - (b) The CAT operator should develop a training programme based on the relevant parts of ICAO Annex 1, ICAO Documents 10106 and 9868, for FOOs/FDs that perform those functions.
 - (c) The training programme specified above should be detailed in the OM of the CAT operator and should be delivered by an instructor for operational control personnel.

Training programme

- AMC1 ORO.GEN.110(c)&(e) Operator responsibilities (cont.)
 - Initial Training
 - Operation specific training
 - Recurrent training
 - Instructor qualification

How is this related to fuel savings?

- Regulations...
- CAT.OP.MPA 181 - Fuel/Energy Planning
- CAT.OP.MPA 182 - Aerodrome Selection Policy

Fuel/Energy Planning

- Any deviation from standard fuel planning now requires...
- AMC6 CAT.OP.MPA.181
 - (b) If the operator establishes and maintains a fuel consumption **monitoring system** for individual aeroplanes, and uses valid data for fuel calculation based on such a system, the operator may use any of the requirements in point (c) or (d) of this AMC to calculate the contingency fuel.
 - (c): 3% contingency fuel
 - (d): reduced contingency fuel / decision point procedure / reclearance procedure

Aerodrome Selection Policy

- Any deviation from standard fuel planning now requires...
- AMC8 CAT.OP.MPA.182
 - (b) As a minimum, the operator should:
 - (1) use a suitable computerised flight-planning system; and
 - (2) have established an operational control system that includes flight monitoring.

Alternate Selection

Table 1 - Planning minima – En-route and destination alternates

TYPE OF APPROACH	PLANNING MINIMA
Cat I	NPA RVR/VIS Ceiling shall be at or above MDH
NPA	NPA RVR/VIS + 1000 m Ceiling shall be at or above MDH + 200 ft
Circling	Circling

Table 2 — Basic fuel scheme — planning minima — aeroplanes
 Destination alternate aerodrome, fuel ERA aerodrome, isolated destination aerodrome

Type of approach operation	Aerodrome ceiling (cloud base or vertical visibility)	RVR/VIS
Type B instrument approach operations	DA/H + 200 ft	RVR/VIS + 800 m
Type A instrument approach operations	DA/H or MDA/H + 400 ft	RVR/VIS + 1 500 m
Circling approach operations	MDA/H + 400 ft	VIS + 1 500 m

Crosswind planning minima: see Table 1 of [AMC3 CAT.OP.MPA.182](#)

Wind limitations should be applied taking into account the runway condition (dry, wet, contaminated).

Table 3 — Basic fuel scheme with variations — planning minima — aeroplanes
 Destination alternate aerodrome, fuel ERA aerodrome

Row	Type of approach operation	Aerodrome ceiling (cloud base or vertical visibility)	RVR/VIS
1	Type B instrument approach operations	DA/H + 200 ft	RVR/VIS + 550 m
2	3D Type A instrument approach operations, based on a facility with a system minimum of 200 ft or less	DA/H* + 200 ft	RVR/VIS** + 800 m
3	Two or more usable type A instrument approach operations***, each based on a separate navigation aid	DA/H or MDA/H* + 200 ft	RVR/VIS** + 1 000 m
4	Other type A instrument approach operations	DA/H or MDA/H + 400 ft	RVR/VIS + 1 500 m
5	Circling approach operations	MDA/H + 400 ft	VIS + 1 500 m

Crosswind planning minima: see Table 1 of [AMC3 CAT.OP.MPA.182](#)

Wind limitations should be applied taking into account the runway condition (dry, wet, contaminated).

Conclusion

- CAT.OP.MPA 181 and 182 and their AMCs are NOT cross-referenced
- Consult on how to introduce a fuel consumption monitoring system at your organisation
 - Result: reduced fuel requirements, especially for long-range operation
- Train your Flight Dispatchers
 - Result: Closer alternates -> reduced fuel requirements especially during winter operations

Questions?