EASA
European Union Aviation Safety Agency

Welcome to the EASA Fuel Webinar

September 2022

Regulation (EU) 2021/1296 and ED Decision 2022/005/R

Air Operations – Flight Standard directorate.
Safety promotion – Strategy & Safety managements directorate.
EASA Project management Fuel Regulatory framework

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Agenda

13:00 – 13:15 – **Welcome: John Franklin & Francesco Gaetani (EASA).**
13:15 – 13:35 – **Fuel schemes (Flight planning and Aerodrome selection)**
13:35 – 13:50 – **Rules Q&A: Led by EASA.**
13:50 – 14:00 – Break
14:00 – 14:15 – **Implementation plan (AESA Spain).**
14:15 – 14:30 – **Implementation Plan. OCC training of personnel (TuiFly)**
14:30 – 14:45 – **Flight planning system – implementation plan (NAVBLUE).**
14:45 – 15:00 – Break
15:00 – 16:00 – **Panel discussion – Experts from the industry.**
16:00 – 16:05 – **Safety Promotion Developments and Webinar Closing.**

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Welcome by Chair of the Rulemaking group RMT.0573 Fuel.

Sept 2022

Regulation (EU) 2021/1296 and ED Decision 2022/005/R

Francesco Gaetani

Head of department Aircrew & Medical.
Air Operations – Flight Standard directorate.

EASA Webinar on Fuel Management Rules
September 21th, 2022

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Safety promotion
September 2022

Regulation (EU) 2021/1296 and ED Decision 2022/005/R

Francisco ARENAS ALVARINO

EASA Project manager Fuel Regulatory framework
Senior OPS Expert and Air CREW expert
Air Operations – Flight Standard directorate.

EASA Webinar on Fuel Management Rules
July 7th, 2022

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Implementation support

→ The New Fuel rules are available in the easy access rules

  → May 2022 Revision 18

  → See more in https://www.easa.europa.eu/document-library/easy-access-rules/easy-access-rules-air-operations-regulation-eu-no-9652012

→ AWO rules - Regulation (EU) 2021/2237 available as well in Rev 18.

→ AWO AMC&GM NOT available until Nov 2022.

→ 3rd Webinar on AWO 20 October 2022.

→ 3rd Webinar on Fuel Schemes 26 October 2022.

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Fuel planning and Aerodrome selection policies

Sept 2022

Regulation (EU) 2021/1296 and ED Decision 2022/005/R

Francisco ARENAS ALVARINO

EASA Project manager Fuel Regulatory framework
Senior OPS Expert and Air CREW expert
Air Operations – Flight Standard directorate.

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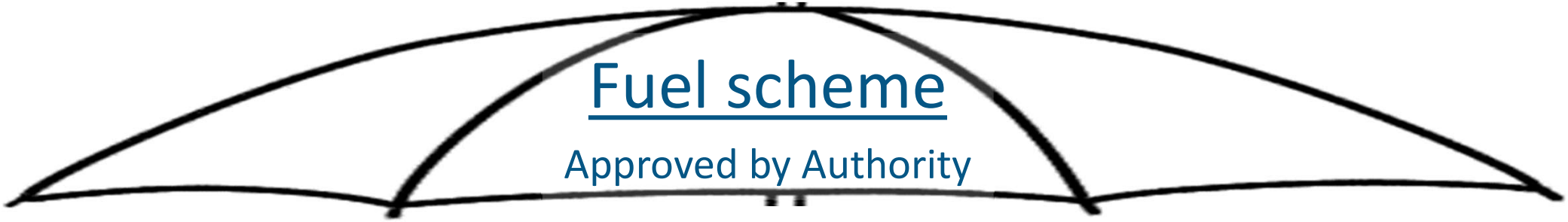
New fuel rules for CAT



Fuel planning / in-flight replanning policy

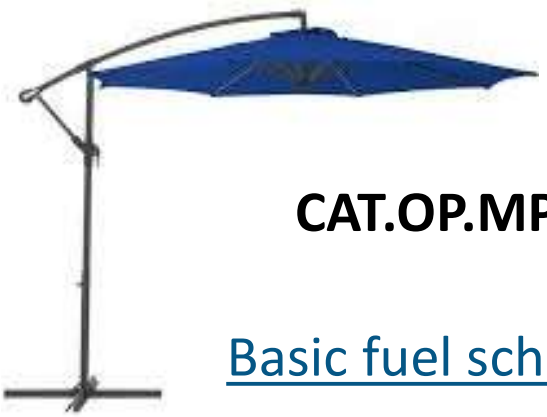
Selection of aerodromes & planning policy

In-flight fuel management policy

Safety objective in the IR

Means to comply in the AMC

Performance-based regulation



Fuel rules for CAT – example on Cont Fuel

CAT.OP.MPA.18X series

Basic fuel scheme

Prescriptive: 5% contingency fuel

- No special requirements for the authority
- No special requirements for the operator
- Current situation for most operators

Basic fuel scheme with variations

Variations to basic fuel scheme: 3% contingency fuel

- No special requirements for the authority
- Some requirements for the operator (e.g. ERA, fuel consumption monitoring program required)
- EASA can create new variations in the future

Individual fuel scheme

Can be reduced based on criteria

- Baseline performance (2 years of data on agreed SPIs)
- Safety risk ass. (= or > LoS)
- Continuous reporting with CA
- Available infrastructure in the area of operation
- Organisational control (processes + resources)
- Operational capabilities

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Flight planning and in-flight replanning

- CAT.OP.MPA.181 for CAT Aeroplanes.
- CAT.OP.MPA.191 for CAT Helicopters.
- Transposed from the old CAT.OP.MPA.150
  - Performance-based rules
  - Except for Final Reserve Fuel (RFR) (30 and 45 minutes) and
  - Except for additional fuel in a no destination alternate scenario (15 minutes)
- Some additional changes:
  - Promotion of Fuel consumpt. monitoring prog. instead of Manufacturer's data.
  - Additional operating conditions to take into account in point (b) CAT.OP.MPA.181

Additional operating conditions

The operator shall ensure that the planning of flights includes the operating conditions under which the flight is to be conducted; the operating conditions shall include at least:

- OLD CAT.OP.MPA.150 point (b)(2)
- (i) aircraft fuel consumption data;
- (ii) anticipated masses;
- (iii) expected meteorological conditions; and
- (iv) air navigation services provider(s) procedures and restrictions.

CAT.OP.MPA.181 point (b)

(1) aircraft fuel/energy consumption data;
(2) anticipated masses;
(3) anticipated meteorological conditions;
(4) the effects of deferred maintenance items and/or of configuration deviations;
(5) the expected departure and arrival routing and runways; and
(6) anticipated delays.

BASIC FUEL SCHEMES

- Performance class A – AMC1 CAT.OP.MPA.181
  - Transposed from AMC1 CAT.OP.MPA.150 (5% contingency)
  - Pay attention to the difference between:
    - Extra fuel
    - Discretionary fuel
- Performance class B and C – AMC2 CAT.OP.MPA.181
  - Transposed from CAT.OP.MPA.151 Fuel policy – alleviations
- ELA 2 Aeroplanes – AMC3 CAT.OP.MPA.181
  - Transposed from CAT.OP.MPA.151 Fuel policy – alleviations

Fuel schemes - Variations

- AMC 5 CAT.OP.MPA.181 – Statistical TAXI fuel variation.
- AMC 6 CAT.OP.MPA.181 – Contingency fuel variations
  - Transposed from existing “variations” contained in old AMC1 CAT.OP.MPA.150
  - New provision: implementation of a Fuel consump. monitoring system.
  - 3%, (no change) Location of the ERA in AMC7 CAT.OP.MPA.181
  - 20 minutes (no change) and
  - statistical fuel method (small changes. Move from GM to AMC).
    - 2 years
  - Reduce contingency fuel procedure (No change)
  - Pre-determine point – Deleted – Only available for isolated aerodrome proc.

Fuel consumption monitoring system

- Fuel consumption monitoring system are not new. It was a feature in CAT.OP.MPA.150 point (b)(1)(ii) “current aircraft-specific data derived from a fuel consumption monitoring system;”
- The new rules provide further guidance:
  - Basic Fuel schemes: point (c) of GM1 CAT.OP.MPA.181
  - Individual fuel schemes: AMC8 CAT.OP.MPA.181
  - Further info: ICAO Doc 9976 Flight Planning and Fuel Management (FPFM) Manual, Appendix 5 to Chapter 5.

A little about Aerodrome Selection.

- → AMC1 CAT.OP.MPA.182 Take off alternate (light improvements)
- → Planning minima Basic fuel schemes
  - → AMC6 CAT.OP.MPA.182 – 200ft/400ft – 800m/1500m – ETOPS
- → Planning minima Fuel schemes Variations
  - → Requirement to have Flight monitoring or flight Watch capabilities and
  - → Computerised flight planning systems.
  - → AMC8 CAT.OP.MPA.182 – Similar approach to Transport Canada & FAA.
    - → For short haul – less than 6 hours and multi- crew operations.
    - → No LVO approval is needed.
  - → AMC9 CAT.OP.MPA.182 – Similar approach to Transport Canada & FAA.
    - → Higher maturity – LVO approval is required.
    - → Lower planning minima is allowed.

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THANK YOU

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