

## MINIMUM FUEL DECLARATION

Taken straight from the *Annex IV to ED Decision 2022/005/R 'AMC and GM to Annex IV (Part-CAT) to Commission Regulation (EU) No 965/2012 – Issue 2, Amendment 20'* and then we removed all the blue so it was easier to read and added some comments in and highlighted some bits we liked the look of. Basically, this is not the official thing, so make sure you go read the official thing rather than using this for anything other than a helpful nicely highlighted guide.

**Here it is:**

**(d) The 'MINIMUM FUEL' declaration informs the ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing. It also informs the ATC that any change to the existing clearance may result in landing with less than the planned FRF.**

**This is not an emergency situation but an indication that an emergency situation is possible, should any additional delay occur.**

*Basically, if it all looks ok based on what you've been told, but any change to that will make it look less ok then speak up early and let ATC know. How to judge if it all looks ok so long as nothing changes?*

(e) When committed to land at a specific aerodrome, the commander should **take into account any operational factor that may cause a delay to landing**, and thus determine whether the aircraft will land with less than the planned FRF, even after receiving clearance from ATC. A change that may cause a delay to landing could be other than the ATC, e.g. a change of weather conditions, etc. If any such factor is likely to result in landing with less than the planned FRF, the commander should declare 'MINIMUM FUEL' to ATC.

*This bit is important - saying minimum fuel won't get you prioritised, but it does let ATC know you're getting tight so they can let you know early what's going on. It doesn't say it here, but if you're "Minimum Fuelling" it to ATC, it might be worth getting in a "if something does change we'll want to divert here, is there space?" call in at the same time.*

(f) **The pilot should not expect any form of priority handling as a result of a 'MINIMUM FUEL' declaration.** However, the ATC should advise the flight crew of any additional expected delays, as well as coordinate with other ATC units when transferring the control of the aeroplane, to ensure that the other ATC units are aware of the flight's fuel state.

*Now they provide some great examples of this 'in action'.*

(g) **Example 1:** The aircraft is on the final approach to the destination aerodrome with a single runway, with just the destination alternate fuel plus FRF available. The aircraft ahead has a tyre burst upon landing and has stopped on the runway. The ATC orders the aircraft on final approach to execute a go-around as the destination aerodrome is closed due to a blocked runway. After completing the go-around, the flight crew decides to divert to the destination alternate aerodrome. After the ATC gives clearance for the destination alternate aerodrome and if the calculated fuel upon landing is close to the FRF, the flight crew should declare 'MINIMUM FUEL'. The flight crew has **now committed to land at the destination alternate aerodrome**, and any change to the clearance may result in landing there with less than the planned FRF.

(h) **Example 2:** The aircraft is approaching the clearance limit point, which has a holding pattern operating at this point in time. The ATC gives the aircraft an expected arrival time that would result in a delay of 25 minutes, and the aircraft enters the holding zone. On receiving this information and prior to entering the holding pattern, the remaining fuel is 7-minute contingency fuel plus 25-minute destination alternate fuel plus 30-minute FRF. The weather conditions and aircraft serviceability are such that the flight crew can convert the destination alternate fuel into holding time over the destination aerodrome. **When the remaining fuel no longer allows a diversion from the holding pattern**, then the flight crew should declare 'MINIMUM FUEL'. The flight crew has committed to land at the destination aerodrome, and any change to the clearance may result in landing with less than the planned FRF.

(i) **Example 3:** The aircraft reaches FL 350, which is the cruising flight level on its 5-hour flight. The weather forecast information that was obtained before departure was favourable and, therefore, the commander did not order any discretionary fuel. The destination alternate fuel is sufficient for 25-minute flight time and the destination alternate aerodrome is located beyond the destination aerodrome. For some reason (unexpected severe turbulence, cockpit window crack, etc.), the aircraft has to descend and continue the flight at FL 230, where fuel consumption is higher. In-flight fuel checks and fuel management now show that **the destination aerodrome can still be reached but only if in-flight re-planning is done without the destination alternate aerodrome** (the destination aerodrome has two runways and good weather, and it is less than 6-hour flight time away, thus meeting the conditions for not requiring an alternate aerodrome). By doing so, the aircraft will arrive at destination for a straight-in approach with exactly the FRF plus 15-minute flight time. During the next 3,5 hours, an ERA aerodrome is available, and the situation is under control. When **approaching the destination, the aircraft has to commit to land at the destination** aerodrome as there is no other destination alternate aerodrome within 15 minutes of reaching the destination aerodrome. The ATC

now informs the pilots that there is a change of landing runway resulting in a 12-minute trip fuel increase. It is time to declare 'MINIMUM FUEL'.

**(j) Several scenarios illustrating circumstances that could lead to a 'MINIMUM FUEL' declaration are provided in ICAO Doc 9976 Flight Planning and Fuel Management (FPFM) Manual (1st Edition, 2015) and the EASA Fuel Manual.**