FAA 180-minute Threshold (non-ETOPS)

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All Aircraft | FAA Non-ETOPS

What is ETOPS?


- A flight plan including any point that is greater than 180 minutes from an adequate airport at an approved one-engine inoperative cruise speed under standard conditions in still air is considered an Extended Operations (ETOPS) and requires operational approval. This rule applies to all areas of operation and has not been limited to overwater operations.

- Operational approval for Part 135 ETOPS is discussed in FAA AC 135-42 and includes specific maintenance procedures and crew training requirements.

- The purpose of this briefing is to understand the methodology of calculating ETOPS applicability and to ensure that flights are under 180 minutes from an adequate diversionary airport. In other words, to ensure non-ETOPS operations.
Determining ETOPS Applicability

• NOTE: ETOPS is a planning requirement (hence the still air qualifier in the definition on the previous page). It need not be evaluated based on current conditions.

• Map Methodology: use data from GAC-OIS-03 (Large Cabin) and GAC-OIS-05 (Mid Cabin) to determine single engine range and true airspeed.

• Draw a 180-minute range around all adequate diversionary airports. This can be accomplished via Great Circle Mapper.

• If within the conjoined circles, the aircraft can execute the flight and be considered non-ETOPS.

• See next pages for a Gulfstream-specific maps.
Gulfstream non-ETOPS Area per Table 2 of Large Cabin GAC-OIS-03 and Mid Cabin GAC-OIS-05. After selecting an aircraft, lighter areas indicate that ETOPS authorization is required:
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Additional References

- Consult Large Cabin GAC-OIS-03 and Mid Cabin GAC-OIS-05 for in-depth discussion on how the non-ETOPS Area of Operation was derived.

- An “Extended Operations” Operating Manual Supplement is also available for most Large Cabin Gulfstreams (e.g., G650-OMS-07). Consult the OMS section of PlaneBook.

- FAA AC 120-42B - Extended Operations (ETOPS and Polar Operations). Although this focuses on “180+” operations, it is very informative.

- Determining Extended Operations (ETOPS) Applicability for 14 CFR 135 Turbine Powered Aircraft (AFS-200 approved)