

(4) Beyond 240 Minutes Area of Operations

The FAA proposes a new ETOPS diversion limit that is beyond 240-minutes. This authority would be available only to those operators that have considerable experience with ETOPS, including operations with routes requiring 240-minutes ETOPS. At a minimum, the operator would have to have 24 consecutive months of ETOPS experience with operations 180 minutes and greater, of which at least 12 consecutive months were at 240-minute ETOPS on the airframe and engine combination for which the authority is requested.

There are only a few routes that would require a diversion time greater than 240-minutes from an ETOPS alternate. The geographical areas with routes that would be best flown with such an authority are the Pacific oceanic areas between the U.S. west coast and Australia, New Zealand and Polynesia; the south Atlantic oceanic areas; the Indian Oceanic areas; the oceanic areas between Australia and South America, and South Pole area. The FAA proposes that for such routes, the authority to dispatch or release a flight that would be more than 240-minutes from an ETOPS alternate would be granted only for specific city pairs served. In planning the route, the operator would be required to always designate the nearest available ETOPS alternate(s). In all cases for ETOPS flight segments that are beyond 180 minutes, the time required to fly the distance to the planned ETOPS alternate(s), at the approved one engine inoperative cruise speed, correcting for wind and temperature, may not exceed the time specified in the Airplane Flight Manual for the airplanes most time limited system time (except for cargo fire suppression), minus 15 minutes. The flight routing must also be within the time required to fly the distance to the planned ETOPS alternate or alternates, at the all engines operating cruise speed, correcting for wind and temperature, that is specified in the Airplane Flight Manual for the airplane's cargo fire suppression system time minus, 15 minutes.

For such operations, the airframe and engine combination would have to be type design approved for the maximum authorized ETOPS diversion time. All requirements specified in the Configuration Maintenance and Procedures (CMP) Standard for beyond 240 minute ETOPS would be applicable to such operations.

B. ETOPS Authorizations: Airplanes With More Than 2 Engines

The flight planning for long-range flights traversing remote areas with few airports available for a non-scheduled landing should not be different because of the number of engines installed. Flights in all engine configurations have experienced conditions requiring landings short of the planned destination. The conditions included onboard technical failures, adverse atmospheric flight conditions, and increasingly, passengers that develop life threatening medical conditions that require prompt medical care. The preclude and protect philosophy that has been a foundation for two-engine airplane ETOPS has similar application and benefit to flight operations that are conducted with 3 and 4-engine airplanes.

The FAA proposes that ETOPS practices apply to flights conducted with 3 and 4-engine airplanes on routes where the flight will be more than 180-minutes from an adequate airport. Operations in any area up to a maximum diversion time up to 240-minutes (based on the one-engine inoperative speed flown in still air) may be conducted on a routine basis. For all such operations, the nearest available ETOPS alternate within 240 minutes diversion time must be specified. If an ETOPS alternate is not available within 240 minutes, the operator may conduct the flight by designating the nearest ETOPS alternate on the planned route that is within the airplanes most time limited system capability as specified by § 121.633 of this chapter.

On all such operations, MEL limitations for ETOPS apply and in addition, the Fuel Quantity Indicating System (FQIS) and the communication requirements specified in § 121.99 and § 121.122 as appropriate must be operational. The airframe/engine combination must be type design approved for the maximum authorized ETOPS diversion time.

C. Polar Area (North & South Pole) and ETOPS Beyond 180 Minutes North of the NOPAC Area

The ARAC ETOPS recommendation includes the adoption of the FAA Polar Policy that was issued March 2001. Because of extreme cold weather during the winter months and the limited availability of supporting services and facilities, it is proposed that the Polar, the area north of N 78°00", be designated as an area of ETOPS applicability. Except for intrastate operations within the State of Alaska, ETOPS requirements would apply

regardless of the number of engines or an airplane's proximity to an airport. Support of a necessary diversion and subsequent recovery in such areas would require the following items to be addressed by the operator:

- (1) Designation and requirements for airports that may be used for enroute diversions
- (2) Recovery plan for passengers at diversion alternates
- (3) Fuel freeze strategy and monitoring requirements for Polar operations
- (4) Communication capability for Polar operations
- (5) MEL considerations for Polar operations
- (6) Training issues for Polar operations
- (7) Crew considerations during solar flare activity
- (8) Special equipment for Polar operations such as cold weather anti-exposure suits.

In order to receive authorization to conduct polar operations, the operator would be required to conduct an FAA observed validation of its polar program. As part of the validation, the operator would be required to exercise its reaction and recovery plan that would be implemented in the event of a diversion to a designated polar area alternate airport.

Part 135

Global Issues for Part 135

Discussion of General Issues in Part 135

(1) Defining a safe operation for ETOPS

The intent of the proposed amendments to part 135 is to establish ETOPS safety standards for commuter and on-demand operators that are adapted for the unique nature of those operations. Regardless of whether a commercial flight is operated under part 121 or part 135, the same safety considerations of ETOPS apply. The FAA believes that these proposals would preclude and protect any diversions.

The applicability of ETOPS requirements would differ from part 121 to part 135. Part 135 casts a wider net than part 121. Part 135 operators range from one or two person companies operating a single Cessna 172 to larger companies that operate fleets of turbojets. As a practical matter, these amendments would not affect the vast majority of part 135 operators. Unlike a typical part 121 operator, a part 135 on-demand operators may fly on a given route only once or twice in a year. This proposal takes into account these differences.

Under this proposal, ETOPS requirement under part 135 would