

## Explanation

The proposal assures that the pilot in command of an ETOPS flight is notified as to the time basis, (for example, 120-minute or 180-minute ETOPS) including the Minimum Equipment List (MEL) limitations, under which the flight is dispatched.

## Proposed New Paragraph 121.689(a)(8) Flight Release Form: Supplemental Operations

The FAA proposes to add a new paragraph 121.689(a)(8) to add the ETOPS time basis to the content of the flight release of each ETOPS flight.

## Explanation

The proposal assures that the pilot in command of an ETOPS flight is aware of the limitations (for example, 120-minute or 180-minute ETOPS) including the minimum Equipment List (MEL) limitations, under which the flight is released.

## Proposed New 14 CFR 121 Appendix O Requirements for ETOPS Approvals

Appendix O to Part 121 would establish the operational requirements and limitations for the various ETOPS diversion time thresholds and areas of ETOPS applicability. In very general terms, Appendix O would codify existing approvals and operational practices that have been developed since 1985 and it would also establish requirements for ETOPS flights that certificate holders may elect to operate in the future. These latter ETOPS flights would have diversion time bases exceeding 180 minutes and are not authorized at this time. The FAA points out again that 207-minute ETOPS flights are an extension of the 180-minute authority and not an independent diversion time authority.

### A. ETOPS Authorizations: Airplanes With 2 engines

#### (a) 75 Minutes ETOPS

The proposed 75-minute ETOPS diversion authority is a codification of the criteria that was specified in AC 120-42A. This deviation authority has traditionally been used for operations in the Caribbean, Western Atlantic, and less frequently, in the North Atlantic areas of operation.

#### (b) 90-Minute ETOPS (Micronesia)

This ARAC recommendation for a new diversion authorization is to establish a 90-minute ETOPS authority for exclusive use on Micronesia routes. This geographical area has been served with ETOPS approved airplanes with operational authority to dispatch at 120

minutes. The only difference between the proposed 90-minute level in comparison to 120-minute ETOPS is to require the ETOPS pre-departure check on the outbound segment only. The nature of flights to serve this area involves destinations to islands at frequencies such that it becomes unreasonable for the operator to have an ETOPS certified mechanic stationed at the arrival location. An alternative means is for the operator to carry on board each flight a certified ETOPS mechanic that would conduct the ETOPS pre-departure check prior to the return to the return flight. This option is an inefficient use of a certified mechanic. The Micronesia route structure is such that it lies beyond a 75-minute authority (which would allow for the operation to be conducted without requiring the ETOPS pre-departure check for the return flight), but short of requiring the full 120-minute diversion. The Micronesia area in terms of weather and airport availability is similar to the area associated with ETOPS conducted in the Caribbean area.

The FAA proposes to allow for a 90-minute ETOPS diversion authority for use in Micronesia routes provided that the airplane is type design approved, and configured to the CMP standards for 120-minutes. The operations are to be conducted to 120-minute ETOPS standards and requirements and MEL requirements, with the exception that the ETOPS pre-departure check will not be required for the return leg of the round trip flight.

#### (c) 120 Minutes

The FAA proposed 120-minute ETOPS diversion authority is a codification of the criteria that was specified in AC 120-42A. The airplane and engine combination would have to be ETOPS type design approved for a minimum of 120-minutes and configured to the standards specified in the CMP document. All flight operations dispatched or released to 120-minute ETOPS standards would have to comply with MEL requirements specified for the operation.

#### (d) 138 Minutes

The FAA proposed 138-minute ETOPS diversion authority is a codification of the criteria that is specified in the 138-minute ETOPS policy letter. No changes to the present existing requirements are proposed. Operators may request 138-minute ETOPS operational approval on an airplane engine combination that has an ETOPS type design approval of 120-minutes provided that the airplane

engine combination has been assessed by the FAA for the extended diversion length. In such cases the dispatch authority may only be exercised on a flight-by-flight exception basis. The operator will be required to amend and use a MEL that has been amended to include those items that are specified for operations beyond 120-minutes. Operators approved to conduct 138-minute ETOPS with an airplane and engine combination that has 180-minute ETOPS type design approval may do so without any restriction to frequency of use. The operator must dispatch or release such flights in accordance with the MEL provisions for ETOPS beyond 120 minutes.

#### (e) 180 Minutes

The FAA proposed 180-minute ETOPS diversion authority is a codification of the criteria that was specified in AC 120-42A. The airplane and engine combination would have to be ETOPS type design approved for a minimum of 180-minutes and configured to the standards specified in the CMP document for 180-minutes. All flight operations dispatched or released to 180-minute ETOPS standards would have to comply with MEL requirements specified for the operation.

#### (f) Greater Than 180 Minutes

The FAA accepts the ARAC recommendations to include the increased ETOPS diversion authorizations beyond 180-minutes. ETOPS beyond 180 minutes has been in use on a limited, flight by flight exception basis, since March 2000 with the issuance of the 207-minute ETOPS policy. The industry has demonstrated its capability to maintain the necessary engine and systems reliability for such operations using the B-777 airplane. Certain geographical areas of the world have few adequate airports along flight routing, and are separated by a distance that is farther than what could be flown within 180-minutes. Other geographical areas have severe weather patterns and weather systems that at times would not allow for the designation and use of area airports as ETOPS alternates. In these cases the air carrier would benefit with better dispatch reliability and added safety of the flight with the ability to flight plan with diversion times that exceed 180-minutes to avoid exposure to such conditions.

The authority for this increased diversion distance flight planning is dependent on the demonstrated capability of the operator's ETOPS program, and the use of an airplane and engine combination that is approved for such operations. The FAA therefore