

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

N 8900.106

National Policy

Effective Date:  
1/11/10

Cancellation Date:  
1/11/11

**SUBJ:** Issuance of New Operations Specification B342, Extended Operations With Two-Engine Airplanes for 14 CFR Parts 121 and 135

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**1. Purpose of This Notice.** This notice provides guidance for certificate-holding district offices (CHDO) and principal operations inspectors (POI) regarding Extended Operations (ETOPS) with two-engine airplanes for Title 14 of the Code of Federal Regulations parts 121 and 135, and issuance of operations specifications (OpSpec) B342. This notice also announces the cancellation of OpSpec B042, Extended-Range Operations with Two-Engine Airplanes (ER-OPS) Under Part 121. For part 121 operators conducting ETOPS, B342, which is a nonstandard OpSpec, will supersede standard OpSpec B042.

**2. Audience.** The primary audience for this notice is Flight Standards District office (FSDO) and Certificate Management Office (CMO) aviation safety inspectors with oversight responsibility of air carriers. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters.

**3. Where You Can Find This Notice.** You can find this notice on the MyFAA Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/). Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators and the public may find this information at: <http://fsims.faa.gov>.

**4. Background.** The FAA published the final ETOPS rule on January 16, 2007 with a mandatory compliance date of August 13, 2008. This rule established regulations governing the design, operation, and maintenance of certain airplanes operated under the following conditions:

- In accordance with part 121, farther than 60 minutes' flying time from an adequate airport for a two-engine airplane, or 180 minutes for a passenger-carrying airplane with more than two engines; and
- In accordance with part 135, farther than 180 minutes from an adequate airport for a two-engine airplane, and all passenger-carrying airplanes with two or more engines.

**a. Applicable to Parts 121 and 135.** Before the publication of the final rule, ETOPS was only allowable by deviation to part 121, § 121.161. The FAA had previously defined ETOPS as Extended Range Operations with two-engine airplanes, which only applied to part 121 operations. After publication of the final rule ETOPS was re-defined as Extended Operations,

and became applicable to operations under parts 121 and 135, and to airplanes with two or more engines.

**b. Compliance With the Final ETOPS Rule.** In order to provide a method of compliance with the final ETOPS rule, the FAA is introducing OpSpec B342 for two-engine aircraft operated under parts 121 and 135.

**5. Guidance.** FAA Order 8900.1 Volume 3, Chapter 18, Section 4, Part B Operations Specifications—En Route Authorizations and Limitations, contains guidance on how to issue OpSpec B342. Order 8900.1, Volume 4, Chapter 6, Airplane Authorizations and Limitations, contains guidance regarding the validation, operational approval, evaluation, and surveillance of an ETOPS program. In addition to the guidance in Order 8900.1, review Advisory Circular (AC) 120-42, Extended Operations (ETOPS and Polar Operations), and AC 135-42, Extended Operations (ETOPS) and Operations in the North Polar Area, current edition, as applicable.

**6. Action.** Authorization to conduct ETOPS in accordance with B342 requires approval by the Director of Flight Standards, AFS-1 for issuance. Refer to Order 8900.1 Volume 3, Chapter 18, Section 2, Automated Operations Safety System, for the nonstandard OpSpec paragraph/template request process. POIs will have 60 calendar-days from the date of this notice to send their request to AFS-200 to obtain approval from AFS-1 to issue OpSpec B342 in lieu of B042.

**a. Current Part 121 Operators With ETOPS Authority.** For part 121 operators who are currently issued standard OpSpec B042, nonstandard OpSpec B342 replaces it.

(1) If there are no changes to the operator's current ETOPS program, the POI should make a request to AFS-200 to change B042 to B342. Once approval has been granted and OpSpec B342 has been issued, POIs should archive OpSpec B042. In addition, the deviation to § 121.161(a) should be removed from the operator's OpSpec A005.

(2) If a part 121 operator with an existing ETOPS program elects to make changes to that program any time following the date of this notice the program changes must be made in accordance with the guidance contained in Volume 3, Chapter 18, Section 2, and Volume 4, Chapter 6, for the issuance of OpSpec B342.

**b. Initial Approval.** For part 121 and part 135 operators applying for initial approval for ETOPS authority, follow the guidance on the approval process as outlined in Volume 3, Chapter 18, Section 2 and Volume 4, Chapter 6.

**7. Disposition.** We will not permanently incorporate the information in this notice in FSIMS before this notice expires. Direct questions or comments concerning this notice to the Air Carrier Operations Branch, AFS-220, at 202-267-8166.



John M. Allen  
Director, Flight Standards Service

**Appendix A. Sample OpSpec B342 14 CFR Part 121**

B342. Extended Operations (ETOPS) with Two-Engine Airplanes Under Part 121

HQ Control: 09/29/08  
HQ Revision: 000

**Select:**

a. In accordance with 14 CFR part 121 Appendix P the certificate holder is authorized to conduct validation flights for Extended Operations (ETOPS) under part 121 with two-engine airplanes in accordance with the limitations and provisions of this operations specification only as described below.

**TEXT01**

The certificate holder may not conduct any other ETOPS flights under these operations specifications.

**OR**

a. In accordance with part 121 Appendix P the certificate holder is authorized to conduct ETOPS with two-engine airplanes only within the ETOPS areas of operation where this paragraph is referenced in operations specification B050 of these operations specifications. The certificate holder may not conduct any other ETOPS flights under these operations specifications.

b. The certificate holder is authorized to conduct ETOPS with two-engine, turbine-powered airplanes under part 121 over a route that contains a point farther than 60 minutes' flying time from an adequate airport at an approved one-engine inoperative cruise speed under standard conditions in still air.

c. General ETOPS Provisions. Except as provided in subparagraph f below, the certificate holder must conduct all ETOPS in accordance with the limitations and provisions of subparagraphs within these operations specifications:

(1) Authorized Areas of Operations. The certificate holder is authorized to conduct part 121 ETOPS within the geographic areas specified in operations specification B050 of these operations specifications where the maximum diversion time at the approved one-engine inoperative cruise speed (under standard conditions in still air) at any point along the route of flight to an adequate airport is equal to or less than the maximum diversion time specified in Table 1, below, and referenced in subparagraph b of B050, "Limitations, Provisions and Specific Requirements."

**Table 1—Authorized ETOPS Airplanes With Two Engines and Maximum Diversion Times**

Airplane M/M/S	Aircraft Registration No.	Aircraft Engine	Maximum Diversion Times <sup>1</sup>

(2) If a certificate holder does not operate in accordance with its ETOPS authority as contained in these operations specifications (use its ETOPS authority) for a period of 6 months, the FAA may rescind the authority to operate in that area.

d. Flight Dispatch or Flight Release Limitations. The certificate holder may not dispatch or release an ETOPS flight up to 180 minutes, unless the maximum diversion time at the approved one-engine inoperative cruise speed (under standard atmospheric conditions in still air) from any point along the planned route of flight to an ETOPS alternate airport is equal to or less than the maximum diversion time specified in Table 1 above. The certificate holder may not dispatch or release an ETOPS flight greater than 180 minutes unless, at the time of dispatch or release; (1) the maximum diversion time at the all-engine operating cruise speed, corrected for wind and temperature, does not exceed the airplane's most limiting fire suppression system time minus 15 minutes; and (2) the maximum diversion time at the approved one-engine inoperative cruise speed, corrected for wind and temperature, from any point along the planned route of flight to an ETOPS alternate airport does not exceed the airplane's most

<sup>1</sup> For Maximum Diversion Times, enter one of the following values: For ETOPS authority up to 180 minutes, enter the Maximum FAA ETOPS approval level of the aircraft, or series of aircraft (if applicable), for each specified engine/airframe combination. For ETOPS authority beyond 180 minutes, enter the time-limited system capability per § 121.633(b) for each specified engine/airframe combination.

limiting ETOPS significant system time (other than the airplane’s most limiting fire suppression system time) minus 15 minutes.

(1) ETOPS alternate(s) must be designated in a dispatch or flight release for use in the event of a diversion during ETOPS.

(2) At the time of dispatch or flight release an ETOPS alternate must have the appropriate weather reports or forecasts, or any combination thereof, that indicate the weather conditions will be at or above the ETOPS alternate airport minima specified in operation specification C055 of these operations specifications when it might be used (from the earliest to the latest possible landing time), and the field condition reports indicate that a safe landing can be made.

(3) ETOPS Alternate Airports. In addition to a flight’s departure and destination airport, regular, refueling, or provisional airports specified in operation specification C070, the certificate holder is also authorized to use the airports listed below as ETOPS alternates. The certificate holder may not use any other airport as an ETOPS alternate.

**Table 2—ETOPS Alternates**

Airport (Ident)	Special Conditions/Limitations

e. Authorized Airplanes. The certificate holder is authorized to conduct ETOPS with the two-engine airplanes listed in Table 1 above of these operations specifications, subject to the diversion times specified therein.

f. Special Provisions for Western Atlantic and Caribbean Sea ETOPS, if authorized. The certificate holder is authorized special ETOPS with two-engine airplanes in the Western Atlantic and Caribbean Sea (over 60 minutes with a deviation to part 121, § 121.161), with the following airplanes and special equipment. (If this area is not authorized, enter *N/A* in both columns.)

**Table 3—Special Provision for Western Atlantic and Caribbean Sea ETOPS**

Airplane Type Make/Model/Series	Special Equipment/Limitations

(1) The certificate holder must conduct part 121 ETOPS in accordance with its approved ETOPS program and must operate within the areas of the North Atlantic Ocean west of the western boundary of North Atlantic Tracks/minimum navigation performance specification airspace and the Caribbean Sea west of a line from 27 degrees N/60 degrees W to 10 degrees N/55 degrees W as specified in operations specification B050 of these operations specifications and all of the following conditions must be met:

(2) Maximum Diversion Time. The maximum diversion time, at any point along the route of flight, to an adequate airport is 75 minutes or less at the approved one-engine inoperative cruise speed (under standard atmospheric conditions in still air).

(3) Flight Dispatch or Flight Release Limitations. The certificate holder may not dispatch or release an ETOPS flight in this area unless:

(a) That flight is operated at a weight that permits the flight at the approved one-engine inoperative cruise speed and power setting (based on net cruise performance data in the ambient temperature conditions likely to be encountered) to maintain a flight altitude at or above the minimum en route altitude, and to clear all obstacles along the route of flight to the destination airport and any required diversionary airports.

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Appendix A

(b) In addition to any equipment required by the basic provisions of the FAA Master Minimum Equipment List, the special equipment required by paragraph f is installed and operational.

*TEXT99*

**Appendix B. Sample OpSpec B342 14 CFR Part 135**

B342. Extended Operations (ETOPS) with Two-Engine Airplanes Under Part 135

HQ Control: 09/29/08  
HQ Revision: 000

**Select:**

a. In accordance with 14 CFR part 135 Appendix G the certificate holder is authorized to conduct validation flights for Extended Operations (ETOPS) under part 135 with two-engine airplanes in accordance with the limitations and provisions of this operations specification only as described below.

**TEXT01**

The certificate holder may not conduct any other ETOPS flights under these operations specifications.

**OR**

a. In accordance with part 135 Appendix G the certificate holder is authorized to conduct ETOPS only within the ETOPS areas of operation where this paragraph is referenced in operations specification B050. The certificate holder may not conduct any other ETOPS flights under these operations specifications.

b. The certificate holder is authorized to conduct ETOPS with two-engine, turbine-powered airplanes under part 135 over a route that contains a point farther than 180 minutes' flying time, but not longer than 240 minutes' flying time, from an adequate airport at an approved one-engine inoperative cruise speed under standard conditions in still air.

c. General ETOPS Provisions. The certificate holder must conduct all ETOPS in accordance with the limitations and provisions of subparagraphs within these operations specifications:

(1) Authorized Areas of Operations. The certificate holder is authorized to conduct part 135 ETOPS within the geographic areas specified in operation specification B050 of these operations specifications where the maximum diversion time at the approved one-engine inoperative cruise speed (under standard conditions in still air) at any point along the route of flight to an adequate airport is equal to or less than the maximum diversion time specified in Table 1 and referenced in paragraph b of B050, "Limitations, Provisions and Specific Requirements."

**Table 1—Authorized ETOPS Airplanes With Two Engines and Maximum Diversion Times**

Airplane M/M/S	Aircraft Registration No.	Aircraft Engine	Maximum Diversion Times <sup>2</sup>

(2) If a certificate holder does not operate in accordance with its ETOPS authority, as contained in these operations specifications (use its ETOPS authority) for a period of 6 months, the FAA may rescind the authority to operate in that area.

d. Flight Release Limitations. The certificate holder may not release an ETOPS flight unless; (1) the maximum diversion time at the all engine operating cruise speed, corrected for wind and temperature, does not exceed the airplane's most limiting fire suppression system time minus 15 minutes; and (2) the maximum diversion time at the approved one-engine inoperative cruise speed, corrected for winds and temperature, from any point along the planned route of flight to an ETOPS alternate airport does not exceed the airplane's most limiting ETOPS significant system time (other than the airplane's most limiting fire suppression system time) minus 15 minutes.

(1) ETOPS alternate(s) must be designated in a flight release for use in the event of a diversion during ETOPS.

(2) At the time of flight release an ETOPS alternate must have the appropriate weather reports or forecasts, or any combination thereof, that indicate the weather conditions will be at or above the ETOPS alternate airport

<sup>2</sup> For maximum diversion times, enter the time-limited system capability per § G135.2.5(d) for each specified engine/airframe combination.

minimums specified in operations specification C055 when it might be used (from the earliest to the latest possible landing time), and the field condition reports indicate that a safe landing can be made.

(3) ETOPS Alternates. In addition to a flight’s departure and destination airport, regular, refueling, or provisional airports specified in operations specification C070, the certificate holder is also authorized to use the airports listed below as ETOPS alternates. The certificate holder may not use any other airports as an ETOPS alternate.

**Table 2—Approved ETOPS Alternate Airports**

Airport (Ident)	Special Conditions/Limitations
TABL01	TABL02

e. Authorized Airplanes. The certificate holder is authorized to conduct ETOPS with the two-engine airplanes listed in Table 1 of these operations specifications, subject to the diversion times specified therein.

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