

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.543

National Policy

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SUBJ: OpSpec B342, Extended Operations (ETOPS) with Two-Engine Airplanes under Part 121 or 135

1. Purpose of This Notice. This notice announces a mandatory revision to Operations Specification (OpSpec) B342, Extended Operations (ETOPS) with Two-Engine Airplanes under Part 121 or 135. The purpose of the revision is to remove the requirement to list each individual airplane authorized for ETOPS, by registration number, in OpSpec B342 Table 1, Authorized ETOPS Airplanes with Two Engines and Maximum Diversion Times.

2. Audience. The primary audience for this notice is the Flight Standards (FS) Safety Assurance offices' Principal Operations Inspectors (POI) responsible for approving an air carrier's ETOPS program. The secondary audience includes air carriers and operators, as well as the FS Safety Standards and Foundational Business offices.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at 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 can find this notice on the Federal Aviation Administration's (FAA) website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background. The Operations Specification Working Group (OSWG) requested the FAA update OpSpec B342 by removing Table 1, which lists each airplane used in ETOPS by make, model, and series (M/M/S); airplane registration number; airplane engine; and maximum diversion time. The OSWG cited redundancy with OpSpec D086, Maintenance Program Authorization for Two-Engine Airplanes Used in Extended-Range Operations, which lists some similar information. The OSWG also indicated that the listing of individual airplanes in two different OpSpecs was unnecessarily time consuming.

a. FAA Review. The FAA reviewed the OSWG request and determined that the listing of the airplane M/M/S and airplane engine, which constitutes the airplane-engine combination (AEC), is critical to the B342 authorization, as is the maximum diversion time. While B342 and D086 do contain some redundant information, it is important to note they are two distinctly different, yet interrelated, authorizations. Information contained in each of those OpSpecs is relevant and necessary within the scope of the authorization they provide.

(1) D086 Authorizes Each Airplane. OpSpec D086 is a maintenance program authorization that authorizes the use of specific airplanes in ETOPS, based on certain systems' reliability and programs and the Configuration, Maintenance, and Procedures (CMP) document.

(2) B342 Authorizes the Certificate Holder to Conduct ETOPS. OpSpec B342 is an operational authorization that allows the certificate holder to conduct ETOPS.

b. Update to B342 Table 1. In considering the request of the OSWG, the FAA has determined that retaining Table 1 of B342 is necessary to capture the AEC being used in ETOPS as well as the maximum diversion time for that AEC. However, the FAA also believes that it is reasonable and warranted to eliminate the requirement to list each airplane authorized for ETOPS, by registration number, in OpSpec B342. Eliminating this requirement will provide significant relief in the amount of information that needs to be entered into the table. The resulting revision to the B342 template eliminates the column of the table in which the airplane registration number would be listed. There are no other changes to the B342 template.

5. Revised B342 Template and Guidance. The Air Transportation Division (AFS-200) has revised the templates for Title 14 of the Code of Federal Regulations (14 CFR) parts 121 and 135 and part 121/135 combination certificates. In this revision, B342 Table 1 was revised to remove the requirement to list the airplane registration number. Samples of the templates are included in the attached appendices.

a. Guidance. Updated guidance on how to issue OpSpec B342 in the Web-based Operations Safety System (WebOPSS) is contained in FAA Order 8900.1, Volume 3, Chapter 18, Section 4, Part B Operations Specifications—En Route Authorizations and Limitations.

b. Template Samples. This notice contains the following:

- The sample OpSpec B342 template in Appendix A applies to part 121.
- The sample OpSpec B342 template in Appendix B applies to part 135.
- The sample OpSpec B342 template in Appendix C applies to part 121/135.

6. Tracking Individual Airplanes. OpSpec D086 Table 1 will remain intact and continue to list each airplane authorized for ETOPS by registration number.

7. Action. This revision to B342 is mandatory. Within 90 calendar-days of the publication of this notice, POIs must issue the new B342 template.

a. Drafting the New B342. When drafting a revised B342, POIs will be able to select or load the information into B342 based on what is currently authorized in the issued (active) OpSpec. It is important to note that Table 1 will not auto-populate due to the removal of the registration number column. Therefore, POIs will begin by populating Tables 2 and 3 from "Active" in the WebOPSS workspace. Using the dropdown list provided, POIs must then repopulate Table 1 with only what is currently approved and authorized in the certificate holder's active B342 OpSpec.

b. AFS-200 Approval Not Required to Transfer Existing ETOPS Authority Into Revised OpSpec B342. B342 is a nonstandard OpSpec that requires approval to issue from AFS-200. In most circumstances, prior approval from AFS-200 is required to issue or reissue the OpSpec. However, in accordance with this notice, the certificate-holding district office (CHDO) is not required to obtain prior approval from AFS-200 to issue the revised B342 for the purpose of updating Table 1. This is allowable provided only what is currently approved and authorized is reentered in the new OpSpec. No new ETOPS approvals are authorized, in accordance with this notice. Any changes to the current information require approval from AFS-200. The following exceptions apply:

(1) The revised B342 template does not require the listing of airplanes by registration number. This is a change to the template and the data structure of Table 1. It does not represent a change in the certificate holder's current information. Airplanes authorized for ETOPS are still listed in the certificate holder's D086.

(2) In accordance with policy contained in Order 8900.1, Volume 3, Chapter 18, Section 4, OpSpec B342, subparagraph D5), adding or removing an ETOPS alternate airport from B342 Table 2, ETOPS Alternate Airports, does not require additional approval by AFS-200.

8. Disposition. The information in this notice has been incorporated into Order 8900.1, Volume 3, Chapter 18, Section 4. Direct questions concerning the information in this notice to the Air Carrier Operations Branch (AFS-220) at 202-267-8166.

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Appendix A. Sample OpSpec B342, Extended Operations (ETOPS) with Two-Engine Airplanes under Part 121

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

 \bigcirc a. In accordance with 14 CFR Part 121 Appendix P, the certificate holder is authorized to conduct Extended Operations (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.

[Text Box]

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. <u>General ETOPS Provisions</u>. Except as provided in subparagraph f below, the certificate holder must conduct all ETOPS in accordance with the limitations and provisions set forth in this operations specification.

(1) <u>Authorized Areas of Operations</u>. 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 B050 subparagraph b, Limitations, Provisions, and Special Requirements.

Airplane M/M/S	Airplane Engine	Maximum Diversion Times
	[Dropdown List]	[Combo Box] 120 180 198 207

Table 1 – Authorized ETOPS Airplanes with Two Engines and Maximum Diversion Times

(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. <u>Flight Dispatch or Flight Release Limitations</u>. The certificate holder may not dispatch or release an ETOPS flight up to 180 minutes (including 207 minutes in the North Pacific Area of Operations) 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 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 operations 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) <u>ETOPS Alternate Airports</u>. In addition to a flight's departure and destination airports, regular, refueling, or provisional airports specified in operations specification C070 of these operations specifications, the certificate holder is also authorized to use the airports listed in Table 2 below as ETOPS alternates. The certificate holder may not use any other airport as an ETOPS alternate.

Airport (Ident)	Special Conditions/Limitations	

Table 2 – ETOPS Alternate Airports

e. <u>Authorized Airplanes</u>. The certificate holder is authorized to conduct ETOPS with the two-engine airplanes listed in Table 1 of this operations specification, subject to the diversion times specified therein.

f. <u>Special Provisions for Western Atlantic and Caribbean Sea ETOPS, If Authorized</u>. The certificate holder is authorized special ETOPS with two-engine airplanes in the Western Atlantic and Caribbean Sea, with the following airplanes and special equipment listed in Table 3 below.

Table 3 – Special Provision for	Western Atlantic and	Caribbean Sea ETOPS
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Airplane Type Make/Model/Series	Special Equipment/Limitations

(1) The certificate holder must conduct Part 121 ETOPS within areas of the North Atlantic Ocean west of the western boundary of the North Atlantic High Level 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) <u>Maximum Diversion Time</u>. 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) <u>Flight Dispatch or Flight Release Limitations</u>. 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.

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

Appendix B. Sample OpSpec B342, Extended Operations (ETOPS) with Two-Engine Airplanes under Part 135

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

 \bigcirc a. In accordance with 14 CFR Part 135 Appendix G, the certificate holder is authorized to conduct Extended Operations (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.

[Text Box]

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. <u>General ETOPS Provisions</u>. The certificate holder must conduct all ETOPS in accordance with the limitations and provisions set forth in this operations specification.

(1) <u>Authorized Areas of Operations</u>. The certificate holder is authorized to conduct Part 135 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 B050 subparagraph b, Limitations, Provisions, and Special Requirements.

Airplane M/M/S	Airplane Engine	Maximum Diversion Times
	[Dropdown List]	[Combo Box] 120 180 198 207

Table 1 – Authorized ETOPS Airplanes with Two Engines and Maximum Diversion Times

(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. <u>Flight Release Limitations</u>. 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 minima 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) <u>ETOPS Alternates</u>. In addition to a flight's departure and destination airports, regular, refueling, or provisional airports specified in operations specification C070 of these operations specifications, the certificate holder is also authorized to use the airports listed in Table 2 below as ETOPS alternates. The certificate holder may not use any other airports as an ETOPS alternate.

Airport (Ident)	Special Conditions/Limitations	

 Table 2 – ETOPS Alternate Airports

e. <u>Authorized Airplanes</u>. The certificate holder is authorized to conduct ETOPS with the two-engine airplanes listed in Table 1 of this operations specification, subject to the diversion times specified therein.

Appendix C. Sample OpSpec B342, Extended Operations (ETOPS) with Two-Engine Airplanes under Part 121/135

SECTION I. Part 121 ETOPS Operations

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

 \bigcirc a. In accordance with 14 CFR Part 121 Appendix P, the certificate holder is authorized to conduct Extended Operations (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.

[Text Box]

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. <u>General ETOPS Provisions</u>. Except as provided in subparagraph f below, the certificate holder must conduct all ETOPS in accordance with the limitations and provisions set forth in this operations specification.

(1) <u>Authorized Areas of Operations</u>. 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 B050 subparagraph b, Limitations, Provisions, and Special Requirements.

Table 1 – Part 121 Authorized ETOPS Airplanes with Two Engines and Maximum
Diversion Times

Airplane M/M/S	Airplane Engine	Maximum Diversion Times
	[Dropdown List]	[Combo Box] 120 180 198 207

(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. <u>Flight Dispatch or Flight Release Limitations</u>. The certificate holder may not dispatch or release an ETOPS flight up to 180 minutes (including 207 minutes in the North Pacific Area of Operations) 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 all-engine operating 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 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 operations 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) <u>ETOPS Alternate Airports</u>. In addition to a flight's departure and destination airports, regular, refueling, or provisional airports specified in operations specification C070 of these operations specifications, the certificate holder is also authorized to use the airports listed in Table 2 below as ETOPS alternates. The certificate holder may not use any other airport as an ETOPS alternate.

Airport (Ident)	Special Conditions/Limitations	

Table 2 – Part 121 ETOPS Alternate Airports

e. <u>Authorized Airplanes</u>. The certificate holder is authorized to conduct ETOPS with the two-engine airplanes listed in Table 1 of this operations specification, subject to the diversion times specified therein.

f. <u>Special Provisions for Western Atlantic and Caribbean Sea ETOPS, If Authorized</u>. The certificate holder is authorized special ETOPS with two-engine airplanes in the Western Atlantic and Caribbean Sea, with the following airplanes and special equipment listed in Table 3 below.

Table 3 – Part 121 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 within areas of the North Atlantic Ocean west of the western boundary of the North Atlantic High Level 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) <u>Maximum Diversion Time</u>. 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) <u>Flight Dispatch or Flight Release Limitations</u>. 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.

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

SECTION II. Part 135 ETOPS Operations

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

 \bigcirc a. In accordance with 14 CFR Part 135 Appendix G, the certificate holder is authorized to conduct Extended Operations (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.

[Text Box]

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. <u>General ETOPS Provisions</u>. The certificate holder must conduct all ETOPS in accordance with the limitations and provisions set forth in this operations specification.

(1) <u>Authorized Areas of Operations</u>. The certificate holder is authorized to conduct Part 135 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 4 below, and referenced in B050 subparagraph b, Limitations, Provisions, and Special Requirements.

Table 4 – Part 135 Authorized ETOPS Airplanes with Two Engines and MaximumDiversion Times

Airplane M/M/S	Airplane Engine	Maximum Diversion Times
	[Dropdown List]	[Combo Box] 120 180 198
		207

(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. <u>Flight Release Limitations</u>. 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 dispatch or 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 minima 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) <u>ETOPS Alternates</u>. In addition to a flight's departure and destination airports, regular, refueling, or provisional airports specified in operations specification C070 of these operations specifications, the certificate holder is also authorized to use the airports listed in Table 5 below as ETOPS alternates. The certificate holder may not use any other airports as an ETOPS alternate.

Airport (Ident)	Special Conditions/Limitations

e. <u>Authorized Airplanes</u>. The certificate holder is authorized to conduct ETOPS with the two-engine airplanes listed in Table 4 of this operations specification, subject to the diversion times specified therein.