

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.383

**National Policy** 

Effective Date: 9/16/16

Cancellation Date: 9/16/17

**SUBJ:** OpSpec B343, Performance-Based Contingency Fuel Requirements for Flag Operations

- 1. Purpose of This Notice. This notice provides revised guidance for Federal Aviation Administration (FAA) certificate-holding district offices (CHDO) and principal inspectors (PI) assigned to operators conducting operations under Title 14 of the Code of Federal Regulations (14 CFR) part 121 flag operations. This notice amends all Operations Specification (OpSpec) B343, Performance-Based Contingency Fuel Requirements for Flag Operations, templates (i.e., OpSpec B343 for operators conducting airplane operations under part 121 flag operations). This is a mandatory change to OpSpec B343.
- **2. Audience.** The primary audience for this notice is FAA CHDOs and PIs assigned to operators conducting airplane operations under part 121. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters (HQ).
- **3.** Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site 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 FAA's Web site at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations\_policies/orders\_notices.
- **4. Background.** OpSpec B343 allows part 121 flag operators to deviate from the fuel requirements of part 121, § 121.645(b)(2). This OpSpec was modified to harmonize with International Civil Aviation Organization (ICAO) Annex 6, Part I, and take advantage of scheduled air carriers' considerable investment in fuel-planning, tracking, and communication capabilities. The statistical method calculates a required unplanned contingency fuel, which is specific to each unique airplane make and model, departure airport, arrival airport, and arrival time window combination.
- **5. Guidance.** This notice contains the sample OpSpec B343 template in Appendix A, which applies to part 121 flag air carrier operations.
- **6. Action.** PIs should review the revised guidance for issuance of OpSpec B343. Principal operations inspectors (POI) should provide this notice to the operators for whom they are responsible, alerting them to updated operating procedures, as well as required pilot and

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dispatcher knowledge and training. This authorization is mandatory, with a compliance date of 365 days from the HQ control date of the templates in the Web-based Operations Safety System (WebOPSS).

**7. Disposition.** We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the Air Transportation Division (AFS-200) at 202-267-8166.

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Deputy Director, Flight Standards Service

## Appendix A. Sample OpSpec Paragraph B343, Performance-Based Contingency Fuel Requirements for Flag Operations: 14 CFR Part 121

a. The certificate holder is authorized, under a deviation as provided in 14 CFR part 121, § 121.645, to conduct certain 14 CFR flag air carrier operations using the fuel supplies specified below in accordance with the special limitations and provisions of this operations specification.

The policies and procedures must be acceptable to the Administrator and included in the certificate holder's documentation of the Performance-Based Contingency Fuel (PBCF) program. Flightcrew members, dispatchers, and those personnel who are responsible for the oversight and reporting of the PBCF program must be trained in the use of these procedures.

- b. <u>Required Fuel Supply</u>. Each airplane used by the certificate holder must have enough fuel on board, considering the requirements of § 121.647, to accomplish the requirements of this operations specification and the following:
  - (1) Fly to and land at the airport to which it is dispatched.
- (2) After that, unplanned contingency fuel (i.e., PBCF) sufficient to fly for a period of time, restricted to no less than 5 minutes of fuel (calculated at 1,500 feet holding speed), based on the statistical burn deviation specific to each airplane make and model/city pair/arrival time window combination authorized in the reference document in Table 1. When no PBCF value is available, the unplanned contingency fuel value shall not be less than 10 percent of en route time, or, for operators with an approved minimum landing fuel program, it shall be not less than 5 percent of the en route time.

The PBCF fuel must meet the following requirements:

- (a) Option 1. For air carriers that have an approved minimum landing fuel program: the probability of burning all PBCF is no greater than 1 in 10 in forecasted non-convective conditions at the destination airport, or 1 in 100 when thunderstorms are forecasted or can reasonably be expected in the vicinity of the destination airport.
- (b) Option 2. For air carriers that do not have an approved minimum landing fuel program, the probability of burning all PBCF is no greater than 1 in 70 in forecasted non-convective conditions at the destination. When thunderstorms are forecasted or can reasonably be expected in the vicinity of the destination airport, the unplanned contingency fuel value shall be no less than 10 percent of the total time required to fly from departure to the intended destination airport.
- (3) Where a destination alternate airport is required, carry the amount of fuel required to enable the airplane to:
  - (a) Perform a missed approach at the destination airport;
  - (b) Climb to the expected cruising altitude;
  - (c) Fly the expected routing;

- (d) Descend to the point where the expected approach is initiated; and
- (e) Conduct the approach and landing at the destination alternate airport.
- (4) When no alternate is required:
- (a) The certificate holder must carry additional fuel to account for a possible missed approach and return to land at the destination airport.
- (b) The fuel planned when no alternate airport is required must include a minimum arrival fuel to divert to an airport with a runway that meets the requirements of § 121.197 and has an operable instrument approach. Planned arrival fuel at the intended destination must allow the flight to divert and land with not less than the minimum arrival fuel specified in § 121.645(b)(4). (This is for planning purposes only.)
- (5) After that, to fly for 30 minutes at holding speed at 1,500 feet above the alternate airport (or the destination airport if no alternate is required) under actual or forecasted temperatures and conditions.
- c. <u>Approved Airplanes and Areas</u>. The certificate holder is authorized to conduct these operations using the approved airplane make and model/city pair/arrival time window combination(s) as listed in the approved document referenced in Table 1 and with provisions of this operations specification:

**Table 1 – Approved Document and Revision** 

<b>Document Name and Location</b>	Revision Status
Airline Performance Based Tracking Tool/ Flight Operations Manual appendix 1	Original

- d. <u>Special Limitations and Provisions</u>. The certificate holder shall conduct operations that use the fuel supplies authorized by this operations specification in accordance with all of the following conditions:
- (1) As applicable, the flight shall be dispatched in accordance with § 121.621, Alternate Airport for Destination: Flag Operations. Additionally, if the destination airport has only one usable runway, an alternate airport must be listed on the dispatch release.
- (2) The provisions of this operations specification may not be used in conjunction with the provisions of operations specification A012, B043, or B044.
- (3) The certificate holder must implement a fuel consumption bias program to maintain a hull-specific performance monitoring system that continuously monitors, analyzes, and compares the fuel performance calculations to the actual performance for each individual airplane used under this deviation.

(4) Accurate meteorological data, including upper wind information equal to or more accurate than 1.25 degrees (1.25 degrees of latitude by 1.25 degrees of longitude grid over the globe) gridded model winds must be utilized for the entire flight plan route.

- (5) All flight deck fuel quantity indicators must be operational at dispatch. Any en route failure of these indicators must be reported as soon as practical to the aircraft dispatcher.
- (6) Fuel requirements of this authorization must not be lower than the requirements of § 121.193(c) or the Extended Operations (ETOPS) critical fuel requirements § 121.646, as applicable.
- (7) The certificate holder must have approved policies and procedures to maintain a flight monitoring system that generates alerts and requires the flightcrew to alert the dispatcher of any significant deviations from the flight planned route, altitude, and speed and any shortfalls in fuel on board compared to flight-planned fuel. If the flight reports any significant deviation or shortfall of fuel while en route, the PIC and aircraft dispatcher must agree upon a course of action and document the decision. Significant deviations from the plan are defined as:
- (a) If actual estimated time of arrival (ETA) will exceed planned ETA by more than 15 minutes;
- (b) Fuel on board shortfall compared to flight planned fuel over a flight plan fix (or abeam fix as appropriate) exceeds 15 minutes of endurance;
- (c) When no alternate is required and the total contingency fuel(s) (for the purpose of this requirement, total contingency fuel includes planned and unplanned) is less than 15 minutes, the PIC will alert the dispatcher when the ETA is planned to exceed the contingency value in minutes;
  - (d) Cruising altitude varies by more than 4,000 feet from the flight plan;
  - (e) Current route exceeds 100 nautical miles from the flight plan route; or
  - (f) Cruise speed deviates by greater than .02 Mach.
- (8) The air carrier must have a primary and secondary method of communication between the flightcrew and the dispatch department. These systems must be available for the entire route of flight.
- (9) The air carrier shall establish performance measures and process controls to ensure the equivalent level of safety to § 121.645 is maintained. Performance measures must include measures of complete PBCF fuel burns, both expected and actual, for each airplane make and model/city pair/arrival time window and in aggregate.
- (10) The air carrier may operate a supplemental charter operation in accordance with operations specification A030 to a destination where PBCF program data is available.

(11) The provisions of this operations specification may not be used when any system outage would affect the monitoring or alerting of the fuel.

- e. <u>Reports Required by This Operations Specification</u>. The air carrier must provide the flight data specified below to the certificate-holding district office (CHDO). The data supplied must be in a format acceptable to the Administrator.
- (1) The air carrier must record and identify the root cause for any flight that consumes all of the contingency fuel required by this operations specification and arrives with less than 60 minutes of fuel remaining (calculated at 1,500 feet holding speed). For the purpose of determining PBCF burn-in, the following is the defined fuel hierarchy:
  - (a) Taxi fuel;
  - (b) En route burn;
- (c) Minimum equipment list (MEL) fuel penalty (does not include unusable fuel (e.g., fuel pump inoperative; 3,500 pounds additional must be carried);
  - (d) Planned contingency fuel for known delays or holding;
  - (e) Section 121.193(c) or the ETOPS critical fuel requirements of § 121.646;
  - (f) PBCF;
- (g) Minimum landing fuel or other additional fuel (e.g., captain- and dispatcher-added fuel);
  - (h) Alternate fuel if required; and
  - (i) Thirty-minute final reserve fuel (refer to § 121.645(b)(4)).
  - (2) The following information will be provided in a quarterly report to the CHDO.
    - (a) Summary of the air carrier's performance measures related to this process;
- (b) A table summarizing the PBCF values on the last day of the quarter for each airplane make and model/city pair/arrival time window combination in effect on that day; and
- (c) The quarterly report shall list all flights excluded from PBCF calculations during the quarter, including the reasons for exclusion.
- (3) All data necessary to generate/duplicate the PBCF values will be made available to the Administrator for the purpose of an audit of a sampling of airplane make and model/city pair/arrival time window combinations. This audit shall be conducted no less than annually and shall cover no less than five unique airplane make and model/city pair/arrival time window combinations.
- (4) The air carrier must report to the principal operations inspector (POI) within 24 hours, whenever any flight makes a declaration of minimum or emergency fuel to the air navigation service provider.
- (5) Additionally, the certificate holder will report any occurrence of a low (minimum fuel) fuel state, which results in actions being taken by ATC and/or dispatch in order to provide priority handling, even if no emergency or minimum fuel state is declared. This will be included as a part of the quarterly reporting.