ARSA Regulatory Compliance Training—Questions

Part 21: Certification Procedures for Products and Articles **Level 1:** For anyone working in aviation

§ 21.4(a)(1)-(3)

(a) *Early ETOPS: reporting, tracking, and resolving problems.* The holder of a type certificate for an airplane-engine combination approved using the Early ETOPS method specified in part 25, Appendix K, of this chapter must use a system for reporting, tracking, and resolving each problem resulting in one of the occurrences specified in paragraph (a)(6) of this section.

(1) The system must identify how the type certificate holder will promptly identify problems, report them to the responsible Aircraft Certification Service office, and propose a solution to the FAA to resolve each problem. A proposed solution must consist of—

(i) A change in the airplane or engine type design;

(ii) A change in a manufacturing process;

(iii) A change in an operating or maintenance procedure; or

(iv) Any other solution acceptable to the FAA.

(2) For an airplane with more than two engines, the system must be in place for the first 250,000 world fleet engine-hours for the approved airplane-engine combination.

(3) For two-engine airplanes, the system must be in place for the first 250,000 world fleet engine-hours for the approved airplane-engine combination and after that until—

(i) The world fleet 12-month rolling average IFSD rate is at or below the rate required by paragraph (b)(2) of this section; and

(ii) The FAA determines that the rate is stable.

Note: The remainder of § 21.4 will be covered on a separate training sheet

Question 1: *Persons using an Early ETOPS method must have a reporting system that identifies how the operator will promptly identify problems.*

A: True.
B: False.

Question 2: *The solutions proposed by the type certificate holder under its Early ETOPS reporting method must consist of a change in the manufacturing process.*

A: True.
B: False.

Question 3: *For an airplane with two or more engines, the system required by § 21.4(a)(1) must be in place for the first 250,000 world fleet engine hours for the approved airplane-engine combination.*

A: True.
B: False.

Question 4: *The time for which the system required by § 21.4(a)(1) must be in place for two-engine airplanes is performance based and dependent on the in-flight shut down rate associated with the airplane-engine combination.*

A: True.
B: False.

Name and/or Identification _____ Date _____

Clearly Print the Name and/or Identification of the Person Taking the Test — Date Test was Completed

Score _____ Hours _____

Enter as x (number correct) of y (number of questions) — Time Credited for Test

Approved by _____

Signature of Supervisor or Person Administering Test

ARSA Regulatory Compliance Training—Answers

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(i) A change in the airplane or engine type design;

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(2) For an airplane with more than two engines, the system must be in place for the first 250,000 world fleet engine-hours for the approved airplane-engine combination.

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(ii) The FAA determines that the rate is stable.

Note: The remainder of § 21.4 will be covered on a separate training sheet

Question 1: *Persons using an Early ETOPS method must have a reporting system that identifies how the operator will promptly identify problems.*

A: True.

B: False. § 21.4(a)(1) requires the system identify how the type certificate holder will identify problems, report them to the responsible ACO, and propose a resolution.

Question 2: *The solutions proposed by the type certificate holder under its Early ETOPS reporting method must consist of a change in the manufacturing process.*

A: True.

B: False. § 21.4(a)(1)(i)-(iv) provides for options – including "any other solution acceptable to the FAA" for proposed solutions to problems identified by the type certificate holder.

Question 3: *For an airplane with two or more engines, the system required by § 21.4(a)(1) must be in place for the first 250,000 world fleet engine hours for the approved airplane-engine combination.*

A: **True. Both §§ 21.4(a)(2) and (3) include this requirement; § 21.4(a)(3) for two entine aircraft has additional requirements after these hours have been met for the airplane-engine combination.**

B: False.

Question 4: *The time for which the system required by § 21.4(a)(1) must be in place for two-engine airplanes is performance based and dependent on the in-flight shut down rate associated with the airplane-engine combination.*

A: **True. §§ 21.4(a)(3)(i) and (ii) set standards for how long the system must be in place dependent on the rate of in-flight shutdowns.**

B: False.