

must highlight the information that you consider is CBI and explain why you believe this information should be held confidential. SBA will make a final determination, in its sole discretion, of whether the information is CBI and, therefore, will not be published.

FOR FURTHER INFORMATION CONTACT:

Linda Rusche, Supervisory Financial Analyst, at (816) 426-4860, or Bryan Hooper, Director, Office of Credit Risk Management, (202) 205-3049.

Authority: 15 U.S.C. 634.

Dated: December 11, 2007.

Eric R. Zarnikow,

Associate Administrator for the Office of Capital Access.

[FR Doc. E7-24381 Filed 12-19-07; 8:45 am]

BILLING CODE 8025-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE275; Notice No. 23-07-04-SC]

Special Conditions: Aviation Technology Group, Inc., Javelin Model 100; High Altitude Operations

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed special conditions.

SUMMARY: This action proposes special conditions for the Aviation Technology Group, Inc., Javelin Model 100 airplane. This airplane will have a novel or unusual design feature(s) associated with high altitude operations. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for these design features. These proposed special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: We must receive your comments by January 22, 2008.

ADDRESSES: Mail two copies of your comments to: Federal Aviation Administration, Regional Counsel, ACE-7, 901 Locust, Room 506, Kansas City, Missouri 64106. You may deliver two copies to the Small Airplane Directorate at the above address. Mark your comments: Docket No. CE275. You may inspect comments in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

FOR FURTHER INFORMATION CONTACT:

Leslie B. Taylor, Regulations & Policy

Branch, ACE-111, Federal Aviation Administration, Small Airplane Directorate, Aircraft Certification Service, 901 Locust, Kansas City, MO 64106; telephone (816) 329-4134; facsimile (816) 329-4090, e-mail at *leslie.b.taylor@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite interested parties to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of written comments.

We will file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning these special conditions. You may inspect the docket before and after the comment closing date. If you wish to review the docket in person, go to the address in the **ADDRESSES** section of this preamble between 7:30 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

We will consider all comments we receive on or before the closing date for comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change these special conditions based on the comments we receive.

If you want the FAA to acknowledge receipt of your comments on this proposal, include with your comments a pre-addressed, stamped postcard on which the docket number appears. We will stamp the date on the postcard and mail it back to you.

Background

On February 15, 2005, Aviation Technology Group (ATG), 8001 S. InterPort Blvd., Englewood, CO 80112 applied for a type certificate for their new Javelin Model 100 airplane. The Javelin Model 100 is a two-seat, pressurized, retractable-gear, composite airplane with two turbofan engines mounted in the aft fuselage.

The Aviation Technology Group, Inc. (ATG) Javelin Model 100 will be certificated for operations at a maximum altitude of 45,000 feet. This unusually high operating altitude constitutes a novel or unusual design feature for which the applicable airworthiness regulations do not contain adequate or appropriate safety standards. Therefore, it is necessary to develop special conditions that provide the level of safety equivalent to that established by the regulations.

ATG indicated they will fully comply with Special Conditions for a., Pressure Vessel Integrity; b., Ventilation; and c., Air Conditioning.

However, ATG is unable to fully comply with Special Conditions d. Pressurization and e. Oxygen equipment and supply. As a result from these discussions, the Special Conditions d. and e. were revised to include an alternate means or compensating features that require the use of an oxygen system and emergency descent procedures that addresses a rapid decompression event.

Discussion

The 14 CFR part 23 certification basis for the ATG Javelin Model 100 is part 23, Amendment 23-55. The FAA issues high altitude special conditions for airplanes when the certificated altitude exceeds human physiological limits.

Crack growth could result in rapid depressurization to cabin altitudes that exceed human physiological limits. Damage tolerance methods are proposed to be used to assure pressure vessel integrity while operating at the higher altitudes. Crack growth data is used to prescribe an inspection program, which will detect cracks before an opening in the pressure vessel would allow rapid depressurization. Initial crack sizes for detection are determined under § 23.571, Amendment 23-55. The cabin altitude after permissible crack growth may not exceed specified limits.

To ensure that there is adequate fresh air for crewmembers to perform their duties, to provide reasonable passenger comfort, and to enable occupants to better withstand the effects of decompression at high altitudes, the ventilation system must be designed to provide 10 cubic feet of fresh air per minute per person during normal operations. Therefore, these special conditions require that crewmembers and passengers be provided with 10 cubic feet of fresh air per minute per person. In addition, during the development of the supersonic transport special conditions, it was noted that certain pressurization failures resulted in hot ram or bleed air being used to maintain pressurization. Air conditioning special conditions are required because such a measure can lead to cabin temperatures that exceed human tolerance limits following probable and improbable failures.

Continuous flow passenger oxygen equipment is certificated for use up to 40,000 feet; however, for rapid decompressions above 34,000 feet, reverse diffusion leads to low oxygen partial pressures in the lungs, to the extent that a small percentage of

passengers may lose useful consciousness at 35,000 feet. The percentage increases to an estimated 60 percent at 40,000 feet, even with the use of the continuous flow system. To prevent permanent physiological damage, the cabin altitude must not exceed 25,000 feet for more than 2 minutes, or 40,000 feet for any time period. The maximum peak cabin altitude of 40,000 feet is consistent with the standards established for previous certification programs.

Decompression above 37,000 feet can result in cabin altitudes that approach the physiological limits of the average person; therefore, every effort must be made to provide the pilot with adequate oxygen equipment to withstand these severe decompressions. Reducing the time interval between pressurization failure and the time the pilot receives oxygen will provide a safety margin against being incapacitated and can be accomplished by the use of mask-mounted regulators. The proposed special condition, therefore, requires pressure demand masks with mask-mounted regulators for the flight crew. This combination of equipment will provide the best practical protection for the failures covered by the proposed special conditions and for improbable failures not covered by the special conditions, provided the cabin altitude is limited.

Type Certification Basis

Under 14 CFR part 21, § 21.17, Aviation Technology Group, Inc. must show that the Javelin Model 100 meets the applicable provisions of part 23, as amended by Amendments 23-1 through 23-55 thereto.

If the Administrator finds that the applicable airworthiness regulations in part 23 do not contain adequate or appropriate safety standards for the Javelin Model 100 because of a novel or unusual design feature, special conditions are prescribed under § 21.16.

In addition to the applicable airworthiness regulations and special conditions, the Javelin Model 100 must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36, and the FAA must issue a finding of regulatory adequacy under § 611 of Public Law 92-574, the "Noise Control Act of 1972."

The FAA issues special conditions, as defined in § 11.19, under § 11.38, and they become part of the type certification basis under § 21.17(a)(2).

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to

include any other model that incorporates the same or similar novel or unusual design feature, the special conditions would also apply to the other model under § 21.101.

Novel or Unusual Design Features

The Javelin Model 100 will incorporate the following novel or unusual design features:

Part 23 did not envision operation at the service ceiling requested for this airplane. The methods used to ensure pressure vessel integrity and to provide ventilation, air conditioning, pressurization, and supplemental oxygen will be unique due to that operating altitude.

Applicability

As discussed above, these special conditions are applicable to the Javelin Model 100. Should Aviation Technology Group, Inc., apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability, and it affects only the applicant who applied to the FAA for approval of these features on the airplane.

List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

Citation

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, and 44701; 14 CFR 21.16 and 21.17; and 14 CFR 11.38 and 11.19.

The Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Aviation Technology Group, Inc., Javelin Model 100 airplanes.

a. Pressure Vessel Integrity.

1. The maximum extent of failure and pressure vessel opening that can be demonstrated to comply with paragraph d (Pressurization) of this special condition must be determined. It must be demonstrated by crack propagation and damage tolerance analysis supported by testing that a larger opening or a more severe failure than demonstrated will not occur in normal operations.

2. Inspection schedules and procedures must be established to ensure that cracks and normal fuselage leak rates will not deteriorate to the extent that an unsafe condition could exist during normal operation.

b. *Ventilation.* In lieu of the requirements of § 23.831(b), the ventilation system must be designed to provide a sufficient amount of uncontaminated air to enable the crewmembers to perform their duties without undue discomfort or fatigue, and to provide reasonable passenger comfort during normal operating conditions and also in the event of any probable failure of any system which could adversely affect the cabin ventilating air. For normal operations, crewmembers and passengers must be provided with at least 10 cubic feet of fresh air per minute per person, or the equivalent in filtered, recirculated air based on the volume and composition at the corresponding cabin pressure altitude of not more than 8,000 feet.

c. *Air Conditioning.* In addition to the requirements of § 23.831, paragraphs (b), the cabin cooling system must be designed to meet the following conditions during flight above 15,000 feet mean sea level (MSL):

1. After any probable failure, the cabin temperature-time history may not exceed the values shown in Figure 1. (Please see Advisory Circular (AC) 23.1309-1C, pages 10 and 16.)

2. After any improbable failure, the cabin temperature-time history may not exceed the values shown in Figure 2. (Please see AC 23.1309-1C, pages 9 and 16.)

d. *Pressurization:* In addition to the requirements of § 23.841, the following revised Special Condition was designed to limit high altitude exposure by slowing down the depressurization event and to mitigate or eliminate acute effects of dangerously low atmospheric pressure on flight crew and passengers.

1. For the purposes of this special condition, the pressurization system includes bleed air, air conditioning, and pressure control systems. The pressurization system must prevent the cabin altitude from exceeding the cabin altitude-time history shown in Figure 3 after each of the following:

(a) Any probable malfunction or failure of the pressurization system. The existence of undetected, latent malfunctions or failures in conjunction with probable failures must be considered.

(b) Any single failure in the pressurization system combined with the occurrence of a leak produced by a complete loss of a door seal element, or a fuselage leak through an opening

having an effective area 2.0 times the effective area, which produces the maximum permissible fuselage leak rate approved for normal operation, whichever produces a more severe leak.

Note: The ATG Javelin Model 100 proposes to use a mechanical canopy seal that is not subject to complete loss of the door seal element. ATG must still show compliance by analysis and/or test a fuselage leak through an opening having an effective area 2.0 times the effective area that produces the maximum permissible fuselage leak rate approved for normal operation.

2. The cabin altitude-time history may not exceed that shown in Figure 4 after each of the following:

(a) The maximum pressure vessel opening resulting from an initially detectable crack propagating for a period encompassing four normal inspection intervals. Mid-panel cracks and cracks through skin-stringer and skin-frame combinations must be considered.

(b) The pressure vessel opening or duct failure resulting from probable damage (failure effect) while under maximum operating cabin pressure differential due to a tire burst, engine rotor burst, loss of antennas or stall warning vanes, or any probable equipment failure (bleed air, pressure control, air conditioning, electrical source(s), etc.) that affects pressurization.

3. Complete loss of thrust from all engines. In showing compliance with paragraphs d.1 and d.2 of these special conditions (Pressurization), it may be assumed that an emergency descent is made by an approved emergency procedure. A 5-second crew recognition and reaction time must be applied between cabin altitude warning and the initiation of an emergency descent.

The additional Special Conditions below show full compliance to paragraphs d.1. and d.2. and are applicable to both aircraft models. Special Conditions that are aircraft model specific will be noted as Mk-10 or Mk-20.

4. A decompression event is considered to be a rapid decompression event; therefore, the following requirements must be met: The airplane design must include an auto descent feature. The AFM must contain specific instructions for its use, including considerations for air traffic conditions, terrain awareness, annunciation, and accessibility to the control(s) for automatic initiation of the descent sequence by each occupant.

Note: For the flight evaluation of the rapid descent, the test article must have the cabin

volume representative of what is expected to be normal, such that ATG must reduce the total cabin volume by that which would be occupied by the furnishings and total number of people.

5. ATG must provide flight crew and crewmember training requirements, including physiological training that covers—

(a) Pressure or reverse cycle breathing,

(b) Rapid decompression training,

(c) Physical condition with respect to the hazards of high altitude rapid decompression, and

(d) Recognition of decompression sickness symptoms and the need for medical treatment.

6. The oxygen system must be compatible with paragraph e, Oxygen Equipment and Supply Special Conditions.

(a) Mk-10: The flight crew and passenger(s) are required to use oxygen masks for all operating altitudes above 25,000 feet.

(b) Mk-20: The flight crew and crewmember are required to use oxygen masks for all operating altitudes above 10,000 feet.

7. ATG will show a means of guarding or de-activating the automatic "auto emergency descent" mode control in the forward or aft cockpit to prevent inadvertent descent mode activation. Appropriate placards will be required for each control device.

8. ATG will show a means of guarding or de-activating the in-flight jettison canopy control, canopy fracturing system, or any other safety critical control device in the forward or aft cockpit to prevent inadvertent activation. Appropriate placards will be required for each control device.

9. Cabin pressure loss must be annunciated as a warning. (See Equivalent Level of Safety Findings for Cabin Pressurization.)

10. The AFM will include:

(a) Mk-10: Require a passenger briefing concerning items 4 through 9 above and the following:

(i) Seat belts.

(ii) Emergency exit.

(iii) Use of quick-donning oxygen mask system with a pressure-demand as described in paragraph e2, Oxygen Equipment and Supply.

(b) Mk-20: Required flight crew and crewmember briefing concerning items 4 through 10(a) above.

(i) The flight crew is the pilot and crewmember, which means a person assigned to perform duty in an aircraft during flight time. The Mk-20 poses safety concerns for a typical passenger since additional training beyond the

pre-flight briefing may be required to use the emergency egress system (i.e., ejection seat). Each occupant of the Mk-20 will be considered as a flight crew or crewmember and be required to complete the minimum requisite training in paragraph d5 before flying on the airplane.

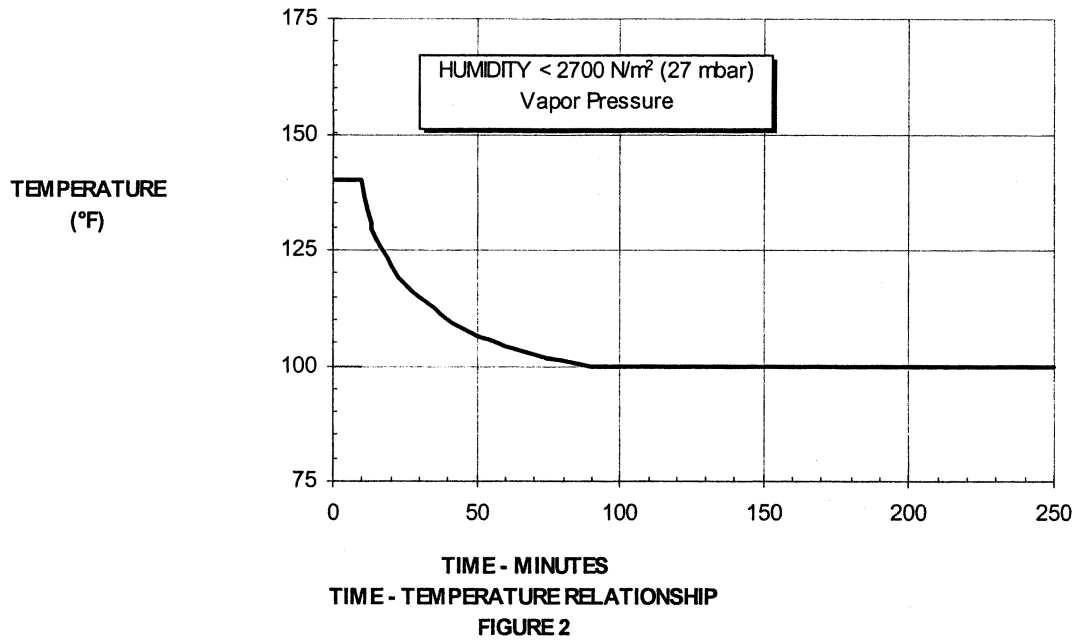
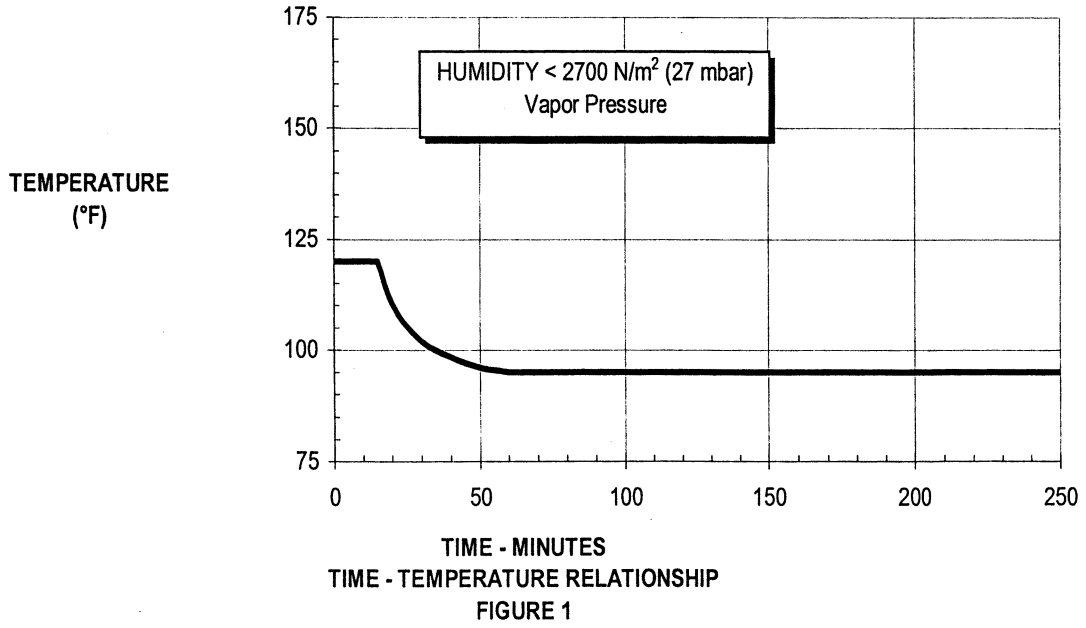
e. *Oxygen equipment and supply.* After several follow-on FAA/ATG discussions, the FAA Position Stage 3 for the Mk-10/Mk-20 Special Conditions e.1 and e.2 were revised to include quick-donning pressure-demand oxygen mask or an alternate helmet mounted oxygen mask for both occupants that complies with TSO-C89 requirements up to 45,000 feet. Furthermore, Special Condition e.3 was revised to allow a common oxygen source with a larger capacity as an alternate means or compensating feature.

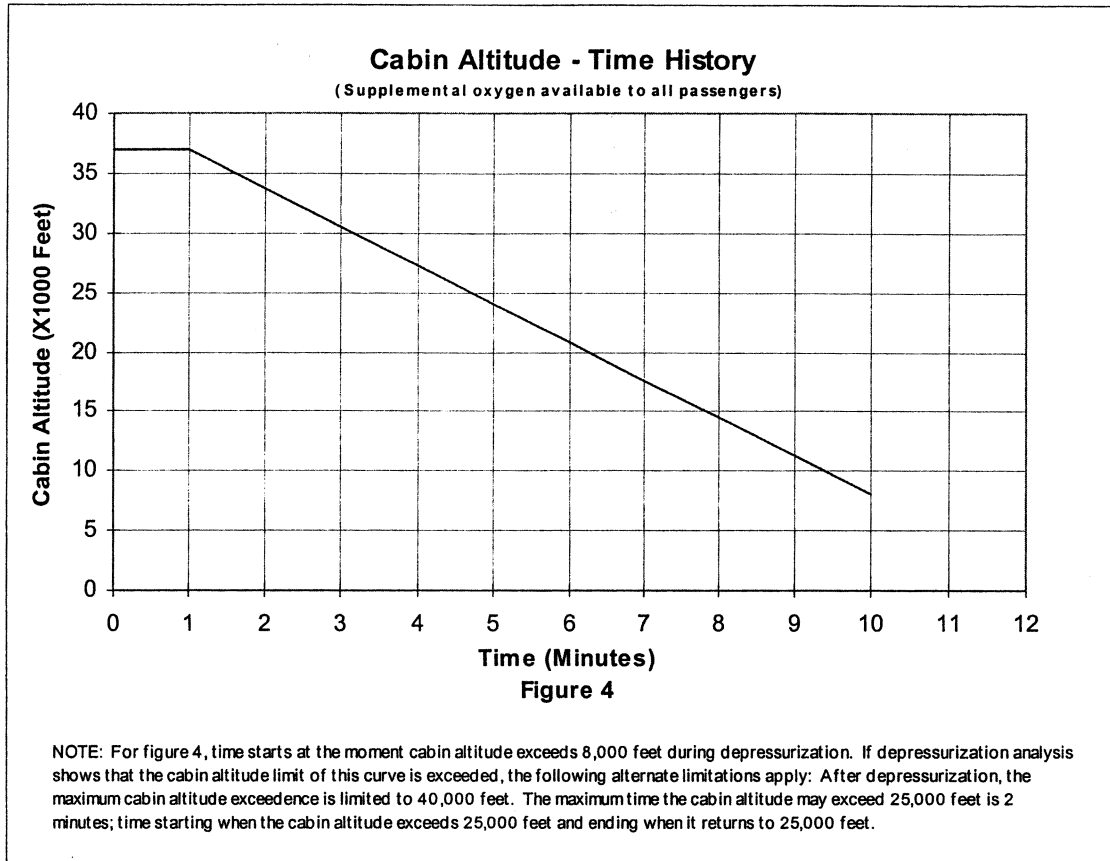
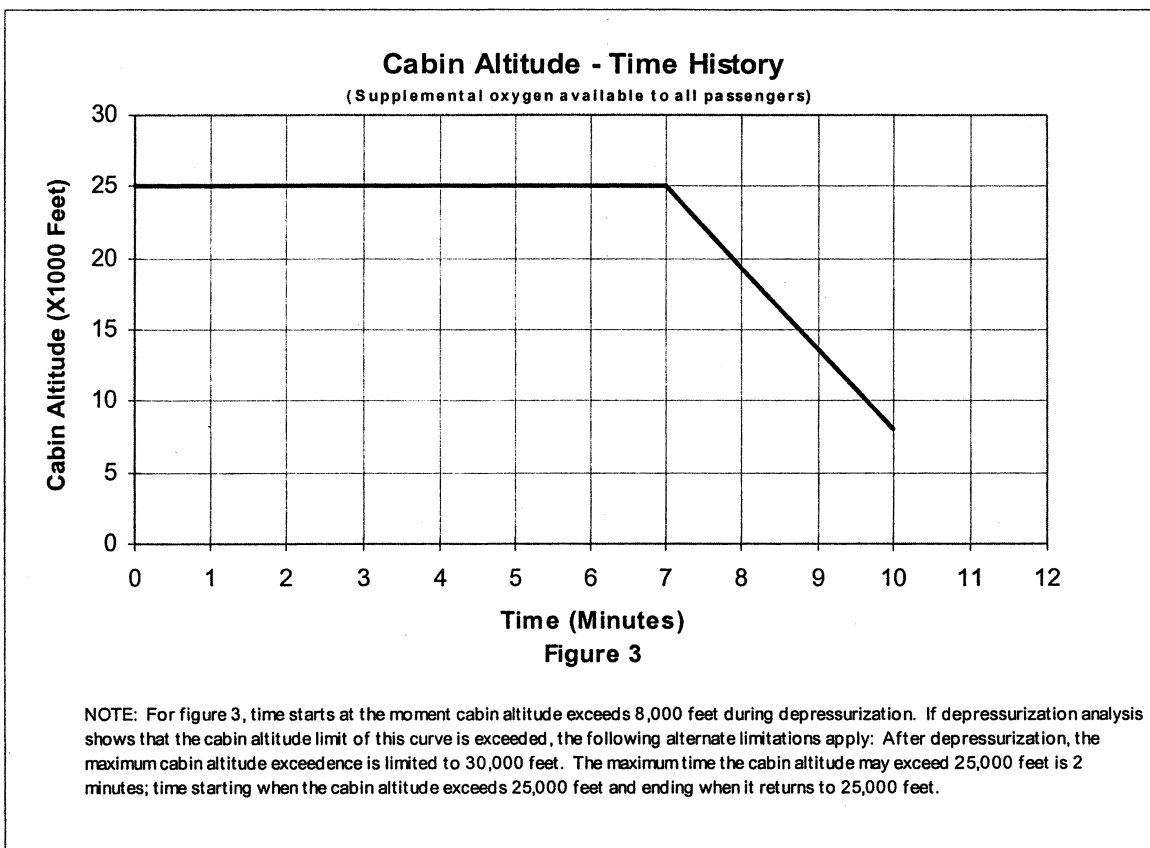
1. In addition to the requirements of § 23.1441(d), the following applies: A quick-donning oxygen mask system with a pressure-demand, mask mounted regulator that complies with TSO-C89 requirements up to 45,000 feet must be provided for the flight crew. It must be shown that each quick-donning mask can, with one hand and within 5 seconds, be placed on the face from its ready position, properly secured, sealed, and supplying oxygen upon demand. Alternately, a helmet mounted oxygen mask, panel mounted regulator that complies with TSO-C89 requirements up to 45,000 feet may be provided to the flight crew.

2. In addition to the requirements of § 23.1443, the following applies: A quick-donning oxygen mask system with a pressure-demand, mask mounted regulator that complies with TSO-C89 requirements up to 45,000 feet must be provided for the passenger or crewmember. Alternately, a helmet mounted oxygen mask, panel mounted regulator that complies with TSO-C89 requirements up to 45,000 feet may be provided to the passenger.

3. In addition to the requirements of § 23.1445, the following applies: If the flight crew and passenger/crewmember share a common source of oxygen, a means to separately reserve the minimum supply required by the flight crew must be provided. Alternately, if the oxygen system can provide the minimum required for the flight crew as well as all other occupants, the system can have a common source.

BILLING CODE 4910-13-P





Issued in Kansas City, Missouri on December 12, 2007.

James E. Jackson,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 07-6129 Filed 12-19-07; 8:45 am]

BILLING CODE 4910-13-C

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-0368; Directorate Identifier 2007-NM-050-AD]

RIN 2120-AA64

Airworthiness Directives; BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Cracking has been found on the centre fuselage top aft longeron at Rib '0,' on an in-service aircraft. * * *

This condition could result in reduced structural integrity of the airplane. The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by January 22, 2008.

ADDRESSES:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Fax:* (202) 493-2251.

- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-40, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>;

or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

Todd Thompson, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2007-0368; Directorate Identifier 2007-NM-050-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2006-0215, dated July 14, 2006 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

Cracking has been found on the centre fuselage top aft longeron at Rib '0' on an in-service aircraft. Subsequent investigation has indicated that the currently defined threshold and repeat inspection period must be reduced, and the area of inspection expanded for the BAe 146 series 100 and 200. For the BAe146 series 300, only the repeat inspection period must be reduced, and the area of inspection expanded.

Cracking on the center fuselage top aft longeron at Rib '0,' could result in reduced structural integrity of the airplane. Corrective actions include repetitive inspections of the center

fuselage top aft longeron for cracking and repair/replacement if necessary. You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

BAE Systems (Operations) Limited has issued Service Bulletin ISB.53-173, Revision 2, dated March 28, 2006. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have proposed different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a NOTE within the proposed AD.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 1 product of U.S. registry. We also estimate that it would take about 8 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$80 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$640, or \$640 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of