

into the FAA-approved maintenance program to specify an inspection for breaks of the bottom flange of the RAT swivel coupling yoke fitting after each RAT retraction; and replacement of the RAT swivel coupling yoke fitting with a new aluminum or steel part as applicable; in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the Direction Générale de l'Aviation Civile (or its delegated agent); or European Aviation Safety Agency (or its delegated agent). The page blocks specified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, as applicable, are one approved method for the actions required by paragraph (c) of this AD. Thereafter, except as provided by paragraph (d) of this AD, no alternative inspection intervals may be approved for the bottom flange of the RAT swivel coupling yoke fitting.

- (1) Airbus A300-600 AMM, Chapter 29-25-00, Page Block 301, dated June 1, 2005.
- (2) Airbus A310 AMM, Chapter 29-25-00, Page Block 301, dated June 1, 2005.
- (3) Airbus A300 AMM Chapter 29-25-00, Page Block 301, dated March 1, 2006.

Note 2: After revising the maintenance program to include the required periodic inspections according to this paragraph, operators do not need to make a maintenance

log entry to show compliance with this AD every time those inspections are accomplished thereafter.

Note 3: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (d) of this AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure. The FAA has provided guidance for this determination in Advisory Circular (AC) 25-1529-1.

Alternative Methods of Compliance

(d)(1) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-116, is authorized to approve alternative methods of compliance for this AD.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to

which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Note 4: The subject of this AD is addressed in French airworthiness directives F-2005-089, dated June 8, 2005; and F-2005-090 R1, dated July 6, 2005.

Incorporation by Reference

(e) Unless otherwise specified in this AD, the actions must be done in accordance with the applicable service information specified in Table 1 of this AD. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get copies of this service information, contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. To inspect copies of this service information, go to the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or to the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

TABLE 1.—MATERIAL INCORPORATED BY REFERENCE

Service information	Revision level	Date
Airbus A300-600 All Operators Telex 57A6096	01	April 11, 2005.
Airbus A310 All Operators Telex 57A2085	01	April 11, 2005.
Airbus Service Bulletin A300-57-0244	Original	March 4, 2005.
Airbus Service Bulletin A300-57-6099	Original	February 23, 2005.
Airbus Service Bulletin A310-57-2086	Original	March 1, 2005.

Effective Date

(f) This amendment becomes effective on March 12, 2007.

Issued in Renton, Washington, on January 24, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-1601 Filed 2-2-07; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-24289; Directorate Identifier 2005-NM-186-AD; Amendment 39-14921; AD 2007-03-10]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A300 Airplanes; A300 B4-600, B4-600R, and F4-600R Series Airplanes, and Model A300 C4-605R Variant F Airplanes (Collectively Called A300-600 Series Airplanes); and A310 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus airplanes identified above. This AD requires improving the routing of certain electrical wire bundles in certain airplane zones, as applicable to the

airplane model. This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: This AD becomes effective March 12, 2007.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of March 12, 2007.

ADDRESSES: You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC.

Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Thomas Stafford, Aerospace Engineer, International Branch, ANM-116,

Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1622; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the **ADDRESSES** section.

Discussion

The FAA issued a supplemental notice of proposed rulemaking (NPRM)

to amend 14 CFR part 39 to include an AD that would apply to all Airbus Model A300 airplanes; A300 B4-600, B4-600R, and F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called A300-600 series airplanes); and A310 airplanes. That supplemental NPRM was published in the **Federal Register** on September 11, 2006 (71 FR 53341). That supplemental NPRM proposed to require the actions in the original NPRM, which were improving the routing of certain electrical wire bundles in certain airplane zones, as applicable to the airplane model. That supplemental NPRM also revised the original NPRM by removing certain proposed requirements, and extending the compliance time for a certain replacement. That supplemental NPRM

also specified that the actions are considered interim until a terminating action for the removed proposed requirements is approved and available.

Relevant Service Information

Since we issued the supplemental NPRM, we have reviewed and approved the service bulletins listed in the following table. We referred to earlier revisions of these service bulletins as appropriate sources of service information for accomplishing certain actions in the supplemental NPRM. We have changed paragraphs (f)(2), (g), (h)(1), and (h)(2), and Table 1 of this AD to include references to these new revisions, and to give credit for accomplishment of previous revisions. The changes in the service information do not change the scope of the AD.

NEW REVISIONS OF CERTAIN SERVICE BULLETINS

Airbus Service Bulletin—	Was Issued to—
A300-24-6004, Revision 04, dated November 15, 2005	<ul style="list-style-type: none"> • Change the manufacturer's serial numbers in Paragraph 1.A. "Effectivity." • Specify that the service bulletin has been rendered mandatory in France. • Give the European Aviation Safety Agency (EASA) designation organization approval number. • Include references to certain other documents. • Update certain access and test information. • Include a note regarding the removal of a certain clamp.
A300-24-6043, Revision 07, dated October 11, 2006	<ul style="list-style-type: none"> • Change the manufacturer's serial numbers in Paragraph 1.A. "Effectivity." • Revise manpower estimates. • Include references to certain other documents. • Revise materials description. • Add a note regarding the size of certain clamps.
A300-28-6056, Revision 01, dated January 20, 2006	<ul style="list-style-type: none"> • Change the manufacturer's serial numbers in Paragraph 1.A. "Effectivity." • Specify that the service bulletin is part of the fuel safety assessment program. • Specify that the service bulletin has been rendered mandatory in France. • Include references to certain other documents. • Update material, price, and industry support information. • Update certain access and part number information.
A310-24-2009, Revision 04, dated November 15, 2005	<ul style="list-style-type: none"> • Change the manufacturer's serial numbers in Paragraph 1.A. "Effectivity." • Specify that the service bulletin has been rendered mandatory in France. • Give the EASA designation organization approval number. • Include references to certain other documents. • Update certain access and test information. • Include a note regarding the removal of a certain clamp.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comment received.

Request To Change Incorporation of Certain Information

The Modification and Replacement Parts Association (MARPA) states that, typically, airworthiness directives are

based on service information originating with the type certificate holder or its suppliers. MARPA adds that manufacturer service documents are privately authored instruments generally having copyright protection against duplication and distribution. MARPA notes that when a service document is incorporated by reference into a public document, such as an airworthiness directive, it loses its

private, protected status and becomes a public document. MARPA adds that if a service document is used as a mandatory element of compliance, it should not simply be referenced, but should be incorporated into the regulatory document; by definition, public laws must be public, which means they cannot rely upon private writings. MARPA is concerned that the failure to incorporate essential service

information could result in a court decision invalidating the AD.

MARPA adds that incorporated by reference service documents should be made available to the public by publication in the Docket Management System (DMS), keyed to the action that incorporates them. MARPA notes that the stated purpose of the incorporation by reference method is brevity, to keep from expanding the **Federal Register** needlessly by publishing documents already in the hands of the affected individuals; traditionally, “affected individuals” means aircraft owners and operators, who are generally provided service information by the manufacturer. MARPA adds that a new class of affected individuals has emerged, since the majority of aircraft maintenance is now performed by specialty shops instead of aircraft owners and operators. MARPA notes that this new class includes maintenance and repair organizations, component servicing and repair shops, parts purveyors and distributors, and organizations manufacturing or servicing alternatively certified parts under part 21 of the Federal Aviation Regulations (14 CFR part 21), § 21.303 (parts manufacturer approval) (PMA). MARPA adds that the concept of brevity is now nearly archaic as documents exist more frequently in electronic format than on paper. Therefore, MARPA asks that the service documents deemed essential to the accomplishment of the NPRM be incorporated by

reference into the regulatory instrument, and published in the DMS.

We understand MARPA's comment concerning incorporation by reference. The Office of the Federal Register (OFR) requires that documents that are necessary to accomplish the requirements of the AD be incorporated by reference during the final rule phase of rulemaking. This final rule incorporates by reference the document necessary for the accomplishment of the requirements mandated by this AD. Further, we point out that while documents that are incorporated by reference do become public information, they do not lose their copyright protection. For that reason, we advise the public to contact the manufacturer to obtain copies of the referenced service information.

Additionally, we do not publish service documents in DMS. We are currently reviewing our practice of publishing proprietary service information. Once we have thoroughly examined all aspects of this issue, and have made a final determination, we will consider whether our current practice needs to be revised. However, we consider that to delay this AD action for that reason would be inappropriate, since we have determined that an unsafe condition exists and that the requirements in this AD must be accomplished to ensure continued safety. Therefore, we have not changed the AD in this regard.

Clarification of Paragraph (f)(2)

We have clarified paragraph (f)(2) of this AD to specify the intended paragraph identifier referenced in that paragraph.

Conclusion

We have carefully reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD with the change described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Interim Action

We consider this AD interim action. The EASA, which is the airworthiness authority for the European Union, has informed us that the manufacturer is currently developing an additional modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, we may consider additional rulemaking.

Costs of Compliance

The following table provides the estimated costs for U.S. operators to comply with this AD.

This AD affects about 169 airplanes of U.S. registry. The following table provides the estimated costs for U.S. operators to comply with this AD. The average labor rate is \$80 per work hour.

ESTIMATED COSTS

For airplanes on which this action is required—	Work hours	Parts	Cost per airplane
Action 3, Modify the retaining and protection system	4 to 16	\$836 to \$1,056	\$1,156 to \$2,336.
Action 4, Modify the electrical wiring of routes 1P and 2P	2	\$720	\$880.
Action 5, Inspect the wire looms on the wing trailing edge	8	Operator Supplied	\$640.
Action 6, Replace the nylon clamps of the electrical routes in the hydraulic compartment and in the shroud box.	44 to 98 ...	\$100 to \$5,700	\$3,620 to \$13,540.

Based on these figures, the estimated cost of the AD for U.S. operators is up to \$2,939,924, or up to \$17,396 per airplane.

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 the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701,

“General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will

not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities

under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2007-03-10 Airbus: Amendment 39-14921. Docket No. FAA-2006-24289; Directorate Identifier 2005-NM-186-AD.

Effective Date

(a) This AD becomes effective March 12, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all Airbus Model A300 airplanes; A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, A300 F4-605R, F4-622R, and C4-605R Variant F airplanes; and A310 airplanes; certificated in any category.

Unsafe Condition

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Action 3—Modify the Retaining and Protection System

(f) For all airplanes identified in paragraphs (f)(1) and (f)(2) of this AD: Within 26 months after the effective date of this AD, modify the retaining and protection system for the electrical bundles located at the wing-to-fuselage junction, under the flap control screw jack.

(1) For Model A300 airplanes: Do the actions specified in paragraph (f) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-24-0085, Revision 06, dated October 13, 2005.

(2) For Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, A300 F4-605R, F4-622R, and C4-605R Variant F airplanes, except those on which Airbus Modification 10505 has been done: Do the actions specified in paragraph (f) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-24-6043, Revision 07, dated October 11, 2006.

Action 4—Modify the Electrical Wiring of Routes 1P and 2P

(g) For Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, A300 F4-605R, F4-622R, and C4-605R Variant F airplanes; except those on which Airbus Modification 11741 has been done: Within 26 months after the effective date of this AD, modify the electrical wiring of routes 1P and 2P (along the top panel of the shroud box and the rear spars of the wings) by extending the protective conduits up to the next support, and replace the two existing clamps on this support with new, improved clamps. Do all actions in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-28-6056, Revision 01, dated January 20, 2006.

Action 5—Inspect the Wire Looms

(h) For all airplanes identified in paragraphs (h)(1) and (h)(2) of this AD: Within 26 months after the effective date of this AD, do a general visual inspection of the wire looms on the wing trailing edge for improperly held wires in the clamps, restore the electrical bundles to good condition, and replace the affected nylon clamps with metallic clamps that have an elastomer lining. Do all applicable corrective action before further flight. Repeat the inspection thereafter at intervals not to exceed 26 months until all clamps have been replaced.

(1) For Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, A300 F4-605R, F4-622R, and C4-605R Variant F airplanes; except those on which Airbus Modification 6478 has been done: Do the actions specified in paragraph (h) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-

24-6004, Revision 04, dated November 15, 2005.

(2) For Model A310 airplanes, except those on which Airbus Modification 6478 has been done: Do the actions specified in paragraph (h) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-24-2009, Revision 04, dated November 15, 2005.

Action 6—Improve the Quality of the Electrical Routes

(i) For all airplanes identified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD: Within 26 months after the effective date of this AD, replace the nylon clamps of the electrical routes in the hydraulic compartment and in the shroud box with new metallic clamps that have white silicone lining (for airplanes identified in paragraph (i)(1) of this AD); and/or replace the nylon clamps and change the location of routes 1P and 2P to improve the retention of the wiring loom (for airplanes identified in paragraphs (i)(2) and (i)(3) of this AD); as applicable.

(1) For Model A300 airplanes; except those on which Airbus Modification 11763 has been done: Do the actions specified in paragraph (i) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-24-0100, dated April 7, 2005.

(2) For Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, A300 F4-605R, F4-622R, and C4-605R Variant F airplanes; except those on which Airbus Modifications 11763 and 12995 have been done: Do the actions specified in paragraph (i) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-24-6084, Revision 01, dated June 28, 2005.

(3) For Model A310 airplanes, except those on which Airbus Modification 11763 has been done: Do the actions specified in paragraph (i) of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-24-2091, dated March 4, 2005.

Parts Installation

(j) After the effective date of this AD, no person may install on any airplane plate assemblies with part numbers A5351088000000 or A5351088000100 unless they have been modified in accordance with paragraph (f) of this AD.

Actions Accomplished According to Previous Revisions of Service Bulletins

(k) Actions done before the effective date of this AD in accordance with the service bulletins identified in Table 1 of this AD are acceptable for compliance with the corresponding requirements in this AD.

TABLE 1.—PREVIOUS REVISIONS OF SERVICE BULLETINS

Airbus Service Bulletin	Revision level	Date
A300-24-0085	Original	December 12, 1994.
A300-24-0085	03	January 17, 1996.
A300-24-0085	04	July 23, 1996.
A300-24-0085	05	March 6, 2001.

TABLE 1.—PREVIOUS REVISIONS OF SERVICE BULLETINS—Continued

Airbus Service Bulletin	Revision level	Date
A300–24–6004	1	January 28, 1988.
A300–24–6004	2	February 24, 1995.
A300–24–6004	03	June 30, 1998.
A300–24–6043	Original	December 12, 1994.
A300–24–6043	01	February 7, 1995.
A300–24–6043	02	May 10, 1995.
A300–24–6043	03	January 17, 1996.
A300–24–6043	04	March 6, 2001.
A300–24–6043	05	August 30, 2001.
A300–24–6043	06	October 13, 2005.
A300–24–6084	Original	March 4, 2005.
A300–28–6056	Original	February 18, 1998.
A310–24–2009	Original	May 31, 1985.
A310–24–2009	1	January 28, 1988.
A310–24–2009	2	February 24, 1995.
A310–24–2009	03	June 30, 1998.

Alternative Methods of Compliance (AMOCs)

(1)(1) The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Related Information

(m) European Aviation Safety Agency airworthiness directive 2006–0074, dated April 3, 2006, also addresses the subject of this AD.

Material Incorporated by Reference

(n) You must use the service information specified in Table 2 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Airbus, 1

Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL–401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741–6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

TABLE 2.—MATERIAL INCORPORATED BY REFERENCE

Airbus Service Bulletin	Revision level	Date
A300–24–0085	06	October 13, 2005.
A300–24–0100	Original	April 7, 2005.
A300–24–6004	04	November 15, 2005.
A300–24–6043	07	October 11, 2006.
A300–24–6084	01	June 28, 2005.
A300–28–6056	01	January 20, 2006.
A310–24–2009	04	November 15, 2005.
A310–24–2091	Original	March 4, 2005.

Issued in Renton, Washington, on January 24, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–1602 Filed 2–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–26046; Directorate Identifier 2006–NM–172–AD; Amendment 39–14922; AD 2007–03–11]

RIN 2120–AA64

Airworthiness Directives; Bombardier Model CL–600–2B19 (Regional Jet Series 100 & 440) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier Model CL–600–2B19 (Regional Jet Series 100 & 440) airplanes. This AD requires inspecting for discrepancies of the activation mechanism of certain chemical oxygen generators, and corrective action if necessary. This AD results from several incidents, on certain airplane models, of incorrect installation of the release pin into the safety pin hole of the activation mechanism of the chemical oxygen generator; this resulted in failure to activate the chemical oxygen generator when required. A separate incident occurred on a different airplane model during deployment of the cabin oxygen system, which resulted in failure of the