



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2025-01-014(已更新)	發布日期 Date issued	2025/01/20
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	<p>This AD applies to Safran Aerosystems (formerly AVOX Systems Inc.; Scott Aviation) oxygen cylinder and valve assemblies having part number (P/N) 89794050, 89794077, 89794015, 891511-14, 806835-01, 807982-01, 808433-01, or 891311-14; and oxygen valve assemblies (body and gage assemblies) having P/N 807206-01. These assemblies might be installed on, but not limited to, the aircraft identified in paragraphs (c)(1) through (12) of this AD, certificated in any category.</p> <p>(1) Airbus SAS Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes.</p> <p>(2) Airbus SAS Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes.</p> <p>(3) Airbus SAS Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.</p> <p>(4) Airbus SAS Model A318-111, -112, -121, and -122 airplanes.</p> <p>(5) Airbus SAS Model A319-111, -112, -113, -114, -115, -131, -132, -133, and -151N airplanes.</p> <p>(6) Airbus SAS Model A320-211, -212, -214, -216, -231, -232, -233, -251N, -252N, -253N, -271N, -272N, and -273N airplanes.</p> <p>(7) Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, -232, -251N, -252N, -253N, -271N, -272N, -251NX, -252NX, -253NX, -271NX, and -272NX airplanes.</p> <p>(8) Airbus SAS Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, and -941 airplanes.</p> <p>(9) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes.</p> <p>(10) ATR-GIE Avions de Transport Régional Model ATR42-200, -300, -320, and -500 airplanes.</p> <p>(11) ATR-GIE Avions de Transport Régional Model ATR72-101, -102, -201, -202, -211, -212, and -212A airplanes.</p> <p>(12) The Boeing Company Model 747-8 series airplanes.</p>		
主旨摘要 Subject	This AD requires the actions specified in AD 2023-13-11(CAA-2023-09-004) and expands the list of affected assemblies and parts.		

<div>民航局 CAA</div> <div> <input type="radio"/> 本國產品 Native product </div> <div> <input type="radio"/> 其他個案 Other </div>	<div>設計國民航主管機構 Original Authority</div> <div> <input checked="" type="radio"/> FAA <input type="radio"/> Germany LBA </div> <div> <input type="radio"/> EASA <input type="radio"/> CAA-NL </div> <div> <input type="radio"/> Brazil <input type="radio"/> UK CAA </div> <div> <input type="radio"/> Transport Canada Civil Aviation <input type="radio"/> Japan CAB </div> <div> <input type="radio"/> DGAC <input type="radio"/> CAA of Israel </div> <div> <input type="radio"/> Other_____ </div>	
	<div>設計國AD編號 Original AD number</div>	<div>2024-19-15</div>
	<div>1. 直接採用原AD之內容? (Is the original AD directly adopted?)</div> <div> <input checked="" type="radio"/> 是(Yes) <input type="radio"/> 否(No)_ </div> <div>a. 生效日期另訂為(Re-specify the effective date as):</div> <div>b. 執行時限另訂為(Re-specify the compliance time or period as):</div> <div>2. 使用人是否需要將AD執行結果向民航局提出報告? (Do users need to report the status of compliance to the CAA?)</div> <div> <input type="radio"/> 需要(Yes) <input checked="" type="radio"/> 不需要(No) </div>	
<div>備註 Note</div>	<div>This AD replaces AD 2023-13-11(CAA-2023-09-004).</div>	
<div>註： 1. AD內容後附。</div> <div>2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。</div> <div>3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, adcaa@mail.caa.gov.tw</div> <div>Note： 1. The AD text is enclosed.</div> <div>2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval.</div> <div>3. For further information, please contact Civil Aviation Administration on Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, adcaa@mail.caa.gov.tw</div>		

[Federal Register, Volume 89 Number 204 (Tuesday, October 22, 2024)]
[Rules and Regulations]
[Pages 84267-84272]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2024-24370]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-0759; Project Identifier AD-2023-01040-T; Amendment 39-22857; AD 2024-19-15]

RIN 2120-AA64

Airworthiness Directives; Safran Aerosystems (Formerly AVOX Systems Inc.; Scott Aviation) Oxygen Cylinder and Valve Assemblies, and Oxygen Valve Assemblies

AGENCY:

Federal Aviation Administration (FAA), DOT.

ACTION:

Final rule.

SUMMARY:

The FAA is superseding Airworthiness Directive (AD) 2023-13-11, which applied to certain AVOX Systems Inc. (formerly Scott Aviation) oxygen cylinder and valve assemblies, and oxygen valve assemblies, installed on but not limited to various transport airplanes. AD 2023-13-11 required inspecting the oxygen valve assemblies, and oxygen cylinder and valve assemblies, to determine the serial number of the valve, cylinder, and entire assembly; inspecting certain assemblies and parts for correct spacing of the gap between the bottom of the packing retainer and top of the valve body on the assemblies, and replacing assemblies having unacceptable gaps. AD 2023-13-11 also limited the installation of affected parts and required reporting inspection results and returning certain assemblies to the manufacturer. This AD was prompted by the determination that additional assemblies and parts are subject to the unsafe condition. This AD requires the actions specified in AD 2023-13-11 and expands the list of affected assemblies and parts. The FAA is issuing this AD to address the unsafe condition on these products.

DATES:

This AD is effective November 26, 2024.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of November 26, 2024.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of September 5, 2023 ([88 FR 50011](#), August 1, 2023).

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA-2024-0759; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For AVOX and Safran Aerosystems material identified in this AD, contact AVOX Systems Inc., 225 Erie Street, Lancaster, NY 14086; telephone 716-683-5100; website [safranaerosystems.com](#).
- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at *regulations.gov* under Docket No. FAA-2024-0759.

FOR FURTHER INFORMATION CONTACT:

Gabriel Kim, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend [14 CFR part 39](#) to supersede AD 2023-13-11, Amendment 39-22496 ([88 FR 50011](#), August 1, 2023) (AD 2023-13-11). AD 2023-13-11 applied to certain AVOX Systems Inc. (formerly Scott Aviation) oxygen cylinder and valve assemblies, and oxygen valve assemblies, installed on but not limited to various transport airplanes. AD 2023-13-11 was prompted by reports of cylinder and valve assemblies having oxygen leakage from the valve assembly vent hole, caused by the absence of a guide that maintains appropriate spacing between certain parts, and by a determination that additional assemblies and parts are affected by the unsafe condition addressed by AD 2022-04-09, Amendment 39-21951 ([87 FR 10958](#), February 28, 2022) (AD 2022-04-09) (which was superseded by AD 2023-13-11).

The NPRM published in the **Federal Register** on March 25, 2024 ([89 FR 20558](#)). The NPRM was prompted by a report that the manufacturer identified additional assemblies and parts subject to the unsafe condition. In the NPRM, the FAA proposed to continue to require the actions specified in AD 2023-13-11 and require similar actions for those additional assemblies and parts. The FAA is issuing this AD to address oxygen leakage from the cylinder and valve assemblies, which could result in

decreased or insufficient oxygen supply during a depressurization event; and heating or flow friction, which could cause an ignition event in the valve assembly.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from four commenters, including Alaska Airlines (Alaska), American Airlines, Cathay Pacific Airways, Delta Air Lines (Delta), and SIAEC (SIA Engineering Company). The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Reference Later Revisions of Material Identified as Credit

Alaska requested adding the required revisions of the material (identified in paragraphs (l)(1) through (3) of the proposed AD) to the group of material identified as acceptable material in paragraph (p)(3) of the proposed AD for actions accomplished before the effective date of this AD.

The FAA disagrees with the request to revise paragraph (p)(3) of this AD. A global alternative method of compliance (AMOC) letter, 753-23-00200, was issued for AD 2023-13-11 that identified the required material in paragraphs (l)(1) through (3) of this AD as an acceptable AMOC. Accomplishment of the required material before the effective date of this AD to comply with the requirements of this AD is addressed by paragraph (f) of this AD. Paragraph (f) of this AD allows for the use of the required material before the effective date of this AD. No change to the AD has been made in this regard.

Request for Clarification on Acceptable Material for Credit Conclusion

SIAEC asked if credit can be granted for the actions specified in paragraphs (h) and (i) of the proposed AD if Revision 03 of the material was used.

The FAA agrees to clarify. Paragraphs (h) and (i) of this AD still reference Revision 03 of the material as the primary means of compliance for those parts identified in Appendices 1 or 2 of the referenced material. Paragraph (p) of this AD references the other revision levels that are acceptable for credit if they were used before certain effective dates. Paragraph (f) of this AD allows for the use of the required material before the effective date of this AD. No change to this AD is necessary in this regard.

Request To Require Actions for All Serial Numbers Instead of List of Affected Serial Numbers

American Airlines requested revising the applicability of the proposed AD to apply to all serial numbers of the affected part numbers, instead of adding groups of additional serial numbers in superseding ADs. Alaska requested revising the requirements for the serial number inspection, in particular, the ones in Appendix 3 of the required material referenced in paragraph (l) of the proposed AD. Alaska explained that the reading and recording of the serial numbers in three different places on the bottle leads to numerous discrepancies by personnel, which then leads to additional time spent trying to review all the numbers and identify the affected airplanes, possibly leading to affected bottles remaining on the airplane longer before being removed. Alaska suggested that a check for the manufacturer date, and then if a bottle has an affected manufacture date, an inspection to determine if the valve has a blue dot, would be sufficient to determine if an affected bottle is installed on the airplane. Alaska also suggested that once an affected bottle is found, the operator could then choose to

accomplish the gap check and record the required serial numbers, or assume all affected bottles are suspect, and then send any suspected bottle back to the vendor instead of doing a gap check and subsequent serial number record-keeping.

The FAA does not agree to expand the applicability. Revising the applicability to refer to the date of manufacture instead of the serial numbers that must be inspected would increase the burden on some operators. However, operators choosing to inspect all the serial numbers of a part number may apply for an AMOC using the procedures specified in paragraph (q) of this AD. No changes to this AD have been made in this regard.

Request for Additional Compliance Time for Replacing Affected Parts

Alaska requested a revision to extend the compliance time to at least 90 days due to the large increase in number of affected bottles and potential effect on the limited supply of spare bottles. Alaska reasoned that a compliance time of 90 days would help repair vendors turn around the repair of faulty bottles in a timely manner. Although Alaska did not specify what action or paragraph the referenced compliance time would be for, the FAA infers that Alaska is referencing the replacement compliance time specified in paragraph (m)(2) of the proposed AD.

The FAA disagrees with the request. A global AMOC letter, 753-23-00200, was provided in December 2023 to provide relief for using later revisions of the material referenced in AD 2023-13-11, so knowledge of the additional numbers of affected bottles identified in the later revisions of the material would have been available since December 2023. In addition, the compliance time for most of the bottles affected by AD 2023-13-11 would have elapsed in early November 2023. Replacement before further flight ensures that airplanes are not knowingly flying with an unsafe condition. Operators may also apply for an AMOC under the provisions of paragraph (q) of this AD. The FAA has not changed the AD in this regard.

Request To Remove Inspection Report Requirement

Delta requested that the inspection report that was specified in paragraphs (j)(1) and (n)(1) of the proposed AD be removed. Delta pointed to guidance in the AD Manual (FAA-IR-M-8040.1C) (<https://drs.faa.gov/browse/excelExternalWindow/66DDD8E1D2E95DB3862577270062AABD.0001>) that describes the general conditions for requiring inspection reports, and contrasted that with the material's description of the problem with the affected valve assemblies and the proposed AD's proposed requirements as the rationale for removing the inspection report.

The FAA agrees to remove the inspection report that was proposed in paragraphs (j)(1) and (n)(1) of the proposed AD for the reasons provided by the commenter. The subsequent paragraph identifiers have been revised, and the cost estimate has been updated accordingly.

Request To Address Discrepancy in Serial Numbers in Appendix of Material

SIAEC stated that there is a discrepancy within the tables of Appendix 3 of Safran Aerosystems Alert Service Bulletin 10015804-35-01, Revision 04, dated November 9, 2023. SIAEC noted that some of the

affected valve serial numbers are erroneously listed in the affected “Cylinder Serial #” columns in the tables for the Cylinder and Valve assemblies P/Ns 89794077 and 891511-14.

The FAA agrees there are discrepancies in the serial number lists. Paragraph (l)(1) of this AD has been revised to correct the discrepancies.

Request for Clarification of Credit

Cathay Pacific Airways noted that the expanded serial number list from the latest revision of the Safran/AVOX service bulletins has a manufacturing date range from 2011 to 2017. The commenter asked whether the actions specified in the latest Safran/AVOX service bulletin must be redone on an affected serial number if maintenance can show that the part has been overhauled already.

The FAA contacted Safran for additional information regarding the comment, and provides the following clarification. The “overhaul kit” does not always have the necessary parts and therefore does not meet the intent of this AD. P/N 10015804 is a guide part number. If this part is missing, the gap check will fail. However, if the tank undergoes an overhaul as outlined in the Component Maintenance Manual (specified in paragraph 1.K of the applicable service bulletin), it will be equipped with the necessary guide, reassembled, and tested for leaks and hydrostatic pressure. This process aligns with the intent of this AD.

Additional Changes to This Final Rule

The FAA corrected the name of the publisher of the material identified in paragraphs (l)(1) through (3) of this AD from AVOX Systems Inc. to Safran Aerosystems. The FAA has also revised references to the manufacturer's name specified throughout this final rule to identify the manufacturer name as published in the most recent material for the affected models.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference Under [1 CFR Part 51](#)

The FAA reviewed the following material. This material specifies procedures for an inspection to determine the serial numbers of the oxygen cylinder and valve assemblies, and the oxygen valve assemblies, a detailed inspection for correct spacing of the gap between the bottom of the packing retainer and top of the valve body on the assemblies, parts marking, inspection report, and return of parts to the manufacturer. These documents are distinct since they apply to different assembly part numbers.

- Safran Aerosystems Alert Service Bulletin 10015804-35-01, Revision 04, dated November 9, 2023.
- Safran Aerosystems Alert Service Bulletin 10015804-35-02, Revision 06, dated August 30, 2023.
- Safran Aerosystems Alert Service Bulletin 10015804-35-03, Revision 05, dated September 29, 2023.

This AD also requires the following material, which the Director of the Federal Register approved for incorporation by reference as of September 5, 2023 ([88 FR 50011](#), August 1, 2023).

- AVOX Systems Inc. Alert Service Bulletin 10015804-35-01, Revision 03, dated June 7, 2021.
- AVOX Systems Inc. Alert Service Bulletin 10015804-35-02, Revision 03, dated March 11, 2022.
- AVOX Systems Inc. Alert Service Bulletin 10015804-35-03, Revision 03, dated June 18, 2021.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

Costs of Compliance

The FAA estimates that this AD affects 3,777 oxygen cylinder and valve assemblies, and oxygen valve assemblies, installed on various transport category airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Serial number inspection (retained action from AD 2023-13-11)	1 work-hour × \$85 per hour = \$85	None	\$85	\$321,045

The FAA estimates the following costs to do any necessary actions that would be required based on the results of the inspection. The FAA has no way of determining the number of aircraft that might need these actions:

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Detailed inspection	1 work-hour × \$85 per hour = \$85	\$0	\$85
Replacement	1 work-hour × \$85 per hour = \$85	*	85
Return of parts	1 work-hour × \$85 per hour = \$85	** 50	135

** The FAA has received no definitive data on the parts cost for the on-condition replacement.*

*** The FAA has received no definitive data to provide cost estimates for the on-condition return of parts, except the FAA estimates that it would take about 1 work-hour per product to comply with the associated paperwork necessary for the return of parts and cost approximately \$50 to ship.*

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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.

The FAA is 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

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) Will not affect intrastate aviation in Alaska, 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.

List of Subjects in [14 CFR Part 39](#)

- Air transportation
- Aircraft
- Aviation safety
- Incorporation by reference
- Safety

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 FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2013-13-11, Amendment 39-22496 ([88 FR 50011](#), August 1, 2023); and

b. Adding the following new AD:

2024-19-15 Safran Aerosystems (formerly AVOX Systems Inc.; Scott Aviation):
Amendment 39-22857; Docket No. FAA-2024-0759; Project Identifier AD-2023-01040-T.

(a) Effective Date

This airworthiness directive (AD) is effective November 26, 2024.

(b) Affected ADs

This AD replaces AD 2023-13-11, Amendment 39-22496 ([88 FR 50011](#), August 1, 2023) (AD 2023-13-11).

(c) Applicability

This AD applies to Safran Aerosystems (formerly AVOX Systems Inc.; Scott Aviation) oxygen cylinder and valve assemblies having part number (P/N) 89794050, 89794077, 89794015, 891511-14, 806835-01, 807982-01, 808433-01, or 891311-14; and oxygen valve assemblies (body and gage assemblies) having P/N 807206-01. These assemblies might be installed on, but not limited to, the aircraft identified in paragraphs (c)(1) through (12) of this AD, certificated in any category.

(1) Airbus SAS Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes.

(2) Airbus SAS Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes.

(3) Airbus SAS Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.

(4) Airbus SAS Model A318-111, -112, -121, and -122 airplanes.

(5) Airbus SAS Model A319-111, -112, -113, -114, -115, -131, -132, -133, and -151N airplanes.

(6) Airbus SAS Model A320-211, -212, -214, -216, -231, -232, -233, -251N, -252N, -253N, -271N, -272N, and -273N airplanes.

(7) Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, -232, -251N, -252N, -253N, -271N, -272N, -251NX, -252NX, -253NX, -271NX, and -272NX airplanes.

(8) Airbus SAS Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, and -941 airplanes.

(9) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes.

(10) ATR-GIE Avions de Transport Régional Model ATR42-200, -300, -320, and -500 airplanes.

(11) ATR-GIE Avions de Transport Régional Model ATR72-101, -102, -201, -202, -211, -212, and -212A airplanes.

(12) The Boeing Company Model 747-8 series airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Unsafe Condition

This AD was prompted by reports of cylinder and valve assemblies having oxygen leakage from the valve assembly vent hole, caused by the absence of a guide that maintains appropriate spacing between certain parts, and by the manufacturer identifying additional assemblies and parts affected by the unsafe condition. The FAA is issuing this AD to address oxygen leakage from cylinder and valve assemblies. The unsafe condition, if not addressed, could result in decreased or insufficient oxygen supply during a depressurization event; and heating or flow friction, which could cause an ignition event in the valve assembly.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Definition of Detailed Inspection, With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2023-13-11, with no changes. For the purposes of this AD, a detailed inspection is an intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.

(h) Retained Identification of Affected Cylinder and Valve Assemblies, With Updated Language

This paragraph restates the requirements of paragraph (h) of AD 2023-13-11, with updated language. Within 60 days after September 5, 2023 (the effective date of AD 2023-13-11), inspect the oxygen valve assemblies, and oxygen cylinder and valve assemblies, to determine if the serial numbers of the valve, cylinder, and entire assembly, are listed in Appendix 1 or Appendix 2, "Affected Shipments," of the applicable material identified in paragraphs (h)(1) through (3) of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial numbers can be conclusively determined from that review.

(1) AVOX Systems Inc. Alert Service Bulletin 10015804-35-01, Revision 03, dated June 7, 2021.

(2) AVOX Systems Inc. Alert Service Bulletin 10015804-35-02, Revision 03, dated March 11, 2022.

(i) Retained Inspection of the Gap, Parts Marking Actions, and Replacement, With Updated Language

This paragraph restates the requirements of paragraph (i) of AD 2023-13-11, with updated language. If, during any inspection or records review required by paragraph (h) of this AD, any oxygen valve assembly, valve or cylinder of an oxygen cylinder and valve assembly, or oxygen cylinder and valve assembly having an affected serial number is found: Before further flight, do a detailed inspection for correct spacing of the gap between the bottom of the packing retainer and top of the valve body, in accordance with paragraph 3.C. of the Accomplishment Instructions of the applicable material identified in paragraphs (h)(1) through (3) of this AD.

(1) If the gap is found to be acceptable, as defined in the applicable material identified in paragraphs (h)(1) through (3) of this AD, before further flight, do the parts marking actions in accordance with paragraph 3.D.(1) of the Accomplishment Instructions of the applicable material identified in paragraphs (h)(1) through (3) of this AD.

(2) If the gap is found to be unacceptable, as defined in the material identified in paragraphs (h)(1) through (3) of this AD, before further flight, remove the affected assembly, in accordance with paragraphs 3.D.(2) or 3.D.(3), as applicable, of the Accomplishment Instructions of the applicable material identified in paragraphs (h)(1) through (3) of this AD; and replace with a serviceable assembly.

(j) Retained Return of Parts, With Updated Language

This paragraph restates the requirement to return parts, as specified in paragraph (j)(2) of AD 2023-13-11, with updated language. If, during the inspection required by paragraph (i) of this AD, any gap is found to be unacceptable, within the applicable time specified in paragraph (j)(1) or (2) of this AD, return the assembly to the manufacturer in accordance with paragraph 3.D.(2) or 3.D.(3), as applicable, of the Accomplishment Instructions of the applicable material identified in paragraphs (h)(1) through (3) of this AD, except you are not required to contact AVOX Systems Inc. for shipping instructions.

(1) If the inspection was done on or after September 5, 2023 (the effective date of AD 2023-13-11): Return the assembly within 30 days after the inspection.

(2) If the inspection was done before September 5, 2023 (the effective date of AD 2023-13-11): Return the assembly within 30 days after September 5, 2023.

(k) Retained Parts Installation Limitation, With Updated Language

This paragraph restates the provisions of paragraph (k) of AD 2023-13-11, with updated language. As of September 5, 2023 (the effective date of AD 2023-13-11), no AVOX Systems Inc. oxygen valve assembly, or valve or cylinder that is part of an oxygen cylinder and valve assembly, or oxygen cylinder and valve assembly having an affected serial number identified in Appendix 1, "Affected Shipments," or Appendix 2, "Affected Shipments," of any AVOX Systems Inc. material identified in paragraphs (h)

(1) through (3) of this AD may be installed on any airplane unless the requirements of paragraph (i) of this AD have been accomplished on that affected assembly.

(l) New Identification of Additional Affected Cylinder and Valve Assemblies

Within 60 days after the effective date of this AD, inspect the oxygen valve assemblies, and oxygen cylinder and valve assemblies, to determine if the serial numbers of the valve, cylinder, and entire assembly, are listed in Appendix 3, “Affected Shipments,” of the applicable material identified in paragraphs (l)(1) through (3) of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial numbers can be conclusively determined from that review.

(1) Safran Aerosystem Alert Service Bulletin 10015804-35-01, Revision 04, dated November 9, 2023, except as specified in paragraphs (l)(1)(i) and (ii).

(i) In rows 2 through 492 of table tab “89794077” in Appendix 3 of Safran Aerosystems Alert Service Bulletin 10015804-35-01, Revision 04, dated November 9, 2023, the list of numbers in the “Valve Serial #” and “Cylinder Serial #” columns have been transposed with each other and the list of numbers in the “Valve Part #” and “Cylinder Part #” columns have also been transposed with each other.

(ii) In rows 2 through 65 of table tab 891511-14 in Appendix 3 of Safran Aerosystems Alert Service Bulletin 10015804-35-01, Revision 04, dated November 9, 2023, the list of numbers in the “Valve Serial #” and “Cylinder Serial #” columns have been transposed with each other, and the list of numbers in the “Valve Part #” and “Cylinder Part #” columns have been transposed with each other.

(2) Safran Aerosystems Alert Service Bulletin 10015804-35-02, Revision 06, dated August 30, 2023.

(3) Safran Aerosystems Inc. Alert Service Bulletin 10015804-35-03, Revision 05, dated September 29, 2023.

(m) New Inspection of the Gap, Parts Marking Actions, and Replacement for Additional Parts

If, during any inspection or records review required by paragraph (l) of this AD, any oxygen valve assembly, valve or cylinder of an oxygen cylinder and valve assembly, or oxygen cylinder and valve assembly having an affected serial number is found: Before further flight, do a detailed inspection for correct spacing of the gap between the bottom of the packing retainer and top of the valve body, in accordance with paragraph 3.C. of the Accomplishment Instructions of the applicable material identified in paragraphs (l)(1) through (3) of this AD.

(1) If the gap is found to be acceptable, as defined in the applicable material identified in paragraphs (l)(1) through (3) of this AD, before further flight, do the parts marking actions in accordance with paragraph 3.D.(1) of the Accomplishment Instructions of the applicable material identified in paragraphs (l)(1) through (3) of this AD.

(2) If the gap is found to be unacceptable, as defined in the material identified in paragraphs (l)(1) through (3) of this AD, before further flight, remove the affected assembly, in accordance with paragraphs 3.D.(2) or 3.D.(3), as applicable, of the Accomplishment Instructions of the applicable material identified in paragraphs (l)(1) through (3) of this AD; and replace with a serviceable assembly.

(n) New Return of Additional Parts

If, during the inspection required by paragraph (m) of this AD, any gap is found to be unacceptable, within the applicable time specified in paragraph (n)(1) or (2) of this AD, return the assembly to the manufacturer in accordance with paragraph 3.D.(2) or 3.D.(3), as applicable, of the Accomplishment Instructions of the applicable material identified in paragraphs (l)(1) through (3) of this AD, except you are not required to contact Safran Aerosystems for shipping instructions.

(1) If the inspection was done on or after the effective date of this AD: Return the assembly within 30 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Return the assembly within 30 days after the effective date of this AD.

(o) New Parts Installation Limitation

As of the effective date of this AD, no AVOX Systems Inc. or Safran Aerosystems oxygen valve assembly, or valve or cylinder that is part of an oxygen cylinder and valve assembly, or oxygen cylinder and valve assembly having an affected serial number identified in Appendix 3, "Affected Shipments," of any Safran Aerosystems Inc. material identified in paragraphs (l)(1) through (3) of this AD may be installed on any airplane unless the requirements of paragraph (m) of this AD have been accomplished on that affected assembly.

(p) Credit for Previous Actions

(1) This paragraph provides credit for the actions specified in paragraphs (h) or (i) of this AD, if those actions were performed before September 5, 2023 (the effective date of AD 2023-13-11), using the material specified in paragraphs (p)(1)(i) through (iii) of this AD. This material is not incorporated by reference in this AD.

(i) AVOX Systems Inc. Service Bulletin 10015804-35-01, dated March 6, 2019; and AVOX Systems Inc. Alert Service Bulletin 10015804-35-01, Revision 01, dated July 9, 2019.

(ii) AVOX Systems Inc. Alert Service Bulletin 10015804-35-02, Revision 1, dated September 4, 2019.

(iii) AVOX Systems Inc. Service Bulletin 10015804-35-03, dated April 11, 2019; and AVOX Systems Inc. Alert Service Bulletin 10015804-35-03, Revision 01, dated May 21, 2019.

(2) This paragraph provides credit for the actions specified in paragraphs (h) or (i) of this AD, if those actions were performed before September 5, 2023 (the effective date of AD 2023-13-11), using the material specified in paragraphs (p)(2)(i) through (iii) of this AD, which was incorporated by reference in AD 2022-04-09.

(i) AVOX Systems Inc. Alert Service Bulletin 10015804-35-01, Revision 02, dated October 16, 2019.

(ii) AVOX Systems Inc. Alert Service Bulletin 10015804-35-02, Revision 2, dated October 31, 2019.

(iii) AVOX Systems Inc. Alert Service Bulletin 10015804-35-03, Revision 02, dated October 15, 2019.

(3) This paragraph provides credit for the actions specified in paragraphs (h), (i), (l), or (m) of this AD, if those actions were performed before the effective date of this AD, using the material specified in paragraphs (p)(3)(i) through (ii) of this AD. This material is not incorporated by reference in this AD.

(i) AVOX Systems Inc. Alert Service Bulletin 10015804-35-02, Revision 04, dated June 30, 2023; or Revision 05, dated August 14, 2023.

(ii) AVOX Systems Inc. Alert Service Bulletin 10015804-35-03, Revision 04, dated June 12, 2023.

(q) Alternative Methods of Compliance (AMOCs)

(1) The Manager, East Certification Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in [14 CFR 39.19](#). In accordance with [14 CFR 39.19](#), send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the East Certification Branch, send it to ATTN: Program Manager, Continuing Operational Safety, at the address identified in paragraph (r) of this AD or email to: AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) AMOCs approved for AD 2023-13-11 are approved as AMOCs for the corresponding provisions of this AD.

(r) Related Information

(1) For more information about this AD, contact Gabriel Kim, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

(2) Material identified in this AD that is not incorporated by reference is available at the address specified in paragraph (s)(5) of this AD.

(s) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under [5 U.S.C. 552\(a\)](#) and [1 CFR part 51](#).

(2) You must use this material as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following material was approved for IBR on November 26, 2024.

(i) Safran Aerosystems Alert Service Bulletin 10015804-35-01, Revision 04, dated November 9, 2023.

(ii) Safran Aerosystems Alert Service Bulletin 10015804-35-02, Revision 06, dated August 30, 2023.

(iii) Safran Aerosystems Alert Service Bulletin 10015804-35-03, Revision 05, dated September 29, 2023.

(4) The following material was approved for IBR on September 5, 2023 ([88 FR 50011](#), August 1, 2023).

(i) AVOX Systems Inc. Alert Service Bulletin 10015804-35-01, Revision 03, dated June 7, 2021.

(ii) AVOX Systems Inc. Alert Service Bulletin 10015804-35-02, Revision 03, dated March 11, 2022.

(iii) AVOX Systems Inc. Alert Service Bulletin 10015804-35-03, Revision 03, dated June 18, 2021.

(5) For material identified in this AD, contact AVOX Systems Inc., 225 Erie Street, Lancaster, NY 14086; telephone 716-683-5100; website *safranaerosystems.com*.

(6) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on September 23, 2024.

Victor Wicklund,

Deputy Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[[FR Doc. 2024-24370](#) Filed 10-21-24; 8:45 am]

BILLING CODE 4910-13-P