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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2024-2328; Project Identifier AD-2024-00282-Q,R; Amendment 39-22863; AD 2024-20-04]**

**RIN 2120-AA64**

### **Airworthiness Directives; Various Helicopters**

#### **AGENCY:**

Federal Aviation Administration (FAA), DOT.

#### **ACTION:**

Final rule; request for comments.

#### **SUMMARY:**

The FAA is superseding Airworthiness Directive (AD) 2024-01-11, which applied to all helicopters with certain Pacific Scientific Company rotary buckle assemblies (buckles) installed. AD 2024-01-11 required inspecting the buckle screws and, depending on the results, reidentifying the buckle, replacing the screws and reidentifying the buckle, or replacing the buckle. AD 2024-01-11 also prohibited installing certain buckles. This AD retains the requirements of AD 2024-01-11, expands the applicability, and updates the referenced material. As an option to the actions required by this AD, this AD allows removing the male side from the lap of the restraint system assembly and installing a placard stating that use of the seat is prohibited; use of that crewmember seat or passenger seat is then prohibited until the actions required by the AD are accomplished and the male side from the lap of the restraint system assembly is reinstalled. This AD was prompted by a manufacturing defect in the screws used inside the buckle. The FAA is issuing this AD to address the unsafe condition on these products.

#### **DATES:**

This AD is effective November 12, 2024.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of November 12, 2024.

The FAA must receive comments on this AD by December 9, 2024.

## ADDRESSES:

You may send comments, using the procedures found in [14 CFR 11.43](#) and [11.45](#), by any of the following methods:

- *Federal eRulemaking Portal:* Go to *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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

*AD Docket:* You may examine the AD docket at *regulations.gov* under Docket No. FAA-2024-2328; 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 street address for Docket Operations is listed above.

## *Material Incorporated by Reference:*

- For Parker Meggitt material identified in this AD, contact Parker Meggitt Services, 1785 Voyager Avenue, Simi Valley, CA 93063; phone: 877-666-0712; email: [TechSupport@meggitt.com](mailto:TechSupport@meggitt.com); website: [meggitt.com/services\\_and\\_support/customer\\_experience/update-on-buckle-assembly-service-bulletins](http://meggitt.com/services_and_support/customer_experience/update-on-buckle-assembly-service-bulletins).
- You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Parkway, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at *regulations.gov* under Docket No. FAA-2024-2328.

## FOR FURTHER INFORMATION CONTACT:

David Kim, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5274; email: [david.kim@faa.gov](mailto:david.kim@faa.gov).

## SUPPLEMENTARY INFORMATION:

### Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2024-2328; Project Identifier AD-2024-00282-Q,R” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in [14 CFR 11.35](#), the FAA will post all comments received, without change, to *regulations.gov*, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

## Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) ([5 U.S.C. 552](#)), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to David Kim, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5274; email: [david.kim@faa.gov](mailto:david.kim@faa.gov). Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

## Background

The FAA issued AD 2024-01-11, Amendment 39-22662 ([89 FR 6008](#), January 31, 2024) (AD 2024-01-11), for all helicopters with a Pacific Scientific Company buckle part number (P/N) 1111475 (all dash numbers) or P/N 1111548-01 installed, if the buckle was manufactured between January 2012 and September 2012 inclusive or has an unknown date of manufacture (DOM). These same part-numbered buckles may also be installed in airplanes; the FAA published a separate notice of proposed rulemaking on February 29, 2024 ([89 FR 14783](#)) to address all airplanes with a Pacific Scientific Company buckle P/N 1111475 (all dash numbers) or P/N 1111548-01 installed.

For helicopters with the identified buckles, AD 2024-01-11 required inspecting each buckle screw for cracked, loose, and missing screw heads and, depending on the results, replacing the buckle or inspecting each screw to determine if any screw has a Torx head. Depending on the results of that inspection, AD 2024-01-11 required reassembling the buckle (if necessary) and reidentifying it with “INS. A” or replacing each Torx head screw with a hex head screw, reassembling the buckle, and reidentifying the buckle with “MOD. A.” If a screw head broke off during disassembly, AD 2024-01-11 required replacing the buckle with an airworthy buckle. Lastly, AD 2024-01-11 prohibited installing an identified buckle unless it was marked with “MOD. A” or “INS. A.”

AD 2024-01-11 resulted from a report of a 2012 manufacturing defect in the screws used inside Pacific Scientific Company buckles P/N 1111475 (all dash numbers) and P/N 1111548-01. The screws used to fasten the load plate to the body of the buckle were found to be susceptible to hydrogen embrittlement due to improper baking during the electroplating process. This condition leads the screwhead to separate from the body of the screw when under load, which could result in the buckle failing to restrain the occupant to the seat. This condition was identified in screw Lots 348601-A and 348994-A, which were manufactured between January 2012 and September 2012, and were the first two lots of screws received by Pacific Scientific Company from a new supplier. The FAA issued AD 2024-01-11 to

prevent cracking and missing screw heads when under load, which, if not addressed, could result in a failure of the buckle to restrain the occupant.

### **Actions Since AD 2024-01-11 Was Issued**

Since the FAA issued AD 2024-01-11, additional review by the manufacturer revealed that an additional lot of screws, Lot 358764-A, is also affected by the same unsafe condition, which expands the DOM to April 2013 inclusive.

Parker Meggitt also revised Service Bulletin (SB) 1111475-25-001-2023 and SB 1111548-25-001-2023, each Revision 001 and dated December 1, 2023 (SB 1111475-25-001-2023 Rev 001 and SB 1111548-25-001-2023 Rev 001), to SB 1111475-25-001-2023 and SB 1111548-25-001-2023, each Revision 002 and dated April 1, 2024 (SB 1111475-25-001-2023 Rev 002 and SB 1111548-25-001-2023 Rev 002). SB 1111475-25-001-2023 Rev 002 and SB 1111548-25-001-2023 Rev 002 specify the same procedures as SB 1111475-25-001-2023 Rev 001 and SB 1111548-25-001-2023 Rev 001, except SB 1111475-25-001-2023 Rev 002 and SB 1111548-25-001-2023 Rev 002 expand the applicability, update material and tooling information, add and clarify certain Accomplishment Instructions procedures, and update figures.

The FAA is issuing this AD to address the unsafe condition on these products.

### **Comments to AD 2024-01-11**

After AD 2024-01-11 was published, the FAA received comments from 26 commenters. The commenters included Airbus, Airbus Atlantic, Airbus Helicopters, Airbus India Private Limited, AS Aerospace, Ltd., ASL Airlines Australia, Avionord, Castle Air, the Civil Aviation Safety Authority of Australia, Emirates Airlines, Etihad Airways, East West Helicopter-Panterra Heli Support, Elifriulia S.p.A., Elitellina—Pegasus Aero Group, Jordan Aviation, NASA Glenn Research Center Aircraft Operation (NASA), Parker Meggitt, Qatar Airways, Sabena Technics, San Antonio Police Helicopter Unit, SAS Airlines, SkyUP Ukraine, Starlux Airlines, Summit Helicopters, Inc., and two anonymous commenters. The following presents the comments received on AD 2024-01-11 and the FAA's response to each comment.

#### **Comment Regarding State of Design**

The Civil Aviation Safety Authority of Australia asked if the FAA or Parker Meggitt in the United Kingdom is the state of design for Pacific Scientific Company for the specified buckles.

The United States is the state of design for the restraints and granted the technical standard order authorizations for those restraints; the oversight is the responsibility of the FAA.

#### **Comments Regarding Buckles Installed in Airplanes**

Airbus India Private Limited, Emirates Airlines, Jordan Aviation, Qatar Airlines, SAS Airlines, SkyUP Ukraine, and Starlux Airlines asked if AD 2024-01-11 applies to airplanes and Airbus, ASL Airlines Australia, Emirates Airlines, Etihad Airways, Jordan Aviation, NASA, Qatar Airlines, and SkyUP Ukraine explained that the affected buckles may be installed in aircraft other than helicopters.

This AD applies to all helicopters with the affected buckles installed. The FAA published a separate notice of proposed rulemaking ([89 FR 14783](#), February 29, 2024) to address all airplanes with an affected buckle installed because the FAA determined that a longer compliance time to accomplish the required actions is allowable for buckles installed in airplanes. The separate AD rulemaking for buckles installed in airplanes is available at *federalregister.gov* and *regulations.gov* under Docket No. FAA-2024-2328.

### Requests for Clarification of the Applicability Product Type

Airbus India Private Limited requested clarification regarding whether AD 2024-01-11 is a rotorcraft or appliance AD and provided images from the FAA's Dynamic Regulatory System website (DRS), which is the website that stores ADs and other regulatory and guidance material, that show the product type as appliance and the product subtype as rotorcraft. An anonymous commenter suggested the FAA specify in the **SUMMARY** section in the preamble and the Applicability paragraph of the rule portion that the AD is an appliance AD.

AD 2024-01-11 applied to rotorcraft with a specific appliance installed. Regarding the information in DRS listing the product type as appliance and the product subtype as rotorcraft, the FAA has since updated the listing in DRS to show the product type as both aircraft and appliance, and the subtype as rotorcraft. The FAA disagrees with explicitly stating that the AD is an appliance AD in the **SUMMARY** section and the Applicability paragraph because the AD is, in fact, a rotorcraft AD that affects all helicopters with the affected buckles installed. Additionally, the purpose of the **SUMMARY** section is to briefly explain the AD action, which may include, but is not limited to, providing the following types of information: affected products or articles, required actions, and the unsafe condition. And the purpose of the Applicability paragraph is to clearly identify the affected products or articles.

### Requests for the Referenced Material and a Direct Link in the Background Section

Avionord, Castle Air, Elifriulia S.p.A, and Sabena Technics requested a copy of the service bulletins referenced in AD 2024-01-11. Parker Meggitt requested the FAA add a hyperlink in the Background section to [www.meggitt.com/services\\_and\\_support/customer\\_experience/update-onbuckle-assembly-service-bulletins](http://www.meggitt.com/services_and_support/customer_experience/update-onbuckle-assembly-service-bulletins), which provides a direct link to the service bulletins.

The service bulletins referenced in AD 2024-01-11 are available in the AD docket at [www.regulations.gov/document/FAA-2024-0034-0002](http://www.regulations.gov/document/FAA-2024-0034-0002). The **ADDRESSES** section, as well as the Material Incorporated by Reference paragraph, provide availability information for the service bulletins, including the direct link requested by Parker Meggitt. Regarding the request to add the direct link in the Background section, the purpose of the Background section is to explain the unsafe condition and the FAA's justification for issuing the AD action. It may include, but is not limited to, providing the following types of information: the circumstances that created the need to correct the unsafe condition, historical information, consequences if the unsafe condition is not corrected, and any other information that supports the AD action. Additionally, the service bulletins referenced in AD 2024-01-11 are no longer available at that direct link. Since this request does not correct information, it has not been incorporated into this new AD.

### Comments Regarding Parker Meggitt Services' Email Address

East West Helicopter-Panterra Heli Support, Elifriulia S.p.A., Parker Meggitt, Pegasus Aero-Group, Sabena Technics, and Summit Helicopters, Inc., stated that the email address identified in AD 2024-01-11 for contacting Parker Meggitt Services was incorrect.

The FAA has corrected the email address for contacting Parker Meggitt Services in this AD to [TechSupport@meggitt.com](mailto:TechSupport@meggitt.com).

### **Request To Clarify the Received Report in the Background Section**

Parker Meggitt requested the FAA revise the Background section by clarifying that the report received by the FAA is for a “2012” manufacturing defect in the screws used inside Pacific Scientific Company buckle P/N 1111475 (all dash numbers) and P/N 1111548-01 to prevent operator confusion.

The FAA agrees and has revised the Background section in this new AD accordingly.

### **Comments Regarding Illegible Dates of Manufacture or Lack of DOM Marking**

East West Helicopter-Panterra Heli Support commented that the DOM on the plastic tag on the back of the buckle is easily erased and the AD requires replacing any Torx head screws before further flight if the date tag is unreadable on the buckle. Airbus Atlantic commented that some buckles may not have been marked with a DOM and asked when the DOM marking was implemented.

The FAA acknowledges these comments and infers concern that some buckles may be repaired or replaced unnecessarily due to the date of manufacture not being legible. Applicable part-numbered buckles with an illegible or missing DOM, including those that may have never been marked, are considered as having an unknown DOM for the purposes of this AD and must comply with the requirements of this AD. Additionally, the compliance time to accomplish the inspections is within 3 months after the AD's effective date; only if, as a result of the inspections, it is determined that a Torx head screw is installed, is replacing each Torx head screw required before further flight. The DOM marking was added to buckle P/N 1111475 (all dash numbers) after the initial 2012 investigation while buckle P/N 1111548-01 has always been marked with the DOM. Additionally, part marking preservation and reidentification is the responsibility of operators.

### **Comment Regarding Availability of Replacement Screws, Grounding Helicopters, and Requesting Alternative Methods of Compliance (AMOCs)**

East West Helicopter-Panterra Heli Support commented that the supplier of the affected screws has no screws available, and none are on order. East West Helicopter-Panterra Heli Support further commented that the lack of screws could ground helicopters and the alternate option to replace the entire seat belt harness with a parts cost of \$8,135 is not stated in the Costs of Compliance section. East West Helicopter-Panterra Heli Support requested the FAA revise the AD to allow a daily inspection to ensure that no screw heads are broken off until the AD is due in May (2024), which could also provide time for screws to become available over the next couple of months and avoid grounding helicopters. An anonymous commenter referenced East West Helicopter-Panterra Heli Support's comment and inquired whether an AMOC could be requested for repetitive inspections until parts become available or for an extension to accomplish a repair.

To the extent spare parts may not exist to replace parts that fail the inspection requirements of this AD, the FAA cannot base its AD action on whether spare parts are available or can be produced. While every effort is made to avoid grounding aircraft, the FAA must address the unsafe condition. While operators may choose to replace the entire seat belt harness assembly, it is not necessary to do so as the buckle can be replaced, which may include repairing the buckle, as a component independently from the assembly. Regarding the request to allow a daily inspection to ensure that no screw heads are broken off, operators may request approval of any specific alternative actions as an AMOC under the provisions of paragraph (i) of this AD.

### **Requests Regarding Deactivating a Seat**

An anonymous commenter requested the FAA revise its AD to allow deactivating and placarding as “Inoperative” an identified discrepant buckle on a seat, other than the one(s) which must be occupied by the minimum crew required to operate the affected rotorcraft, per [14 CFR 91.213\(b\)](#) and MMEL [Master Minimum Equipment List] PL-34. The commenter also requested clarification of the FAA's position regarding deactivating non-operational seats.

The FAA agrees with the commenter's request and has added an optional action for the AD requirements. This AD allows, for a crewmember seat or passenger seat with a restraint system with an affected buckle installed, removing the male side from the lap of the restraint system assembly and fabricating and installing a placard on the seat stating that use of the seat is prohibited. Use of that crewmember seat or passenger seat is then prohibited until the actions required by the AD are accomplished and the male side from the lap of the restraint system assembly is reinstalled.

### **Request To Change Citations of Referenced Material**

AS Aerospace Ltd requested the FAA change the paragraph citations to referenced service bulletins in the Required Actions paragraph to begin with a number instead of a letter, *e.g.*, state “paragraph 4.B.(4)(a)” instead of “paragraph B.(4)(a)” because the service bulletins identify a number before each section title.

The FAA disagrees. The paragraph citations to the service bulletins suffice since they identify the section of the service bulletins by title instead, *e.g.*, “Accomplishment Instructions, paragraph B.(4)(a).”

### **Request To Correct the Flow Chart in Referenced Material**

Airbus Atlantic commented that an error in the flowchart in the Parker Meggitt service bulletin results in buckles being incorrectly reidentified.

The flowcharts in Parker Meggitt SB 1111475-25-001-2023 and SB 1111548-25-001-2023, each original issue and dated September 1, 2023, specify only the reidentification of “MOD. A.” One of the changes incorporated in SB 1111475-25-001-2023 Rev 001 and in SB 1111548-25-001-2023 Rev 002 was a change in the flowcharts to reidentify the buckle with “INS. A” or “MOD. A” depending on the inspection results.

### **Request To Revise a Service Bulletin Figure**

Airbus Atlantic requested revision of the “Torx Head Screws vs. Hex Head Screws” figure (Figure 7 of SB 1111475-25-001-2023 Rev 001 and Figure 5 of SB 1111548-25-001-2023 Rev 001) in the service bulletins to add the dates when each screw was used.

The FAA cannot require a manufacturer to revise its publications; however, the FAA does include exceptions in an AD to referenced material that is required for compliance to correct information within the referenced material. The proposed changes do not correct information in the referenced material and accordingly, have not been incorporated into this new AD.

### **Requests for Clarification Regarding Returning Parts to Parker Meggitt**

An anonymous commenter requested clarification regarding whether a buckle needs to be scrapped when a screw head breaks off during disassembly because it cannot be sent to Parker Meggitt for repair. And, if so, the commenter requested the FAA revise the AD to state that such buckles must be scrapped and update the Costs of Compliance accordingly. The commenter also asked if the FAA intended to prevent operators from attempting to repair such buckles in the field by removing the threaded portion of the broken screw and installing a new screw and, if so, to consider deleting the paragraph in the Required Actions paragraph and let the service information stand as-is ( *i.e.*, return a buckle with broken screws to Parker Meggitt for repair or replacement).

Since the AD does not require (permanently) removing a damaged buckle from service, the damaged buckle may be returned to an airworthy condition. The AD does not require returning a buckle to Parker Meggitt because the FAA does not have the authority to direct operators to return defective components to the manufacturer in this AD. Because the AD also does not specify any particular procedure to return a damaged buckle to an airworthy condition, a procedure that is acceptable to the FAA must be used, which includes operators choosing to return a damaged buckle to Parker Meggitt for repair as the AD does not prohibit an operator from doing so. Operators may also request approval of any specific corrective actions as an AMOC under the provisions of paragraph (i) of this AD.

### **Requests Regarding the Magnet Used for the Magnet Test**

Airbus Helicopters commented regarding Meggitt Service Bulletin SB 1111475-25-001-2023 and stated that the magnetism strength of the magnet is the representative physical quantity to determine if each screw has a Torx head or hex head in the magnet test. Airbus Helicopters asked if Meggitt would provide more precise information concerning the magnet (particularly its magnetism strength) and if Meggitt would provide this magnet as a specific tool to ensure proper application of the service bulletin. Airbus Atlantic also requested that the service bulletin specify precise/physical characteristics of the magnet to be used to perform the magnet test. Additionally, Airbus Atlantic requested that Meggitt specify the magnet as a special tool with a part number and provide that tool to operators.

Since AD 2024-01-11 was issued, SB 1111475-25-001-2023 Rev 001 has been revised to Rev 002, to incorporate various changes, including the addition of a website link to magnet P/N 5862K104 under the Material Information, paragraph G.—Special Tooling. The website at this link provides various magnet specification information. SB 1111475-25-001-2023 Rev 002 also recommends certain magnet dimensions and explains that a magnet that is strong enough to not slip off the buckle suffices for the purposes of the magnet test. Regarding the request for Meggitt to provide a magnet, the FAA does not have the authority to require a manufacturer to send any tooling to an operator.

## **Requests Regarding the Magnet Test for a Buckle With Velcro Installed on Its Back Plate**

Airbus Helicopters commented regarding Meggitt Service Bulletin SB 1111475-25-001-2023 that the magnet test is not applicable for all buckles because some buckles have Velcro on their back plate that attaches padding between the buckle and the occupant. Airbus Helicopters requested that Meggitt provide an alternate method for buckles with this Velcro installed. Airbus Atlantic also expressed concern about inaccurate results from the magnet test when Velcro is attached to the buckle back plate.

Since AD 2024-01-11 was issued, SB 1111475-25-001-2023 Rev 001, as well as SB 1111548-25-001-2023 Rev 001, were revised to Rev 002 to incorporate various changes, including the addition of procedures to accomplish the magnet test for a buckle that has Velcro installed on its back plate. Therefore, this AD provides two other methods for determining if any screw has a Torx head as an alternative to the magnet test.

## **Requests for Clarification of “Thin Metal Stock” and Removing a Buckle**

Airbus Helicopters commented regarding Meggitt Service Bulletin SB 1111475-25-001-2023 and requested that Meggitt provide more details about the “thin metal stock” to be used to remove a buckle, the way to proceed, and a reference to a well-known procedure of CMM [Component Maintenance Manual].

Since AD 2024-01-11 was issued, SB 1111475-25-001-2023 Rev 001 was revised to Rev 002 to incorporate various changes, including the addition of dimensions and specification of a shim or feeler gauge (metal stock) under the Material Information, paragraph G.—Special Tooling. This AD requires using Revision 2 of the referenced material to accomplish its requirements. AD 2024-01-11 does not refer to a component maintenance manual and the FAA cannot require a manufacturer to revise its publications.

## **Requests for Torque Values**

Airbus Helicopters commented regarding Meggitt Service Bulletin SB 1111475-25-001-2023 and requested that Meggitt provide the precise torque values to reassemble the two parts of the buckle because the values are missing.

Since AD 2024-01-11 was issued, SB 1111475-25-001-2023 Rev 001 was revised to Rev 002 to incorporate various changes, including the addition of the torque values. Further, this AD requires using Revision 2 of the referenced material to accomplish its requirements.

## **Request Regarding Service Bulletin Accomplishment Traceability**

Airbus Helicopters commented regarding Meggitt Service Bulletin SB 1111475-25-001-2023 and requested that Meggitt provide a proposal for buckle (re)identification that indicates the completion of its service bulletin to ensure the traceability of affected buckles.

Parker Meggitt SB 1111475-25-001-2023 Rev 002, which is incorporated by reference in this AD, specifies procedures for marking affected buckles that have passed the inspections with “INS. A” and marking affected buckles that have successfully been modified with “MOD. A.”

## **FAA's Determination**

The FAA is issuing this AD because the agency determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

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

The FAA reviewed SB 1111475-25-001-2023 Rev 002 for buckle P/N 1111475 and SB 1111548-25-001-2023 Rev 002 for buckle P/N 1111548-01. This material specifies procedures for inspecting the buckle for any missing or loose screw heads and depending on the results, replacing the buckle and sending the removed buckle to Parker Meggitt for repair or replacement. If after that first inspection, all of the screw heads are intact, this material specifies procedures for inspecting the buckle for any Torx head screws (alloy steel) and, depending on the results, allowing the buckle assembly to remain in-service temporarily, replacing any Torx head screws (alloy steel) with new hex head screws (stainless steel), and checking the functionality of the buckle. This material also specifies procedures for removing a buckle from a restraint system, installing a buckle on a restraint system, and returning buckles to Parker Meggitt. If the buckle passes the specified inspections or is modified by replacing Torx head screws (alloy steel) with new hex head screws (stainless steel) screws, this material specifies procedures for reidentifying the back of the buckle.

The buckle may be included as a component of a different part-numbered restraint system assembly. This material identifies known affected restraint system assembly P/Ns.

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.

## **AD Requirements**

This AD requires accomplishing the actions specified in the referenced material described previously, except as discussed under “Differences Between this AD and the Referenced Material.”

## **Differences Between This AD and the Referenced Material**

The material incorporated by reference does not specify any compliance times, whereas this AD requires accomplishing the required actions within three months. This AD also prohibits installing an affected buckle on any helicopter unless the buckle includes “MOD A” or “INS A” on the buckle as of the effective date of this AD.

The material incorporated by reference specifies sending any damaged buckles to Parker Meggitt for repair or replacement, and this AD does not. Instead, this AD requires replacing the buckle with an airworthy buckle.

The material incorporated by reference allows buckles with a Torx head (alloy steel) screw to remain in service temporarily and be replaced at a time convenient to the operator, and this AD does not. If a buckle has any number of Torx head (alloy steel) screws installed, this AD requires replacing all four screws with hex head screws before further flight.

If a screw head breaks off during disassembly of a buckle or if reassembly of a buckle is not possible, the material incorporated by reference specifies returning the buckle to Parker Meggitt, whereas this

AD does not. If a screw head breaks off during disassembly, this AD requires replacing the buckle with an airworthy buckle. If reassembly of a buckle is not possible, then the buckle is not airworthy.

This AD has the optional action, for a crewmember seat or passenger seat with a restraint system with an affected buckle installed, within 3 months after the effective date, of removing the male side from the lap of the restraint system assembly and fabricating and installing a placard on the seat stating that use of the seat is prohibited. Use of that crewmember seat or passenger seat is then prohibited until the actions required by the AD are accomplished and the male side from the lap of the restraint system assembly is reinstalled. The material incorporated by reference does not include this optional action.

### **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b) of the Administrative Procedure Act (APA) ([5 U.S.C. 551](#) *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because in an otherwise survivable accident, hard landing, or severe turbulence, the buckle may fail to restrain the occupant. Based on the rotorcraft accident rate, coupled with not knowing the propagation rate of this unsafe condition into failure, the FAA determined that the compliance time to inspect affected buckles installed in helicopters must be within three months. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to [5 U.S.C. 553\(b\)](#).

In addition, the FAA finds that good cause exists pursuant to [5 U.S.C. 553\(d\)](#) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

### **Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to [5 U.S.C. 553](#) to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

### **Costs of Compliance**

The FAA estimates that this AD affects approximately 21,313 buckles installed on restraint systems in aircraft worldwide. The FAA has no way of knowing the number of helicopters of U.S. Registry that may have a restraint system with an affected buckle installed. The estimated costs on U.S. operators reflects the maximum possible costs based on affected buckles installed on restraint systems in aircraft worldwide. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting a buckle will take approximately 0.1 work-hour for an estimated cost of \$9 per buckle and up to \$191,817. for the U.S. fleet. If required, replacing a set of screws (four) will take approximately 0.5 work-hour and parts will cost a nominal amount for an estimated cost of \$43 per buckle. Replacing a buckle will take approximately 0.5 work-hour and parts will cost approximately \$740 for an estimated cost of \$783 per buckle. The FAA estimates a nominal cost for reidentifying a buckle.

The optional action of removing the male side from the lap of the restraint system assembly on the crewmember or passenger seat and fabricating and installing a placard will take approximately 1.5 work-hours and parts will cost a nominal amount for an estimated cost of \$128 per seat.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some 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](#), and
- (2) Will not affect intrastate aviation in Alaska.

### **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 2024-01-11, Amendment 39-22662 ( [89 FR 6008](#), January 31, 2024); and
- b.** Adding the following new airworthiness directive:

**2024-20-04 Various Helicopters:** Amendment 39-22863; Docket No. FAA-2024-2328; Project Identifier AD-2024-00282-Q,R.

### **(a) Effective Date**

This airworthiness directive (AD) is effective November 12, 2024.

### **(b) Affected ADs**

This AD replaces AD 2024-01-11, Amendment 39-22662 ([89 FR 6008](#), January 31, 2024) (AD 2024-01-11).

### **(c) Applicability**

This AD applies to all helicopters, certificated in any category, with a restraint system with a Pacific Scientific Company rotary buckle assembly (buckle) part number (P/N) 1111475 (all dash numbers) or P/N 1111548-01 having a date of manufacture (DOM) between January 2012 and April 2013 inclusive, or an unknown DOM. These buckles may be installed on, but not limited to, Airbus Helicopters model helicopters.

**Note 1 to paragraph (c):** The buckle may be included as a component of a different part-numbered restraint system assembly.

**Note 2 to paragraph (c):** These buckles may also be installed on airplanes; however, the FAA determined that a longer compliance time to accomplish the required actions is allowable for buckles installed on airplanes. Accordingly, the FAA plans to publish a separate AD rulemaking to address all airplanes with an affected buckle installed.

### **(d) Subject**

Joint Aircraft System Component (JASC) Code: 2500, Cabin Equipment/Furnishing; and 2510, Flight

## Compartment Equipment.

### **(e) Unsafe Condition**

This AD was prompted by a report of a manufacturing defect in the screws used inside the buckle. The FAA is issuing this AD to prevent cracking and missing screw heads when under load. The unsafe condition, if not addressed, could result in a failure of the buckle to restrain the occupant.

### **(f) Compliance**

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

### **(g) Required Actions**

(1) For helicopters with buckle P/N 1111475 (all dash numbers), within 3 months after the effective date of this AD, inspect each buckle screw for cracked, loose, and missing screw heads by following the Accomplishment Instructions, paragraphs B.(1) and (2), of Parker Meggitt Service Bulletin (SB) 1111475-25-001-2023, Revision 002, dated April 1, 2024 (SB 1111475-25-001-2023 Rev 002).

(i) If any screw has a cracked, loose, or missing screw head, before further flight, replace the buckle with an airworthy buckle.

(ii) If none of the four screw heads are cracked, loose, or missing, before further flight, inspect each screw to determine if any screw has a Torx head by using one of the following methods in the Accomplishment Instructions of SB 1111475-25-001-2023 Rev 002: paragraph B.(4)(a) (Magnet Test); paragraph B.(4)(b) (Inspection); or paragraphs C.(2) through (4) (removing the buckle from the restraint system) and paragraphs D.(1)(a) through (d) (disassembling the buckle).

(A) If none of the four screws have a Torx head, before further flight, reassemble the buckle (if necessary) by following the Accomplishment Instructions, paragraphs D.(1)(f) through (l), of SB 1111475-25-001-2023 Rev 002, and reidentify the buckle with “INS. A” by following the Accomplishment Instructions, paragraph B.(6), of SB 1111475-25-001-2023 Rev 002.

(B) If at least one of the four screws has a Torx head, before further flight, with the buckle removed, replace each Torx head screw with a hex head screw, reassemble the buckle, and reidentify the buckle with “MOD. A” by following the Accomplishment Instructions, paragraphs D.(1)(e) through (m), of SB 1111475-25-001-2023 Rev 002, except you are not required to return any parts to Parker Meggitt. If a screw head breaks off during disassembly, before further flight, replace the buckle with an airworthy buckle.

**Note 3 to paragraph (g)(1):** SB 1111475-25-001-2023 Rev 002 refers to a magnifying glass as an “eye loupe.”

(2) For helicopters with buckle P/N 1111548-01, within 3 months after the effective date of this AD, inspect each buckle screw for cracked, loose, and missing screw heads by following the Accomplishment Instructions, paragraph B.(1), of Parker Meggitt SB 1111548-25-001-2023, Revision 002, dated April 1, 2024 (SB 1111548-25-001-2023 Rev 002).

(i) If any screw has a cracked, loose, or missing screw head, before further flight, replace the buckle with an airworthy buckle.

(ii) If none of the four screw heads are cracked, loose, or missing, before further flight, inspect each screw to determine which screws have a Torx head by using one of the following methods in the Accomplishment Instructions of SB 1111548-25-001-2023 Rev 002: paragraph B.(3)(a) (Inspection); or paragraph C. (removing the buckle from the restraint system) and paragraphs D.(1)(a) through (c) (disassembling the buckle).

(A) If none of the four screws have a Torx head, before further flight, reassemble the buckle (if necessary) by following the Accomplishment Instructions, paragraphs D.(1)(e) through (l), of SB 1111548-25-001-2023 Rev 002, and reidentify the buckle with “INS. A” by following the Accomplishment Instructions, paragraph B.(5), of SB 1111548-25-001-2023 Rev 002.

(B) If at least one of the four screws has a Torx head, before further flight, with the buckle removed, replace each Torx head screw with a hex head screw, reassemble the buckle, and reidentify the buckle with “MOD. A” by following the Accomplishment Instructions, paragraphs D.(1)(d) through (m), of SB 1111548-25-001-2023 Rev 002, except you are not required to return any parts to Parker Meggitt. If a screw head breaks off during disassembly, before further flight, replace the buckle with an airworthy buckle.

**Note 4 to paragraph (g)(2):** SB 1111548-25-001-2023 Rev 002 refers to a magnifying glass as an “eye loupe.”

(3) As of the effective date of this AD, do not install a buckle identified in paragraph (c) of this AD on any helicopter unless the buckle is marked with “MOD. A” or “INS. A.”

(4) For a crewmember seat or passenger seat with a restraint system with a buckle identified in paragraph (c) of this AD installed, as an option for the actions required by paragraph (g)(1) or (2) of this AD, as applicable, within 3 months after the effective date of this AD:

(i) Remove the male side from the lap of the restraint system assembly.

(ii) Fabricate a placard using at least 1/8 inch letters with the words “USE OF THIS SEAT IS PROHIBITED” on it and install the placard on the seat within the crewmember or passenger's clear view. The seat is then inoperative until the actions required by paragraph (g)(1) or (2) of this AD, as applicable, are accomplished and the male side from the lap of the restraint system assembly is reinstalled.

#### **(h) Credit for Previous Actions**

(1) You may take credit for the actions required by paragraph (g)(1) or (2) of this AD, as applicable, if you accomplished AD 2024-01-11 before the effective date of this AD, provided torque of 15 to 25 in-lbs (1.69 to 2.82 N-m) was applied on the four hex head screws (P/N 0901101-149) during any repair of the buckle.

(2) You may take credit for actions required by paragraph (g)(1) or (2) of this AD, as applicable, if the corresponding actions were performed before the effective date of this AD using Parker Meggitt SB 1111475-25-001-2023, Revision 001, dated December 1, 2023, or Parker Meggitt SB 1111548-25-001-

2023, Revision 001, dated December 1, 2023, as applicable, and provided torque of 15 to 25 in-lbs (1.69 to 2.82 N-m) was applied on the four hex head screws (P/N 0901101-149) during any repair of the buckle.

#### **(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, West 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 local Flight Standards District Office, as appropriate. If sending information directly to the manager of the West Certification Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: [AMOC@faa.gov](mailto:AMOC@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

#### **(j) Additional Information**

For more information about this AD, contact David Kim, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5274; email: [david.kim@faa.gov](mailto:david.kim@faa.gov).

#### **(k) 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 the AD specifies otherwise.

(i) Parker Meggitt Service Bulletin 1111475-25-001-2023, Revision 002, dated April 1, 2024.

(ii) Parker Meggitt Service Bulletin 1111548-25-001-2023, Revision 002, dated April 1, 2024.

(3) For Parker Meggitt material identified in this AD, contact Parker Meggitt Services, 1785 Voyager Avenue, Simi Valley, CA 93063; phone: 877-666-0712; email: [TechSupport@meggitt.com](mailto:TechSupport@meggitt.com); website: [meggitt.com/services\\_and\\_support/customer\\_experience/update-on-buckle-assembly-service-bulletins](http://meggitt.com/services_and_support/customer_experience/update-on-buckle-assembly-service-bulletins).

(4) You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Parkway, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) 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](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on October 21, 2024.

Steven W. Thompson,

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

[[FR Doc. 2024-24756](#) Filed 10-24-24; 8:45 am]

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