

# Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2021-0032; Project Identifier AD-2020-01314-P]

RIN 2120-AA64

#### Airworthiness Directives; Hamilton Sundstrand Corporation Propellers

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 2020-12-07, which applies to certain Hamilton Sundstrand Corporation (Hamilton Sundstrand) 54H model propellers. AD 2020-12-07 requires initial and repetitive eddy current inspections (ECI) of certain propeller blades and replacement of the propeller blades that fail the inspection. Since the FAA issued AD 2020-12-07, the manufacturer determined that all propeller blades installed on Hamilton Sundstrand 54H model propellers with a 54H60 model propeller hub are susceptible to intergranular corrosion cracking in the blade taper bore. This proposed AD would require initial and repetitive ECI of all propeller blades installed on Hamilton Sundstrand 54H60 propeller hubs and replacement of any propeller blade that fails inspection. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by April 12, 2021.

**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 <https://www.regulations.gov>. Follow the instructions for submitting comments.
- *Fax:* (202) 493-2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M-

30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

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

For service information identified in this NPRM, contact Hamilton Sundstrand, 1 Hamilton Road, Windsor Locks, CT 06096-1010; phone: (877) 808-7575; email: [CRC@collins.com](mailto:CRC@collins.com). You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (781) 238-7759.

#### Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0032; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Michael Schwetz, Aviation Safety Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7761; fax: (781) 238-7199; email: [michael.schwetz@faa.gov](mailto:michael.schwetz@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-2021-0032; Project Identifier AD-2020-01314-P" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, 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 the proposal 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 [https://](https://www.regulations.gov)

[www.regulations.gov](https://www.regulations.gov), including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### 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 NPRM 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 NPRM, 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 NPRM. Submissions containing CBI should be sent to Michael Schwetz, Aviation Safety Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. 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 2020-12-07, Amendment 39-21142 (85 FR 36145, June 15, 2020) (AD 2020-12-07) for certain Hamilton Sundstrand 54H model propellers. Note that AD 2020-12-07 and the Hamilton Sundstrand service information reference 54H60 model propellers whereas this AD references 54H model propellers. Hamilton Sundstrand 54H60 model propellers are 54H model propellers with a 54H60 model propeller hub.

AD 2020-12-07 was prompted by a report of the separation of a 54H60 model propeller blade installed on a United States Marine Corps Reserve (USMCR) KC-130T airplane during a flight in July 2017. The USMCR investigation of this event revealed the Hamilton Sundstrand 54H60 model propeller blade separated due to corrosion pitting and a resultant intergranular radial crack that was not corrected at the last propeller overhaul. From this intergranular crack, a fatigue

crack initiated and grew under service loading until the Hamilton Sundstrand 54H60 model propeller blade could no longer sustain the applied loads and ultimately the blade separated. The separation of the blade resulted in the loss of the airplane and 17 fatalities. The investigation further revealed that 54H60 model propeller blades manufactured before 1971 are susceptible to cracks of the propeller blade in the area of the internal taper bore. The applicability of AD 2020-12-07 was therefore limited to those Hamilton Sundstrand 54H60 model propellers blades with a blade serial number (S/N) below 813320, which are those propeller blades manufactured before 1971. AD 2020-12-07 required initial and repetitive ECI of the affected propeller blades and replacement of any propeller blade that fails inspection. The agency issued AD 2020-12-07 to detect cracking in the propeller blade taper bore.

#### Actions Since AD 2020-12-07 Was Issued

Since the FAA issued AD 2020-12-07, the manufacturer determined that all propeller blades installed on Hamilton Sundstrand 54H model propellers with a 54H60 model propeller hub are susceptible to intergranular corrosion cracking in the blade taper bore. As a result, the manufacturer published

Hamilton Sundstrand Alert Service Bulletin (ASB) 54H60-61-A154, Revision 1, dated May 29, 2020, to expand the effectivity of the ASB to include all propeller blades installed on a propeller that contains a blade S/N below 813320, and all propeller blades installed on a propeller that has not been overhauled within ten years. Hamilton Sundstrand ASB 54H60-61-A154, Revision 1, dated May 29, 2020, also provides instructions for concurrent compliance with Hamilton Sundstrand ASB 54H60-61-A155, dated May 29, 2020, to ECI an expanded and deeper taper bore area.

#### FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

#### Related Service Information Under 1 CFR Part 51

The FAA reviewed Hamilton Sundstrand ASB 54H60-61-A154, Revision 1, dated May 29, 2020. This ASB identifies the affected propeller models and specifies procedures for performing an ECI of the propeller blade taper bore. The FAA also reviewed Hamilton Sundstrand ASB 54H60-61-A155, dated May 29, 2020. This ASB also identifies affected propeller models

and specifies procedures for performing an expanded ECI of the propeller blade taper bore. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in **ADDRESSES**.

#### Proposed AD Requirements in This NPRM

This proposed AD would retain certain requirements of AD 2020-12-07. This proposed AD would require initial and repetitive ECI of all propeller blades installed on Hamilton Sundstrand 54H60 propeller hubs and replacement of any propeller blade that fails inspection.

#### Interim Action

The FAA considers that this proposed AD would be an interim action. This unsafe condition is still under investigation by the manufacturer and, depending on the results of that investigation, the FAA may consider further rulemaking action.

#### Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 212 propellers installed on 53 aircraft of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

#### ESTIMATED COSTS

| Action                                                                         | Labor cost                                                                                | Parts cost | Cost per product | Cost on U.S. operators |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------|------------------|------------------------|
| ECI all propeller blades installed on propeller<br>Report results of ECI ..... | 16 work-hours × \$85 per hour = \$1,360 .....<br>1 work-hour × \$85 per hour = \$85 ..... | \$700<br>0 | \$2,060<br>85    | \$436,720<br>18,020    |

The FAA estimates the following costs to do any necessary replacement that would be required based on the

results of the proposed inspection. The agency has no way of determining the

number of aircraft that might need this replacement:

#### ON-CONDITION COSTS

| Action                        | Labor cost                               | Parts cost | Cost per product |
|-------------------------------|------------------------------------------|------------|------------------|
| Replace propeller blade ..... | 1 work-hour × \$85 per hour = \$85 ..... | \$63,500   | \$63,585         |

#### Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information

collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send

comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

## 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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would 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 Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 2020–12–07, Amendment 39–21142 (85 FR 36145, June 15, 2020); and
- b. Adding the following new airworthiness directive:

**Hamilton Sundstrand Corporation:** Docket No. FAA–2021–0032; Project Identifier AD–2020–01314–P.

### (a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) action by April 12, 2021.

### (b) Affected ADs

This AD replaces AD 2020–12–07, Amendment 39–21142 (85 FR 36145, June 15, 2020).

### (c) Applicability

This AD applies to all Hamilton Sundstrand Corporation (Hamilton Sundstrand) 54H model propellers with a propeller hub, model 54H60, installed.

Note to paragraph (c): Hamilton Sundstrand references propeller model 54H60 in Hamilton Sundstrand Alert Service Bulletin (ASB) 54H60–61–A154, Revision 1, dated May 29, 2020. These are model 54H propellers with a 54H60 model propeller hub.

### (d) Subject

Joint Aircraft System Component (JASC) Code 6111, Propeller Blade Section.

### (e) Unsafe Condition

This AD was prompted by the separation of a propeller blade that resulted in the loss of an airplane and 17 fatalities. The FAA is issuing this AD to detect cracking in the propeller blade taper bore. The unsafe condition, if not addressed, could result in failure of the propeller blade, blade separation, and loss of the airplane.

### (f) Compliance

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

### (g) Required Actions

(1) For propellers with an installed propeller blade having a blade serial number (S/N) below 813320, that has not been overhauled within the past sixty (60) months, within one year or 500 flight hours (FHs) after July 20, 2020 (the effective date of AD 2020–12–07), whichever occurs first, perform an eddy current inspection (ECI) of all blades installed on the propeller.

(2) For propellers with an installed propeller blade having a blade S/N below 813320, that has been overhauled within the past sixty (60) months, within two years or 1,000 FHs after July 20, 2020 (the effective date of AD 2020–12–07), whichever occurs first, perform an ECI of all blades installed on the propeller.

(3) For propellers with an installed propeller blade, blade S/N 813320 and above, that has not been overhauled within ten years since new or since last overhaul, within one year or 500 FHs after the effective date of this AD, whichever occurs first, perform an ECI of all blades installed on the propeller.

(4) Perform the ECI of the propeller blades required by paragraphs (g)(1) through (3) of this AD in accordance with the Accomplishment Instructions, paragraph 3.C.(5), of both Hamilton Sundstrand ASB 54H60–61–A154, Revision 1, dated May 29, 2020, and of Hamilton Sundstrand ASB 54H60–61–A155, dated May 29, 2020.

(5) For all propellers identified in paragraphs (g)(1) through (3) of this AD, repeat the inspection required by paragraphs (g)(1) through (4) of this AD at intervals not exceeding 3 years or 1,500 FHs, whichever comes first, from the previous inspection.

(6) If a propeller blade fails any inspection required by this AD, based on the criteria in Accomplishment Instructions, paragraph 3.C.(5)(g) of Hamilton Sundstrand ASB 54H60–61–A154, Revision 1, dated May 29, 2020, and paragraph 3.C.(5)(j) of Hamilton Sundstrand ASB 54H60–61–A155, dated May 29, 2020, remove the blade from service before further flight and replace with a blade eligible for installation.

(7) Report the results of the ECI required by paragraphs (g)(1) through (5) of this AD in accordance with the Accomplishment Instructions, paragraph 3.C.(6), of Hamilton Sundstrand ASB 54H60–61–A154, Revision 1, dated May 29, 2020.

### (h) Installation Prohibition

(1) After the effective date of this AD, do not install onto any propeller a Hamilton Sundstrand propeller blade identified in paragraphs (g)(1) through (4) of this AD, unless the blade has first passed the initial inspection required by paragraphs (g)(1) through (4) of this AD.

(2) After the effective date of this AD, do not install any propeller assembly with a propeller blade identified in paragraphs (g)(1) through (4) of this AD onto any aircraft unless the propeller blades have passed the initial inspection required by paragraphs (g)(1) through (4) of this AD.

### (i) Credit for Previous Actions

You may take credit for the initial ECI of a propeller blade required by paragraphs (g)(1) and (2) of this AD and the replacement of a propeller blade required by paragraph (g)(6) of this AD if the actions were completed before the effective date of this AD using Hamilton Sundstrand ASB 54H60–61–A154, dated August 26, 2019.

### (j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Boston ACO 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 certification office, send it to the attention of the person identified in Related Information.

(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.

**(k) Related Information**

(1) For more information about this AD, contact Michael Schwetz, Aviation Safety Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7761; fax: (781) 238-7199; email: [michael.schwetz@faa.gov](mailto:michael.schwetz@faa.gov).

(2) For service information identified in this AD, contact Hamilton Sundstrand, 1 Hamilton Road, Windsor Locks, CT 06096-1010; phone: (877) 808-7575; email: [CRC@collins.com](mailto:CRC@collins.com). You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (781) 238-7759.

Issued on February 8, 2021.

**Lance T. Gant,**

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

[FR Doc. 2021-03607 Filed 2-24-21; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2005-21679; Directorate Identifier 2004-SW-33-AD]

**RIN 2120-AA64**

**Airworthiness Directives; Robinson Helicopter Company Model R22 Series Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Proposed rule; withdrawal.

**SUMMARY:** The FAA is withdrawing a notice of proposed rulemaking (NPRM) that proposed to adopt a new airworthiness directive (AD) that would have applied to Robinson Helicopter Company (RHC) Model R22 series helicopters. The NPRM was prompted by an in-flight break up of a helicopter on which both teeter stop brackets (brackets) failed. The NPRM would have required replacing each main rotor blade (blade) droop and teeter stop (stop) and bracket and associated hardware with redesigned and improved airworthy parts. Since issuance of the NPRM, the FAA has determined that failure of the brackets was caused by turbulence and other factors that are addressed in AD 95-26-04. Accordingly, the NPRM is withdrawn.

**DATES:** The FAA is withdrawing the proposed rule published June 28, 2005 (70 FR 37059), as of February 25, 2021.

**ADDRESSES:**

**Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2005-21679; 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 AD action, any comments received, and other information. The street 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.

**FOR FURTHER INFORMATION CONTACT:**

James Guo, Aviation Safety Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone 562-627-5357; email [james.guo@faa.gov](mailto:james.guo@faa.gov).

**SUPPLEMENTARY INFORMATION:****Discussion**

The FAA has issued an NPRM that proposed to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the **Federal Register** on June 28, 2005 (70 FR 37059). The NPRM was prompted by an accident that involved an in-flight breakup of a helicopter that had old part-numbered stops and brackets installed. While the probable cause of the in-flight breakup had not been determined, the FAA believed failure of the stops or brackets may have been a contributing factor. Accordingly, the NPRM proposed to require replacing the stops and brackets with redesigned, airworthy parts. The proposed actions were intended to prevent failure of the stops and brackets, blade contact with the airframe, and subsequent loss of control of the helicopter.

**Actions Since the NPRM Was Issued**

Since issuance of the NPRM, the FAA has determined that the unsafe condition was caused by different factors than those stated in the NPRM. Previously, RHC had introduced service information to replace the stops and brackets that were the subject of the NPRM with redesigned parts. The redesign introduced a material change from aluminum to stainless steel. However, the redesigned parts were mistakenly evaluated as a change that would address the unsafe condition. It has since been determined that the strength increase in the redesign is insignificant and would not have improved the outcome of the accident. It has also been determined that the accident was caused by mast bumping,

which is addressed in AD 95-26-04 (60 FR 66487, December 22, 1995) (AD 95-26-04). Therefore, the FAA has determined that AD action is not required and the NPRM is withdrawn.

Withdrawal of the NPRM constitutes only such action and does not preclude the FAA from further rulemaking on this issue, nor does it commit the FAA to any course of action in the future.

**Comments**

The FAA gave the public the opportunity to comment on the NPRM. The following presents the comments received on the NPRM and the FAA's response to each comment.

**Requests**

One commenter stated that the stops and droops could not have contributed to the accident as contact with those items occurs only when operating a Model R22 helicopter outside of its certificated flight envelope, accordingly making it an operational issue. The commenter requested the FAA table the proposed AD until the accident investigation is complete.

The FAA acknowledges the commenter's request. The FAA further determined that the unsafe condition was caused by mast bumping, which is addressed in AD 95-26-04. Because the FAA is withdrawing the NPRM and has issued AD 95-26-04, the commenter's request is no longer necessary.

A second commenter requested that the proposed action be modified by inclusion of the following or similar statement: "The requirement to install certain part-numbered specific parts shall be interpreted broadly to include any replacements parts approved under FAR 21.303 for the original equipment parts cited in this action. Nothing in this action prevents or precludes the installation of such alternatively approved parts."

The FAA acknowledges the commenter's request. However, because the FAA is withdrawing the NPRM, the commenter's request is no longer necessary.

**FAA's Conclusions**

Upon further consideration of the available information, the FAA has determined that the NPRM is unnecessary. Accordingly, the NPRM is withdrawn.

**Regulatory Findings**

Since this action only withdraws an NPRM, it is neither a proposed nor a final rule. This action therefore is not covered under Executive Order 12866, the Regulatory Flexibility Act, or DOT