(i) Remove the studs by following the Accomplishment Instructions, paragraphs 3.B.(1) through 3.B.(4) of the ASB. Visually inspect the tapped holes for any damage to the threads. Serrations on the entire counterbore (360 degrees) are acceptable. Serrations in the housing must be intact, and mating serrations on the lock ring must line up with serrations on the housing. Visually inspect the housing to determine that the housing threads are free from damage and corrosion. Visually inspect housing locking counterbore to determine if the housing is airworthy.
(ii) If you find damage or corrosion to the housing threads, the housing, or the locking counterbore, stop work and contact Kirk Gustafson, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238–7190, fax (781) 238–7170.
(iii) If you do not find damage to the housing threads, the housing, or the locking counterbore, replace the mounting studs by following the Accomplishment Instructions, paragraphs 3.B.(7) through 3.B.(15) of the ASB.
(5) Install an airworthy, two-piece MGB filter bowl assembly modification kit, P/N 92070–35005–011, as depicted in Figures 8 and 9 of the ASB and by following the Accomplishment Instructions, paragraphs 3.C.(1) through 3.C.(20) of the ASB.
(b) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Boston Aircraft Certification Office, Attn: Kirk Gustafson, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238–7190, fax (781) 238–7170, for information about previously approved alternative methods of compliance.
(c) The Joint Aircraft System/Component (JASC) Code is 6320: Main Rotor Gearbox.
(d) Inspecting and replacing the MGB filter bowl assembly shall be done by following the specified portions of Sikorsky Alert Service Bulletin No. 92–63–022A, dated December 18, 2009. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT, telephone (203) 383–4866, e-mail address tsslibrary@sikorsky.com, or at http://www.sikorsky.com. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.
(e) This amendment becomes effective on June 21, 2010.

Issued in Fort Worth, Texas, on April 27, 2010.

Mark R. Schilling, Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2010–11069 Filed 5–14–10; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Turbomeca Arriel 1B, 1D, 1D1, and 1S1 Turboshaft Engines

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

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD) for certain Turbomeca Arriel 1B, 1D, 1D1, and 1S1 turboshaft engines. That AD requires initial and repetitive relative position checks of the gas generator 2nd stage turbine blades on Turbomeca Arriel 1B (that incorporate Turbomeca Modification (mod) TU 148), Arriel 1D, 1D1, and 1S1 turboshaft engines that do not incorporate mod TU 347. That AD also requires initial and repetitive thresholds for replacement of 2nd stage turbine engines. This AD results from reports of new cases of failures of 2nd stage turbine blades since we issued AD 2008–07–01. We are issuing this AD to prevent the failure of 2nd stage turbine blades, which could result in an uncommanded in-flight engine shutdown, and a subsequent forced autorotation landing or accident.

DATES: This AD becomes effective June 21, 2010. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of June 21, 2010.

ADDRESSES: You can get the service information identified in this AD from Turbomeca, 40220 Tarnos, France; telephone (33) 05 59 74 40 00, fax (33) 05 59 74 45 15.

The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.

FOR FURTHER INFORMATION CONTACT: Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; phone: (781) 238–7117, fax: (781) 238–7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 by superseding AD 2008–07–01, Amendment 39–15442 (73 FR 15866, March 26, 2008), with a proposed AD. The proposed AD applies to Turbomeca Arriel 1B (that incorporate mod TU 148), 1D, 1D1, and 1S1 turboshaft engines that do not incorporate mod TU 347. We published the proposed AD in the Federal Register on March 10, 2010 (75 FR 11072). That action proposed to require lowering the repetitive threshold for relative position checks on Arriel 1B engines. That action also proposed to require lowering the initial and repetitive thresholds for replacement of 2nd stage turbine on Arriel 1B, 1D, and 1D1 engines.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone (800) 647–5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

Comments

We provided the public the opportunity to participate in the development of this AD. We received no comments on the proposal or on the determination of the cost to the public.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 587 Turbomeca Arriel 1B, 1D, 1D1, and 1S1 turboshaft engines installed on products of U.S. registry. We also estimate that it will take about 2 work-hours per engine to perform one inspection, and about 40 work-hours per engine to replace the gas turbine discs
and blades. The average labor rate is $85 per work-hour. Required parts will cost about $54,000 per engine. Based on these figures, we estimate the cost of the AD on U.S. operators to be $33,793,590.

Authority for This Rulemaking
Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator, Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, part A, subpart III, section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings
We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

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

(1) Is not a “significant regulatory action” under Executive Order 12866;

(2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under ADDRESSES.

List of Subjects in 14 CFR Part 39
Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment
Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration 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 removing Amendment 39–15442 (73 FR 15866, March 26, 2008), and by adding a new airworthiness directive, Amendment 39–16288, to read as follows:


Effective Date
(a) This airworthiness directive (AD) becomes effective June 21, 2010.

Table 1—INITIAL AND REPETITIVE RELATIVE POSITION CHECK INTERVALS OF 2ND STAGE TURBINE BLADE

<table>
<thead>
<tr>
<th>Turbomeca engine model</th>
<th>Initial relative position check interval</th>
<th>Repetitive interval</th>
<th>Mandatory Service Bulletin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arriel 1B (that incorporate mod TU 148), 1D1, and 1D.</td>
<td>Within 1,200 hours time-since-new (TSN) or time-since-overhaul (TSO) or 3,500 cycles-since-new (CSN) or cycles-since-overhaul (CSO), whichever occurs earlier.</td>
<td>Within 150 hours time-in-service-since-last-relative-position-check (TSLRPC).</td>
<td>A292 72 0807, Version E, dated October 29, 2009, paragraphs 2B(1)(a) and (b), or 2B(2)(a).</td>
</tr>
<tr>
<td>Arriel 1S1 .........................</td>
<td>Within 1,200 hours TSN or TSO or 3,500 CSN or CSO, whichever occurs earlier.</td>
<td>Within 150 hours TSLRPC ..........</td>
<td>A292 72 0810, Version C, dated July 24, 2009, paragraphs 2B(1)(a) and (b), or 2B(2)(a), (b), and (c).</td>
</tr>
</tbody>
</table>

Repetitive Relative Position Check of 2nd Stage Turbine Blades
(g) Recheck the relative position of 2nd stage turbine blades at the TSLRPC intervals specified in Table 1 of this AD, using the Turbomeca MSBs indicated.

Credit for Previous Relative Position Checks
(h) Credit is allowed for previous relative position checks of 2nd stage turbine blades done using the following Turbomeca MSBs:

(1) MSB No. A292 72 0263, Update Nos. 1 through 5.

(2) MSB No. A292 72 0807, Original, and Update No. 1 through Version D.

(3) MSB No. A292 72 0809. Update No. 1.

(4) MSB No. A292 72 0810. Original, and Version A through Version B.
(i) Initially replace the Arriel 1B 2nd stage turbine disk and blades with an inspected 2nd stage turbine that does not incorporate mod TU 347 and is fitted with new blades or with a 2nd stage turbine that incorporates mod TU 347, using Turbomeca MSB No. A292 72 0807, Version E, dated October 29, 2009, paragraphs 2B(1)(c) or (d), or 2B(2)(b) or (c), at the following times:

Replace before further flight on engines with a 2nd stage turbine disk having accumulated more than 2,200 hours TIS since-new or since-last-inspection, whichever occurs later, or with 2nd stage turbine blades that have accumulated more than 3,000 hours TIS since-new.

(2) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, more than 1,800 hours TIS since-new, but 3,000 or fewer hours TIS since-new, replace before reaching any of the following:

400 hours TIS from the effective date of this AD, or
3,000 hours TIS since-new or since-last-inspection, whichever occurs later, or
2,200 hours TIS since-new or since-last-inspection, whichever occurs later, on the 2nd stage turbine disk.

(3) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, more than 900 hours TIS since-new, but 1,800 or fewer hours TIS since-new, replace before reaching any of the following:

800 hours TIS from the effective date of this AD, or
2,200 hours TIS since-new or since-last-inspection, whichever occurs later, on the 2nd stage turbine disk.

(4) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, 900 or fewer hours TIS since-new, replace before the 2nd stage turbine blades have accumulated 1,200 hours TIS since-new.

Repetitive Replacements of 2nd Stage Turbines on Arriel 1B Engines

(i) Thereafter, for 2nd stage turbines that do not incorporate mod TU 347, replace the 2nd stage turbine disk and blades before the blades have accumulated 1,200 hours TIS since-new.

Initial Replacement of 2nd Stage Turbines on Arriel 1D and 1D1 Engines

(k) Initially replace the Arriel 1D and 1D1 2nd stage turbine disk and blades with an inspected turbine that does not incorporate mod TU 347 and is fitted with new blades or with a turbine that incorporates mod TU 347, using Turbomeca MSB No. A292 72 0807, Version E, dated October 29, 2009, paragraphs 2B(1)(c) or (d), or 2B(2)(b) or (c), at the following times:

Replace before further flight on engines with a 2nd stage turbine disk having accumulated more than 1,500 hours TIS since-new or since-last-inspection, whichever occurs first, or with 2nd stage turbine blades having accumulated more than 1,500 hours TIS since-new, whichever occurs first.

(2) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, more than 900 hours TIS since-new, but 1,500 or fewer hours TIS since-new, replace before the 2nd stage turbine blades have accumulated 1,500 hours TIS since-new, or before the 2nd stage turbine disk has accumulated 1,500 hours TIS since-new.

(3) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, 900 or fewer hours TIS since-new, replace before the 2nd stage turbine blades have accumulated 1,200 hours TIS since-new.

Repetitive Replacements of 2nd Stage Turbines on Arriel 1D and 1D1 Engines

(i) Thereafter, for 2nd stage turbines that do not incorporate mod TU 347, replace the 2nd stage turbine disk and blades before the blades have accumulated 1,200 hours TIS since-new.

Relative Position Check Continuing Compliance Requirements

(m) All 2nd stage turbines, including those that are new or overhauled, must continue to comply with the actions specified in paragraphs (f) and (g) of this AD, unless mod TU 347 has been incorporated.

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**TABLE 2—INCORPORATION BY REFERENCE**

<table>
<thead>
<tr>
<th>Turbomeca mandatory Service Bulletin No.</th>
<th>Page</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 292 72 0807 ..................................................</td>
<td>ALL</td>
<td>E</td>
<td>October 29, 2009.</td>
</tr>
<tr>
<td>Total Pages: 20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A 292 72 0810 ..................................................</td>
<td>ALL</td>
<td>C</td>
<td>July 24, 2009.</td>
</tr>
<tr>
<td>Total Pages: 15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SUMMARY:** We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Several occurrences of loss of the AC [alternating current] BUS 1 have been reported which led in some instances to the loss of the AC ESS [essential] BUS and DC [direct current] ESS BUS and connected systems. The affected systems include multiple flight deck Display Units (Primary Flight Display, Navigation Display and Upper Electronic Centralised Aircraft Monitoring display).

The loss of multiple display units, if not corrected expeditiously during a high workload period, potentially affects the capability of the flight crew and could contribute to a loss of situational awareness and consequent control of the aeroplane, which would constitute an unsafe condition.

We are issuing this AD to require actions to correct the unsafe condition on these products.

**DATES:** This AD becomes effective June 21, 2010.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of June 21, 2010.

**Addresses:** You may examine the AD docket on the Internet at [http://www.regulations.gov](http://www.regulations.gov) or in person at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC.


**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on February 23, 2010 (75 FR 8003). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Several occurrences of loss of the AC [alternating current] BUS 1 have been reported which led in some instances to the loss of the AC ESS [essential] BUS and DC [direct current] ESS BUS and connected systems. The affected systems include multiple flight deck Display Units (Primary Flight Display, Navigation Display and Upper Electronic Centralised Aircraft Monitoring display).

The reasons for these events have been investigated but have not been fully established for all cases. Due to the range of system losses some crews reported difficulty in establishing the failure cause during the events and, consequently, the appropriate actions to be taken may not be completed in a timely manner.

The loss of multiple display units, if not corrected expeditiously during a high workload period, potentially affects the capability of the flight crew and could contribute to a loss of situational awareness and consequent control of the aeroplane, which would constitute an unsafe condition.

This AD therefore mandates the modification of the electrical network configuration management logic consisting in adding an automatic switching of the AC and DC ESS BUS power supply such that upon the loss of the AC BUS 1, the AC BUS 2 will automatically take over the power supply. On pre-MOD aeroplanes, this power supply switching can only be accomplished manually from the cockpit and is covered by an Electronic Centralised Aircraft Monitoring (ECAM) procedure.

The modification of the electrical power distribution system includes, depending on the configuration, adding a new circuit breaker and new relay to the AC/DC ESS BUS circuit, and adding a diode between a certain relay and terminal block. You may obtain further information by examining the MCAI in the AD docket.

**Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comment received.

**Support and Request to Reduce Compliance Time**

The Airline Pilots Association International (ALPA) supports this AD, and asks that the 48-month compliance time proposed in the NPRM be reduced to 24 months. ALPA states that, given the potentially serious consequences of the flightcrew experiencing a very high workload during a critical phase of flight, the compliance time should be reduced based on the number of events and the safety risk associated with BUS failures.

We do not agree that the compliance time should be reduced. In developing the compliance time for this AD action, we considered not only the safety implications of the identified unsafe condition, but the average utilization rate of the affected fleet, the practical aspects of modifying the fleet during the compliance time, and the availability of required parts. In addition, we have coordinated with the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community. We have determined that the 48-month compliance time to do the modification addresses the identified unsafe condition and ensures an adequate level of safety for the affected fleet. We have made no change to the AD in this regard.

**Conclusion**

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD as proposed.

**Differences Between This AD and the MCAI or Service Information**

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

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