AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to ***Canadian Aviation Regulation*** **(CAR) 593**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613-952-4357.

Number: **CF-1995-17R2**

Subject: **Crosstube Assemblies**

Revision: **Supersedes Airworthiness Directive CF-1995-17R1**

Effective: **16 July 2012**

Applicability: **All Bell Helicopter Textron Canada Model 206 helicopters, equipped with the following crosstube assemblies:**

Aeronautical Accessories Inc.	P/N	206-320-101 and -102 206-321-001 and -002 206-323-* 206-325-* 206-328-* 206-329-001 and -002
Airborne Supply Inc.	P/N	AB206-050-107-* and -119-* AB206-053-109-*
Bell Helicopter Textron	P/N	206-050-107-*, -119-*, -134-*, -157-* and -169-* 206-053-109-*, -119-* and -129-*

* All dash numbers

Compliance: **As indicated below, unless already accomplished.**

Background: Two accidents have been attributed to crosstube assemblies (crosstubes) failures. There have also been a number of reports of cracks due to corrosion or metal fatigue that might cause a failure of the crosstubes. On the crosstubes of older design, the cracks were mostly found at the rivet holes in the attachment-to-fuselage area and at the saddle attachment. On the newer, clamp-on tubes without holes, the cracks were mostly found in the saddle attachment area and along the line where the clamp touches the tube. Helicopters operating in a corrosive environment or being used in training or sightseeing role involving frequent landings are most affected.

To prevent failure of the affected crosstubes accomplish either Part I or Part II below, depending on the type of crosstube.

Since the issuance of AD CF-1995-17, the Aeronautical Accessories Inc. reports AA-94022 and AA-94023, which provide inspection procedure and maintenance instructions for crosstubes, have been replaced with the Instructions for Continued Airworthiness. The first revision to this AD was issued to reflect this change.

Revision 2 corrects errors in the applicability section.

Corrective Actions:

Part I - For Aeronautical Accessories Inc. Crosstubes

A. For Model 206A and 206B Helicopters:

1. Initially, within the next 100 hours time-in-service, unless already accomplished, perform an inspection in accordance with Aeronautical Accessories Inc. Alert Service Bulletin (ASB) No.94045, Revision B dated 17 April 1995.

2. No later than 16 days from the effective date of this AD, incorporate into the operator's aircraft inspection program the requirements of the FAA Approved Instructions for Continued Airworthiness for Crosstubes Report Number AA-01147 Revision E, dated 5 October 2005, or later approved revisions. The required procedures shall be repeated at each annual or 300 hour scheduled inspection, whichever occurs first.

B. For Model 206L, 206L-1, -3 and -4 Helicopters:

1. Initially, within the next 100 hours time-in-service, unless already accomplished, perform an inspection in accordance with Aeronautical Accessories Inc. ASB No. 94046, Revision B dated 17 April 1995.

2. No later than 16 days from the effective date of this AD, incorporate into the operator's aircraft inspection program the requirements of the FAA Approved Instructions for Continued Airworthiness for Crosstubes Report Number AA-01149 Revision A, dated 12 May 2004, or later approved revisions. The required procedures shall be repeated at each annual or 300 hour scheduled inspection, whichever occurs first.

Part II - For All Other Affected Crosstubes

A. Initially, within the next 100 hours time in service, perform a detailed visual inspection of the crosstubes for cracks and corrosion, using a 10-power magnifying glass. Pay particular attention in the strap and the saddle attachment area for mechanical damage and corrosion which could lead to cracks. If there is any indication of cracks or corrosion, remove the paint in suspected areas and perform the detailed visual inspection. If the crosstube has rivet holes in the attachment-to-fuselage area, visually check using a 10-power magnifying glass for cracks emanating from the rivets holes. Refer to the applicable Maintenance Manual for inspection limits. In the absence of manufacturer's limits, the maximum allowable depth of corrosion is limited to 0.005 inch over an area not exceeding one-fourth the circumference by 3 inches in length after cleanup, regardless of location. If any crosstube is found corroded beyond the maximum allowable limit, or cracked, replace the part with a serviceable one before further flight.

B. No later than 16 days from the effective date of this AD, incorporate the requirements of paragraph 1 above in the operator's aircraft inspection program. The required inspection shall be repeated at each annual or 300 hour scheduled inspection, whichever occurs first.

Note: The amendments to the aircraft inspection program, required by Parts I and II above, eliminate the requirement to record in the aircraft records the intervals of this directive and the repeat certification of accomplishment. This inspection task insertion is to include the following:

"AD CF-1995-17R2 refers. This task is not to be escalated or removed from the inspection program without approval by Transport Canada, Chief Continuing Airworthiness, Ottawa."

Replacement of affected crosstubes with later part number crosstubes constitutes terminating action for the inspection requirements of this directive.

Authorization: For the Minister of Transport, Infrastructure and Communities,

ORIGINAL SIGNED BY

Robin Lau
Acting Chief, Continuing Airworthiness

Contact: Bogdan Gajewski, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail ADs@tc.gc.ca or any Transport Canada Centre.