



**LUFTFARTSVERKET**  
Luftfartsinspektionen

## **LUFTVÄRDIGHETSDIREKTIV (LVD)**

A Motordrivna Luftfartyg  
Bell Helicopters Textron /  
Agusta Bell  
LVD Nr 2-3189  
Upphäver 2-2659  
2-2945

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### Sektion 2. Utlandstillverkad flygmateriel

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**TITEL:** Byte av landställets tvärgående rör "Cross tubes".

**GÄLLER:** Bell Helicopter Textron Inc. och Agusta Bell modell 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, AB 206A och AB 206B med installerade "crosstubes" enligt bifogade kopior av CF-95-17, CF-98-43 och ENAC 1999-102.

**ÅTGÄRD:** Utför åtgärder enligt CF-95-17, CF-98-43 och ENAC 1999-102.

**TID FÖR ÅTGÄRD:** Enligt CF-95-17, CF-98-43 och ENAC 1999-102.

**UNDERLAG:** Enligt bifogade kopior av Transport Canada AD CF-95-17 och CF-98-43 samt ENAC AD 1999-102.

**REFERENS:** TCA AD CF-95-17, CF-98-43, ENAC 1999-102

**BESLUTSDATUM:** 14 januari 2002

**LFS** 2002:8

Åtgärder enligt LVD utgör nödvändig förutsättning för ifrågavarande flygmateriels luftvärdighet. Referens BCL M 1.11.  
Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senast gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

Postadress	Gatuadress	Telefonnummer	Faxnummer	Telegram Civilair	Telex
601 79 NORRKÖPING	Vikobplan 11	011-19 20 00	011-19 25 75	Norrköping	62450



Transport Canada  
Aviation  
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Regulation

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Réglementation  
aérienne

ILLUSTRATIONS

95-12-2

TP 7245E

No.	CF-95-17	1/3
Date	5 December 1995	

# AIRWORTHINESS DIRECTIVE

THE FOLLOWING CANADIAN AIRWORTHINESS DIRECTIVE IS ISSUED PURSUANT TO SECTION 211 OF THE AIR REGULATIONS AND CHAPTER 503 OF THE AIRWORTHINESS MANUAL.

## CF-95-17 BELL

Applies to all models of Bell 206 series helicopters equipped with the following crosstube assemblies (crosstubes):

- |  |   |
|--|---|
| (i) Aeronautical Accessories Inc.  | P/N 206-320-101 and -102<br>206-321-001 and -002<br>206-323-*<br>206-325-*<br>206-328-*<br>206-329-001 and -002 |
| (ii) Airborne Supply Inc.  | P/N AB206-050-107 and -119*<br>AB206-053-109*   |
| (iii) Bell Helicopter Textron  | P/N 206-050-107, -119, -134, -157 and -169*<br>206-053-109, -119 and -129*                                      |
| (iv) Other manufacturers, as approved by the Federal Aviation Administration (FAA) under Parts Manufacturer Approval (PMA) | P/N Any of the above  |

\*All dash numbers

Compliance is required as indicated.

Two accidents have been attributed to crosstube failures. There has 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 a 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:

### Part I For Aeronautical Accessories Inc. Crosstubes

#### A. For Model 206A and 206B Helicopters:

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

THIS AIRWORTHINESS DIRECTIVE MAY BE APPLICABLE TO AN AIRCRAFT MODEL WHICH OUR RECORDS INDICATE IS REGISTERED IN YOUR NAME. CONTINUING AIRWORTHINESS OF AN AIRCRAFT IS CONTINGENT UPON COMPLIANCE WITH ALL APPLICABLE AIRWORTHINESS DIRECTIVES. FAILURE TO COMPLY WITH THE REQUIREMENTS OF AN AIRWORTHINESS DIRECTIVE MAY INVALIDATE THE CERTIFICATE OF AIRWORTHINESS OR FLIGHT PERMIT OF YOUR AIRCRAFT.

For any address change, print new address on the envelope in which this directive was received and return to Transport Canada, AARPC, Ottawa, Ontario K1A 0N8 (full postage required).

No. N°	CF-95-17	2/3
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2. Not later than 1 February 1996, incorporate into the operator's aircraft inspection program the procedures of Report No. AA-94022, Revision G or later revision, as referenced in ASB No. 94045, Revision B. The required procedures shall be repeated at each annual or 300-hour scheduled inspection, whichever comes 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 as per Aeronautical Accessories Inc. ASB No. 94046, Revision B dated 17 April 1995.
2. Not later than 1 February 1996, incorporate into the operator's aircraft inspection program the procedures of Report No. AA-94023, Revision D or later revision, as referenced in ASB No. 94046, Revision B. The required procedures shall be repeated at each annual or 300-hour scheduled inspection, whichever comes first.

**Part II For All Other Affected Crosstubes**

1. 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.
2. Not later than 1 February 1996, 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 comes 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 in accordance with Airworthiness Manual Chapter 575. This inspection task insertion is to include the following:

"AD CF-95-17 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.

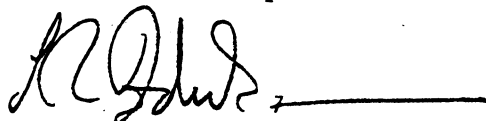
Alternative means of compliance with the requirements of this directive may be used only if approved by the Director, Airworthiness Branch, Transport Canada, Ottawa. Any application should be made to the appropriate regional office.

This airworthiness directive (AD) supersedes Federal Aviation Administration (FAA) AD 95-11-14. It also supersedes Transport Canada Alleviation No. AARDG 95/A90, issued to operators of Canadian registered Bell 206 helicopters on 16 June 1995.

No. N°	CF-95-17	3/3
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This directive becomes effective 9 January 1996.

For Minister of Transport



S.R. Didrikson  
Chief, Continuing Airworthiness

Further information regarding the contents or interpretation of this directive may be obtained from your regional airworthiness office, or by contacting directly Mr. Bogdan Gajewski, Transport Canada, Airworthiness Branch, Ottawa, telephone (613) 952-4450 or facsimile (613) 996-9178.



Transport Canada Transports Canada  
Civil Aviation Aviation civile

No.	CF-98-43	1/2
Date	31 December 1998	

## 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 AN 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.

### CF-98-43 BELL

Applies to all Bell Helicopter Textron Canada (BHTC) Model 206 series helicopters equipped with crosstube assemblies (crosstubes) of older design having rivet holes in the support area designated for rivet-on supports with the following, but not limited to, part numbers:

- |  |  |
|--|--|
| (i) Aeronautical Accessories Inc.  | 206-321-001 and -002   |
| (ii) Airborne Supply Inc.  | AB206-050-107-025 and -027<br>AB206-050-119-005 and -007   |
| (iii) Bell Helicopter  | 206-050-107-011, -013, -025 and -027<br>206-050-119-001, -003, -005 and -007<br>206-050-134-001, -003, -005, -007, -009 and -011<br>206-050-157-001 and -003<br>206-050-169-001, -003, -011 and -013<br>206-053-109-001, -003, -005 and -007<br>206-053-119-001 and -003<br>206-053-129-009, -011, -010 and -013 |
| (iv) Other manufacturers, as approved by the Federal Aviation Administration (FAA) under Parts Manufacturer Approval (PMA) | Any of the above   |

Note: The riveted crosstubes of newer configurations, P/N 206-050-2xx-xxx and 206-053-2xx-xxx, having rivet holes only on the sides of the crosstube, are not affected by this directive.

Compliance is required as indicated, unless already accomplished.

The older versions of riveted crosstubes were subject to fatigue cracking; the large majority of cracks started at the top rivet holes under the support assemblies. A few started elsewhere at corrosion or mechanically damaged initiation points. Two accidents have been attributed to crosstubes breaking from cracks starting at the rivet holes. Since the issue of Airworthiness Directive CF-95-17, which introduced inspections, a total failure of an aft crosstube occurred just 40 hours air time after it was properly inspected. The crack had gone undetected under the strap assembly until progressing rapidly once near the strap's edge. Therefore, these older riveted configurations need to be retired within a reasonable time in service.

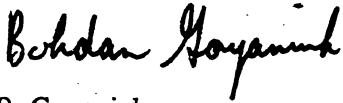
To prevent a possible catastrophic failure of the crosstube assemblies accomplish the following:

No. N°	CF-98-43	2/2
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1. Within the next 100 hours air time after the effective date of this directive, remove from the helicopter any crosstube of unknown history or having a total of six or more years in service.
2. No later than 31 December 2000, remove any of the affected crosstubes, regardless of time in service.

This directive becomes effective 15 February 1999.

For Minister of Transport



B. Goyaniuk  
Acting Chief, Continuing Airworthiness

For further information contact a Transport Canada Centre, or Mr. Bogdan Gajewski, Continuing Airworthiness, Ottawa, telephone (613) 952-4450, facsimile (613) 996-9178 or e-mail [gajewsb@tc.gc.ca](mailto:gajewsb@tc.gc.ca).



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**Ente Nazionale per l'Aviazione Civile****PRESCRIZIONE DI AERONAVIGABILITA'****SOGGETTO - OGGETTO:**

Elicotteri Bell e Agusta Bell serie 206 - Traverse  
carrello di atterraggio.

**RIFERIMENTI:****-Documentazione della Ditta Costruttrice:**

Aero Accessories	Alert S.B. 94045
BHTI	ASB206-94-78
BHTI	ASB206-94-81
BHTI	ASB206-94-82
BHTI	ASB206-94-83
BELL CANADA	ASB206-96-88
BHTI	ASBL206-94-93
BHTI	ASBL206-94-97
BHTI	ASBL206-94-98

**- Prescrizioni Estere:**

FAA USA	AD 95-11-14 Amdt. 39-9247
TCA Canada	AD CF-95-17
TCA Canada	AD CF-98-43

N. 1999-102  
del 04-03-  
1999

Rev. 3  
della P.A.  
1996-080

P.A.  
Ripetitiva NO

! DATA DI ENTRATA IN VIGORE: 15 aprile 1999

! SCADENZA:

! Come indicato nella AD a riferimento, a partire dalla data di entrata in  
! vigore della presente PA, se non già eseguito.

! APPLICABILITA' :

! Elicotteri Bell Helicopter Textron Canada (BHTC) serie 206A, 206B, 206L,  
! 206L-1, 206L-3, 206L-4 e Agusta Bell serie AB 206A e AB 206B, equipaggiati  
! con le traverse carrello sotto elencate:

! (i) Aeronautical Accessories Inc. 206-321-001 e -002

! (ii) Airborne Supply AB206-050-107-025 e -027  
! AB206-050-119-005 e -007

! (iii) Bell Helicopter 206-050-107-011, -013, -025 e -027

! 206-050-119-001, -003, -005 e -007

! 206-050-134-001, -003, -005, -007, -009 e -011

! 206-050-157-001 e -003

! 206-050-169-001, -003, -011 e -013

! 206-053-109-001, -003, -005 e -007

! 206-053-119-001 e -003

! 206-053-129-009, -011, -101 e -103

! (iv) Qualsiasi altro costruttore P/N qualsiasi tra quelli indicati  
! con approvazione FAA  
! "Parts Manufacturers Approval"

## Prescrizione di Aeronavigabilità N. 1999-102

## DESCRIZIONE:

L'allegata AD a riferimento costituisce Prescrizione di Aeronavigabilità, con le scadenze riportate alla relativa voce della presente PA.

La presente PA annulla e sostituisce la PA96-080 del 20/4/1996.

Si riporta di seguito il testo della suddetta AD nella versione in lingua inglese:

CF-98-43 BELL

Applies to all Bell Helicopter Textron Canada (BHTC) Model 206 series helicopters equipped with crosstube assemblies (crosstubes) of older design having rivet holes in the support area designated for rivet-on supports with the following, but not limited to, part numbers:

(i) Aeronautical Accessories Inc. 206-321-001 and -002

(ii) Airborne Supply Inc. AB206-050-107-025 and -027  
AB206-050-119-005 and -007

(iii) Bell Helicopter 206-050-107-011, -013, -025 and -027  
206-050-119-001, -003, -005 and -007  
206-050-134-001, -003, -005, -007, -009 and -011,  
206-050-157-001 and -003  
206-050-169-001, -003, -011 and -013  
206-053-109-001, -003, -005 and -007  
206-053-119-001 and -003  
206-053-129-009, -011, -101 and -103

(iv) Other manufacturers, as approved by Any of the above  
the Federal Aviation Administration (FAA)  
under Parts Manufacturer Approval (PMA)

Note: The riveted crosstubes of newer configurations, P/N 206-050-2xx-xxx and 206-053-2xx-xxx, having rivet holes only on the sides of the crosstube, are not affected by this directive.

Compliance is required as indicated, unless already accomplished.

The older versions of riveted crosstubes were subject to fatigue cracking; the large majority of cracks started at the top rivet holes under the support assemblies. A few started elsewhere at corrosion or mechanically damaged initiation points. Two accidents have been attributed to crosstubes breaking from cracks starting at the rivet holes. Since the issue of Airworthiness Directive CF-95-17, which introduced inspections, a total failure of an aft crosstube occurred just 40 hours air time after it was properly inspected. The crack had gone undetected under the strap assembly until progressing rapidly once near the strap's edge. Therefore, these older riveted configurations need to be retired within a reasonable time in service.

To prevent a possible catastrophic failure of the crosstube assemblies accomplish the following:

1. Within the next 100 hours air time after the effective date of this directive, remove from the helicopter any crosstube of unknown history or having a total of six or more years in service.



## Prescrizione di Aeronavigabilità N. 1999-102

2. No later than 31 December 2000, remove any of the affected crosstubes, regardless of time in service.

This directive becomes effective 15 February 1999.

For further information contact a Transport Canada Centre, or Mr. Bogdan Gajewski, Continuing Airworthiness, Ottawa, tel: 613 952-4450, facsimile 613 996-9178 or e-mail gajewsb@tc.gc.ca.

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*Il Certificato di Navigabilità dell'aeromobile sulle cui strutture od impianti deve essere applicata la Prescrizione di Aeronavigabilità in oggetto, scade di validità qualora essa non venga attuata nei termini prefissati. La effettuazione della Prescrizione di Aeronavigabilità deve essere annotata, a cura dell'Esercente, sui libretti dell'aeromobile, del motore o dell'elica.*