



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

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# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service  
Washington, DC

<http://www.faa.gov/aircraft/safety/alerts/>

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*This is information only. Recommendations aren't mandatory.*

## Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of **Apex Aircraft model CAP 10 B airplanes**, that the Direction Generale De L'Aviation Civile (DGAC), airworthiness authority for France, issued French Airworthiness Directive (AD) No. F-2004-144 dated August 28, 2004. This AD affects serial numbers (SN) 300 through 310, SN 312 & 313, and all SNs up to and including 299 that are changed under "CAP 10C wing" modification 000302.

## Background

Due to vibrations in the ailerons of a CAP 10C aircraft during rapid descent, APEX Aircraft has developed a new design: change of the aileron bell crank bolts and replacement of the washers installed between the brackets by spacers. Replacing the aileron bell crank bolts as described in the French AD will lessen the play in the control system and prevent such vibrations.

## Recommendation

We recommend that you comply with French AD F-2004-144, dated August 28, 2004.

Specifics of this AD are as follows:

- compliance within the next 50 flight hours.
- apply the technical instructions as described in APEX Aircraft Service Bulletin No. 031101, dated July 16, 2004 (attached).

## For Reference Materials Contact

APEX Aircraft, 1 Route De Troyes, 21121,  
Darois-France

## For Further Information Contact

Mr. Sarjapur Nagarajan, Aerospace  
Engineer, Small Airplane Directorate, ACE 112,  
901 Locust, Room 301, Kansas City, MO  
64106; phone: (816) 329-4145; fax:  
(816) 329-4090; email:  
sarjapur.nagarajan@faa.gov



APEX Aircraft Bureau de Navigabilité 1, route de Troyes 21121 DAROIS - France Tél +33 380 35 65 10 Fax +33 380 35 65 15 www.apex-aircraft.com	<h1>SERVICE BULLETIN</h1> <p>No. <b>031101</b></p>
<b>CAP10B - Flight controls - Aileron bellcrank pivot bolt replacement</b>	
Supersedes : N/A	

ATA : 27

This document is a courtesy translation of its original French version.  
 In case of any difficulty, reference should be made to the French original issue.

## EFFECTIVITY

Models	Serial numbers affected
<b>CAP10B</b>	<b>300 to 313 and all CAP10B modified in accordance with modification 000302 "CAP10C wing".</b>

For information: the change corresponding to this Service bulletin has been implemented during production from s/n 312.

## COMPLIANCE

**MANDATORY**

Is the subject of an airworthiness Directive (AD)

## TIME OF COMPLIANCE

**On receipt of this SB with a 50 flight hours tolerance.**

## REASON

During rapid descent, vibrations have been observed in the aileron system of a CAP10C (300 flight hours). The vibrations have not led to loss of control.

## DESCRIPTION

Replacing the aileron bellcrank bolts together with the washers installed between the brackets will reduce the play in the control system and therefore avoid the phenomenon.

The aim of this Service Bulletin is to provide the users with technical instructions needed for the replacement.

## MANPOWER

The instructions in this Service Bulletin are only to be implemented by an individual/organization authorized by the relevant supervisory Authority.

The time required to implement the inspection / modification is evaluated at **about 2 hours**.



## MATERIAL

Material (supplies) consist of old and/or new parts as listed in section 'MATERIAL INFORMATION' of this SB. Spare parts can be procured from APEX Aircraft (Fax: +33 380 35 60 58, E-mail: parts@apex-aircraft.com).

## TOOLING

Standard tools.

## REFERENCES

Dossier d'Evolution Technique DET modification majeure 031101, approved by EASA.

## PUBLICATIONS AFFECTED

- CAP10B Parts catalog: insert a copy of this Service bulletin until the next update.
- Service Letter 990813 SB/SL list: to update.

## FEEDBACK

Please inform APEX Aircraft Airworthiness Office about the implementation of the inspection/change described in this Service Bulletin.

You may use:

- postal mail: address on the first page of this Service Bulletin,
- fax : (+33) (0) 380 356 515,
- e-mail: [airworthiness@apex-aircraft.com](mailto:airworthiness@apex-aircraft.com),
- the APEX Aircraft web page: <http://www.apex-aircraft.com>.

## ACCOMPLISHMENT INSTRUCTIONS

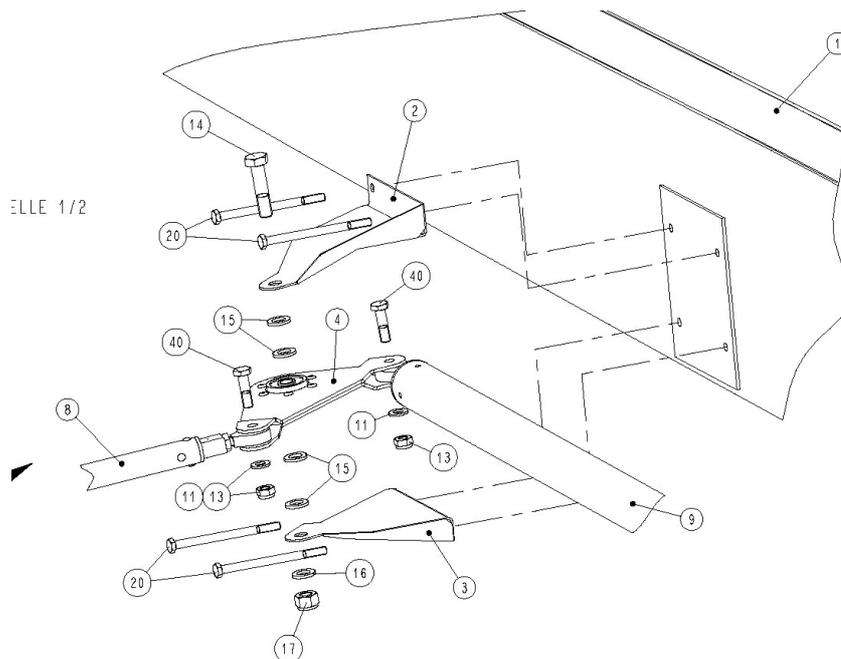
### 1. Removal

Remove doors to access to aileron bellcranks on both wings:



Aileron bellcrank

### 2. Modifications





The aileron bellcrank (item 4) is fixed on 2 brackets by means of an AN5-12A bolt (item 14). Two washers (AN960-516) are installed on each side of the aileron bellcrank (item 15).

- Replace the AN5-12A bolt (item 14) with an AN5-13A bolt (the latter being longer).
- Replace each set of two AN960-516 washers (item 15) with one spacer 2714-0311003 (Apex part number).
- Also replace the washer (item 16) with a spacer 2714-0311003.
- Replace the bolt and washers on left hand and right hand wings.

### 3. Reassembly

- a) Install access doors.

### 4. Checks

- b) Make sure the aileron control system works properly.
- c) Check the ailerons deflection.

## MATERIAL INFORMATION

New part number	Qty	Key word	Old part number	Instructions
AN5-13A (order ref: 00.00.05.306)	2	Aileron bellcrank bolt <i>Axe de renvoi d'aileron</i>	AN5-12A (order ref: 00.00.04.555)	To replace <i>A remplacer</i>
////////////////////	10	Washer <i>Rondelle</i>	AN 960-516 (order ref: 00.00.60.153)	To replace <i>A remplacer</i>
2714-0311003 (order ref: 00.00.05.461)	6	Spacer <i>Entretoise</i>	////////////////////	New part to install <i>Nouvelle pièce à installer</i>

Contact APEX Aircraft for current prices.