

Le Blanc, 23rd of May 2013

### **SERVICE BULLETIN Nº 101-33**

# **ERRATUM**

Following an inadvertent error in the Service Bulletin N° 101-33, please find enclosed amended Service Bulletin (page 5/6 point 3 "lower plate" instead of "upper plate")

With all our apologizes.





# SERVICE BULLETIN

No. 101-33

SN CENTRAIR 101 gliders all "Pegasus" types

Page 1/6

SUBJECT:

TO ENSURE CORRECT INSTALLATION OF THE AIRBRAKE PLATES

ON THE WING.

VALIDITY:

SN CENTRAIR 101 gliders, all types, all serial numbers.

PURPOSE:

To ensure correct retraction of the airbrakes and avoid possible

jamming at mid travel of the airbrake plates.

APPLICATION:

Check the various clearances before the next flight and at each

removal of the airbrake plates.

Inspection and possible replacement of the bolts at the next scheduled

check (annual inspection or general inspection).

### DESCRIPTION:

The airbrake plates are mounted on arms hinged from the wing (see sketches Nos. 1 and 2 on the following pages).

The resultant clearances between:

- the structure of the wing and the lower airbrake plate (cf. Sketch No. 2)
- the bottom of the front face of the upper airbrake plate and the ends of the attachment bolts of the lower plate (cf. Sketch No. 2)
- the top of the lower plate and the end of the 2 attachment bolts for the upper plate (cf. Sketch No. 4)

are small.

The purpose of this Service Bulletin is, first of all to check the clearances on the ground between the airbrake plates and the structure of the glider (composite structure and the attachment bolts of the upper and lower plates). Secondly, if necessary, to replace the attachment bolts of the lower plates to ensure a standard and satisfactory installation on all the gliders. The correct operation check of the spoilers on the ground should reveal the majority of potential problems. However the deflections of the structure of the glider when subjected to flight loads may slightly modify these clearances and generate malfunctions not detected on the ground.

Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC FRANCE

Tél.: 02.54.37.07.96 - Fax: 02.54.37.48.64

Issue dated 16/05/2013

 Classification
Mandatory
Recommended
For information

Classification

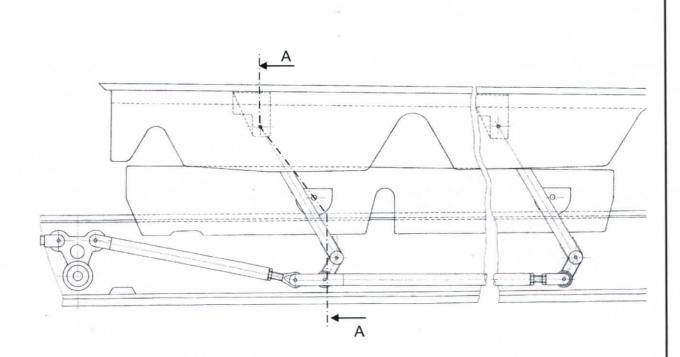


# SERVICE BULLETIN

No. 101-33

SN CENTRAIR 101 gliders all "Pegasus" types

Page 2/6



Sketch No. 1: Airbrake linkage in the wing (shown with the airbrake plates partly extended)

## Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC FRANCE

Tél.: 02.54.37.07.96 - Fax: 02.54.37.48.64

Issue dated 16/05/2013

## Classification

Mandatory
Recommended
For information



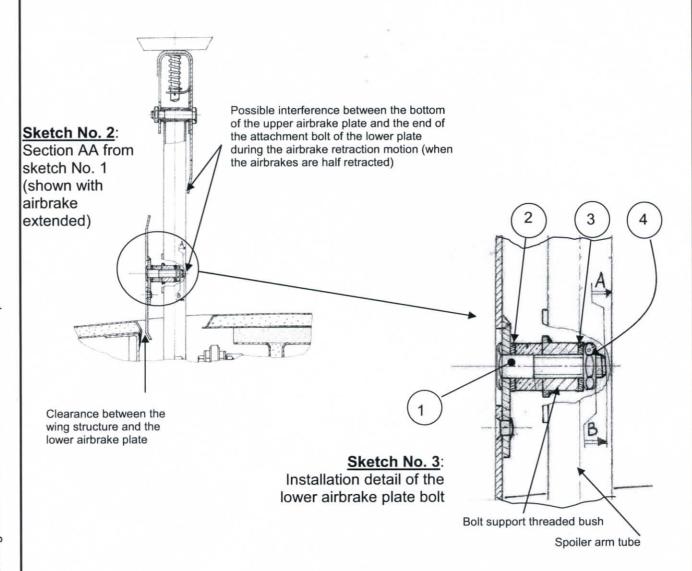
## SERVICE BULLETIN

No. 101-33

## Société Nouvelle Centrair

SN CENTRAIR 101 gliders all "Pegasus" types

Page 3/6



<u>Note</u>: The tightening of bolt, Item 1, must be moderate. It must not cause excessive friction in the pivoting motion of the airbrake arms.

It must however be sufficient to ensure proper guidance of the airbrake plate (it should not be able to incline relative to the spoiler airbrake arm). The locknut, Item. 4 (installed with Loctite "Medium threadlock" ref. 243) is intended to lock bolt, Item 1, in position.

### Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC FRANCE

Tél.: 02.54.37.07.96 - Fax: 02.54.37.48.64

Issue dated 16/05/2013

# Classification

Mandatory
Recommended
For information

CENT63-1b



# Société Nouvelle Centrair

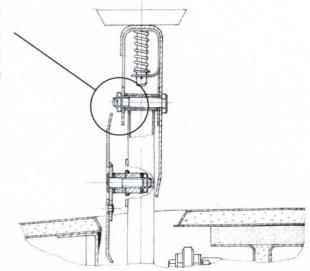
## SERVICE BULLETIN

No. 101-33

SN CENTRAIR 101 gliders all "Pegasus" types

Page 4/6

Possible interference between the top of the lower airbrake plate and the end of the attachment bolt of the upper plate during the airbrake retraction motion (when the airbrakes are 2/3 retracted)



**Sketch No. 4**: Section AA from sketch No. 1 (shown with the airbrake 2/3 retracted)

### Action No. 1: Before next flight, it is required to check :

- Point 1: The presence of adequate functional clearance between the lower spoiler airbrake plate and the structure of the wing (see sketch No. 2)
- Point 2: The values of dimension B (see sketch No. 3, protrusion of the bolt relative to the locknut) which should be at least 1.5mm and dimension A which should be more than 0.6mm (risk of interference with the bottom edge of the upper airbrake plate).
- Point 3: The presence of a clearance between the top of the lower airbrake plate and the end of the attachment bolt of the upper airbrake plate (cf. Sketch No. 4)

Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC FRANCE

Tél.: 02.54.37.07.96 - Fax: 02.54.37.48.64

Issue dated 16/05/2013

_	Classification
	Mandatory
	Recommended

For information





## SERVICE BULLETIN

No. 101-33

SN CENTRAIR 101 gliders all "Pegasus" types

Page 5/6

### Action No. 2:

### Point 1: Concerns Point 1 of Action No. 1

In the event of inadequate clearance, check the tightening of the 2 attachment nuts of the lower plate (cf. Sketch No. 3) and inspect for any possible distortion of the lower airbrake plate. Correct any defects found.

#### Point 2: Concerns Point 2 of Action No. 1

In the event of non-compliance with these values, the glider must be reconditioned for flight by ensuring compliance of the installation of the bolts for the lower airbrake plates with

The total length of the bolts, Item 1 in sketch No. 3, under their heads, must be 26.5mm. If the length of the bolts fitted to the glider is different, they must be replaced with bolts part number SY856A.

Washer, Item 2 (part No. SN CENTRAIR 400126) in sketch No. 3 is optional and is intended to modify the clearance between the lower airbrake plate and the structure of the wing as well as the free length of the bolt behind the locknut, Item No. 4 (see sketch No. 3). It may be deleted if necessary to modify the above clearances.

It may be necessary to slightly chamfer washer No. 3 (part No. SN CENTRAIR 400126) to avoid any possible interference between this washer and the weld of the bolt support threaded bush with the airbrake arm tube

Nut No. 4 must be replaced with a new nut each time it is removed (nut part No. SN CENTRAIR 400030). It must be installed using Loctite "Medium threadlock" ref. 243. After reinstallation, check the compliance of the clearances described under Action No. 1.

### Point 3: Concerns Point 3 of Action No. 1

In the event of inadequate clearance, check the tightening of the 2 attachment nuts of the lower plate (cf. Sketch No. 3) and inspect for any possible distortion of the lower airbrake plate. Correct any defects found.

When the 3 points above are satisfactory, the glider may be returned to flight. If this is not the case, send a report to SN CENTRAIR to define the action to be taken in order to return the glider to an airworthy condition.

Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC **FRANCE** 

Tél.: 02.54.37.07.96 - Fax: 02.54.37.48.64

Issue dated 16/05/2013

_	Classification
	Mandatory
-6	Recommende

d For information



## SERVICE BULLETIN

No. 101-33

SN CENTRAIR 101 gliders all "Pegasus" types

Page 6/6

### Action No. 3:

Since the start of manufacture of the "Pegasus" glider, several types of attachment bolts have been fitted for the lower airbrake plates. The differences between these bolts concern their total length.

Even if the measurement of the clearances (Point 2 of Action No. 1) is correct, it is essential to check that the installation of the lower airbrake plate bolts meets the requirements of Point 2 of Action No. 2.

Indeed, in the event of switching of the bolts with those of another glider, or in the event of omitting to install the thrust washer, the operating clearances described above may not be satisfactory.

It is therefore preferable for all gliders to be in the same configuration.

It is therefore requested, at the next scheduled check of the gliders (Annual Inspection or General Inspection) to perform Point 2 of Action No. 2 unless it has already been performed during correction of Point 2 of Action No. 1.

Translation of 'BULLETIN DE SERVICE'. In case of any difficulty, reference should be made to the French original issue

Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC FRANCE

Tél.: 02.54.37.07.96 - Fax: 02.54.37.48.64

Issue dated 16/05/2013

_	Classification
	Mandatory
	Recommended
	For information