



ELA AVIACIÓN, S.L.
SERVICE BULLETIN Nº 16.

Maintenance procedure and lifetime of hub bar P/Nº: 14-145B

Date of issue: 8th September 2012.

MANDATORY

1) Gyroplanes affected:

All ELA 07, ELA 07S, Cougar and Agro with hub bar P/Nº: 14-145B.



2) Reason:

The CIAIAC (civil aviation accident and incident investigation commission) in collaboration with AESA (Spanish agency for aviation safety) have determined that:

In the case of non-proper use, storage, inspection and maintenance of the gyro, there is an area in the hub bar where some cracks can appear during operation.

This area is located in the lower face of the hub bar, where the bolts heads are inserted in a machined groove.

Non-compliance with this service bulletin may cause the total collapse of the rotor in flight and therefore the loss of life of the pilots



ELA AVIACIÓN, S.L.
SERVICE BULLETIN Nº 16.

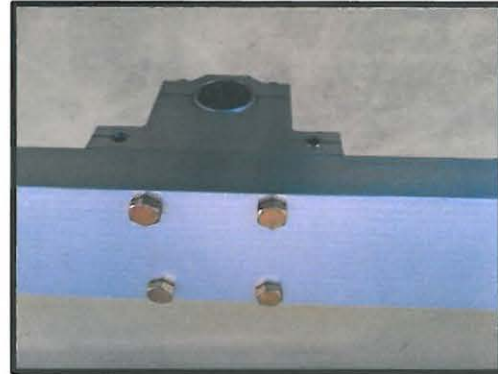
Maintenance procedure and lifetime of hub bar P/Nº: 14-145B

Date of issue: 8th September 2012.

Old hub bar P/N: 14-145B.



New hub bar P/N: 14-145C.



3) Subject:

Rotor hub bars with apparition of cracks are not airworthy.

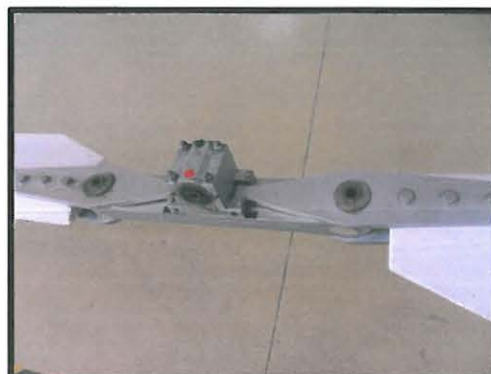
4) Compliance:

Periodical inspection (after the first 200 flight hours and then every 100 hours) should be performed to confirm the integrity of the hub bar.

The lifetime of the hub bar is limited to 500 flight hours, and then it should be replaced by the new hub bar P/Nº: 14-145C.

5) Maintenance / Inspection instructions:

- 1) Remove the rotor from the gyroplane and put it over trestles.



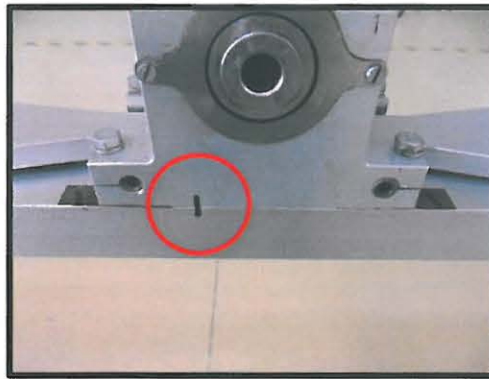


ELA AVIACIÓN, S.L.
SERVICE BULLETIN Nº 16.

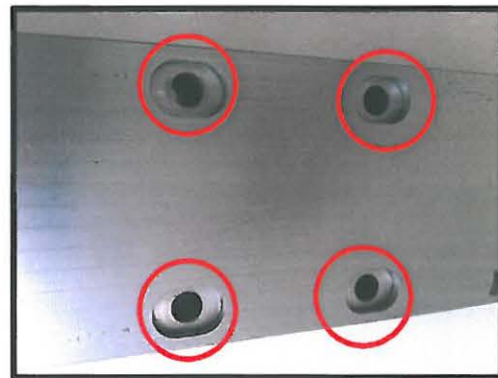
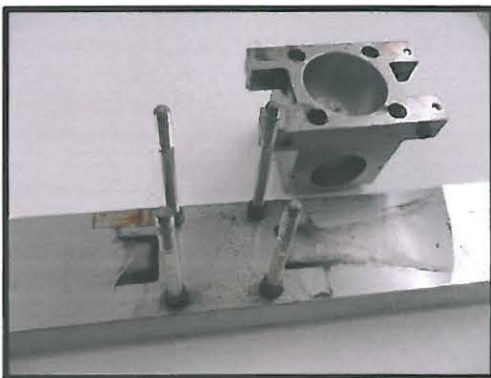
Maintenance procedure and lifetime of hub bar P/Nº: 14-145B

Date of issue: 8th September 2012.

2) Mark the position of the hub block with the hub bar and remove it. It is not necessary to remove the blades from the hub bar.



3) Clean the parts and inspect the bore holes to confirm the absence of cracks in the hub bar and block. Perform a dye penetrant inspection test on this area of the hub bar by a qualified inspector.



4) Re-assemble the block with new bolts and nuts in the same position.

5) Assembly the rotor on the gyroplane in the same position.



ELA AVIACIÓN, S.L.
SERVICE BULLETIN Nº 16.

Maintenance procedure and lifetime of hub bar P/Nº: 14-145B

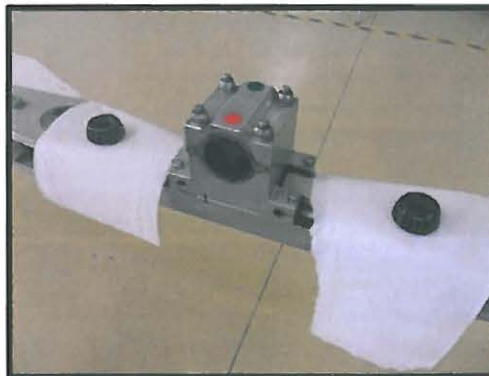
Date of issue: 8th September 2012.

6) Replacement instructions:

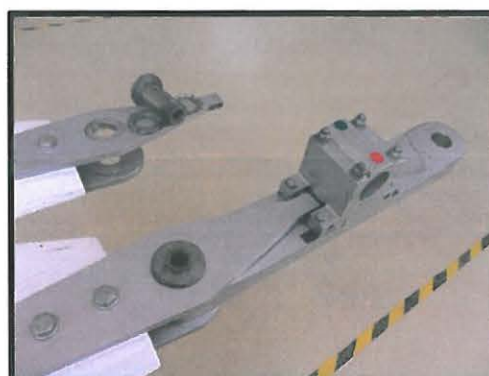
- 1) Remove the rotor from the gyroplane and put it over trestles.



- 2) Remove the hub bar bearings for replacing.



- 3) Remove the rotor blades from the hub bar.





ELA AVIACIÓN, S.L.
SERVICE BULLETIN Nº 16.

Maintenance procedure and lifetime of hub bar P/Nº: 14-145B

Date of issue: 8th September 2012.

- 4) Clean the bolts of the rotor blades and grease them with spray.



- 5) Disassembly the hub block from the hub bar, clean and install it in the new one with new AN-5 bolts and nuts. Tightening torque: 18N/m +/- 1.
- 6) Re-install the rotor blades in the new hub bar. Tightening torque (30mm bolts): 120N/m.
- 7) Re- install the rotor on the gyroplane.