

# AutoGyro Certification Ltd    Service Bulletin (Permit)

<b>Title: Inspection of Rotor head</b>		<b>Release date 07.10.2022</b>
<b>SB-147 Iss1</b>	<b>Related documents</b> Modification: CCAR No.: None	<b>Compliance Category:</b>  <b>OPTIONAL</b> <del>or</del> <b>RECOMMENDED</b> <del>or</del> <b>MANDATORY</b>
<b>Applicability</b>		
<b>Aircraft type &amp; model:</b> All Cavalon and Calidus with Rotor head III	<b>Aircraft serial Nos. affected:</b> All Cavalon and Calidus with Rotor head III	
The maintenance manual to be referenced is this stated or subsequent issue.		None
<p>This form is the response from AutoGyro Certification Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation. For help, contact RotorSport on 44(0)1588 505060, or email <a href="mailto:compliance@rotorsport.org">compliance@rotorsport.org</a>.</p> <p>The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: <b>DAI/9917/06</b></p>		

<b><u>Documentation (Service Bulletin Completion action)</u></b>
<p>a) Entries within the aircraft logbooks, eg CAA BCAR A3-7 Authorised Person to certify that the work is completed by writing ‘<i>SB-147 Iss 1 Inspection of rotor head.</i>’ in the aircraft logbook white pages, and record the action in the pink pages entitled ‘Aircraft Modifications’. Both entries must be signed by the CAA Authorised Person together with their CAA Authorisation number.</p> <p>b) Completion of the SB worksheet if attached. This must contain a PMR statement, and a final check item that no tools or equipment have been left within the aircraft.</p> <p>c) Complete the Type Approval change application document. (This is required where the SB will affect the type approval limitations, eg airspeed change or MTOW change and enables the owner to request the permit change required)</p> <p>d) Any other Permit Maintenance Release to Service form requirements.</p>

<b>Document approval signatures</b>			
<b>Engineering Manager</b>	<b>CVE (as required)</b>  <b>Not required, change already approved</b>	<b>Chief Test Pilot (if flight performance or safety effect)</b>	<b>Head of Airworthiness</b>

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## **Reason and overview of the Service Bulletin (cause of problem if known)**

The purpose of this SB is to highlight the need for effective pre-flight and service inspection of the weld that joins the rotor head side plate to the roll link bracket.

Reason; a small number of 1st generation Rotor head III Rotor head bridge roll linkage assemblies were found during service inspection to have a weld crack. The inspection in this area is considered to be part of the pre-flight inspection, and the area is easily visually inspectable.

This SB re-iterates the inspection procedure, which applies to all AutoGyro Cavalon and Calidus Rotorhead III assemblies.

## **Manpower estimates**

There is no manpower estimate for an associated with the inspection of the rotor head. The inspection is encompassed within the pre-flight check, and the normal maintenance requirements. The man power estimate should a replacement of the bracket be necessary is 0.5 hours

## **Compliance:**

This Service Bulletin must be complied with at the next pre-flight inspection.

## **Tooling required**

Standard tools

## **Weight and Balance Effects**

No effect

## **Manuals affected**

Not affected.

## **Previous Modifications that affect the SB**

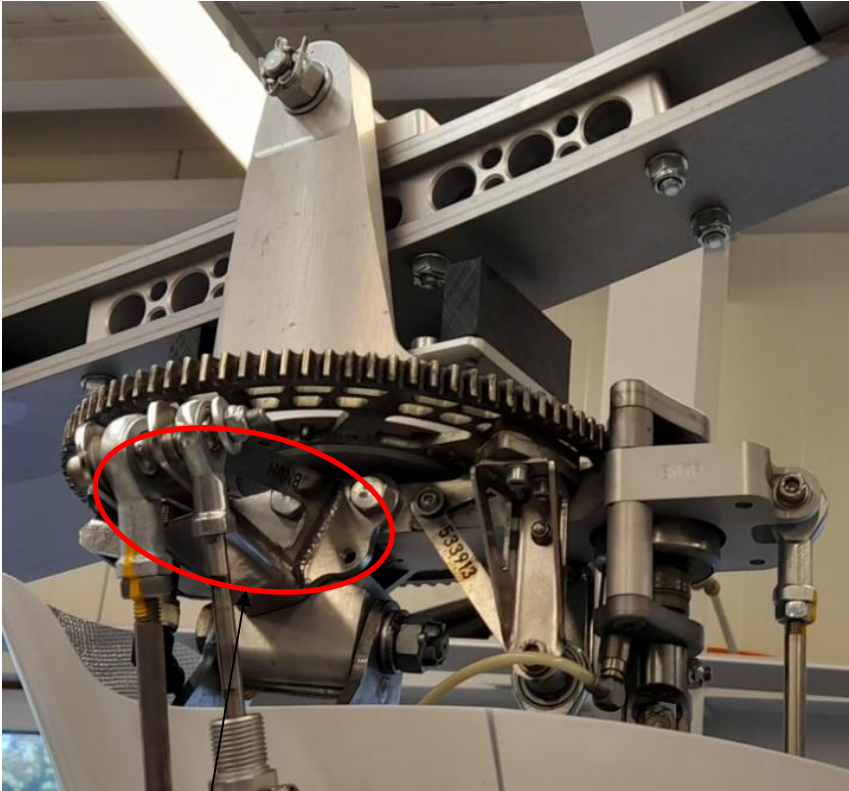
None

## **Accomplishment instructions (Action required to implement this bulletin):**

All work is to be carried out in accordance with the latest model-relevant AutoGyro Aircraft Manual.

Pre-flight inspection requires a thorough review of the rotorhead. Pilot/operators are reminded that this includes the welded connection between the side plates and roll link bracket shown below. This area is open for easy inspection. If a crack is found, the part is to be replaced in accordance with normal maintenance procedures.

**Rotorhead III**



The ringed area indicates the installed bridge linkage

Rotorhead III bridge linkage, welded,  
PN 43689  
Inspect this area, both sides of the  
bracket.



External weld with crack:

This area is readily inspected during pre-flight inspection



Information:

There are two generations of the Rotor head III Rotor head bridge roll linkage assemblies. The second generation is welded on the inside upper end of the bracket, see photo, and was released in 2019. Only this later generation is available, and is fully interchangeable with the earlier version.

Note: these assemblies are stamped with the size (21.5 and 22.5). If replacing, ensure that the correct size is fitted!



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## **Material information (Parts required to be made to implement this service bulletin):**

No parts made during embodiment

## **List of components (with purchasable part nos)**

Replacement parts if required

45966, Rotor head bridge roll linkage 22,5 welded (Cavalon)

43689, Rotor head bridge roll linkage 21,5 welded (Calidus)

## **Interchangeability**

Not affected

## **Parts disposition**

a) Disposal requirements – None

b) Environmental hazards of parts containing hazardous materials - None

c) Scrap requirements (e.g. mutilate scrapped items beyond use) – None.