# RotorSport UK Ltd Service Bulletin (Permit)

Title: MTOsport 2017 radio antenna position improvement		Release date 10.10.2020
SB-139 Iss1	Related documents Modification: CCAR No.: None	Compliance Category:  OPTIONAL or
Applicability		RECOMMENDED or
Aircraft type & model: MTOsport 2017	Aircraft serial Nos. affected: As required, optional	MANDATORY
The maintenance manual to be referenced is this stated or subsequent issue.		None

This form is the response from RotorSport UK 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 compliance@rotorsport.org.

The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: **DAI/9917/06** 

## **Documentation (Service Bulletin Completion action)**

- a) Entries within the aircraft logbooks, eg CAA BCAR A3-7 Authorised Person to certify that the work is completed by writing 'SB-139 Radio antenna position improvement.' 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.
- 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.
- 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)
- d) Any other Permit Maintenance Release to Service form requirements.

Document approval signatures				
Engineering Manager	CVE (as required)	Chief Test Pilot (if flight performance or safety effect)	Head of Airworthiness	
G. Speich Feb 2 2021 6:01 PM	Not required, change already approved	Not required	Allyn	
Docu <i>Sign</i>			Andrew Lyons 5th Feb 2021	

# RotorSport UK Ltd Service Bulletin (Permit)

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

AutoGyro has developed a means to improve the radio reception and transmission on the MTO2017.

After tests and trials it was determined that a repositioning of the current antenna assembly can offer a significant improvement, by utilising the carbon content of the front body as a large ground plane.

This service bulletin provides instructions on how to reposition the antenna assembly.

#### **Manpower estimates**

Estimated man-hours to complete the task as a stand-alone item is; approx. 1.5hrs

Compliance: Optional

## **Tooling required**

See AutoGyro SB

## **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):

1. Follow the requirements of AutoGyro AG-SB-2020-07-B-EN.

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

No parts made during embodiment

#### <u>List of components (with purchasable part nos)</u>

None

#### 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.



Title: MTO2017 Radio Antenna Repositioning				
AG-SB-2020-07-B-EN		Compliance Category:		
Applicability		A - MANDATORY		
Aircraft type & model:	Affected Serial number(s):	B - RECOMMENDED		
AutoGyro MTO2017	All MTO2017 variants	C - OPTIONAL		
The maintenance manual to be referenced is this stated or subsequent issue.		As per AutoGyro website		

This form is the response from AutoGyro GmbH 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 AutoGyro on 49(0)5121 88056-00, or email airworthiness@auto-gyro.com.

## **Documentation (Service Bulletin Completion action)**

The accomplishment of this Service Bulletin, or the decision of its rejection, must be properly documented, if such procedure is required by the relevant authority

## **Category Codes**

A – Mandatory – failure to comply result in a significant reduction of flight safety, injury or death

B - Recommended - failure to comply may result in reduced safety margin, injury and/or equipment damage

C - Optional – improves operating behavior, reliability and/or maintainability

**Chief Certification Officer** 

G. Speich Nov 25 2020 5:37 PM

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Chief Technical Officer

Otmar Birkner Nov 27 2020 9:35 AM

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

AutoGyro has developed a potential means to improve the radio reception and transmission on the MTO2017.

After tests and trials it was determined that a repositioning of the current antenna assembly can offer a significant improvement, by utilising the carbon content of the front body as a large ground plane.

This service bulletin provides instructions on how to reposition the antenna assembly.

#### **Manpower estimates**

The task may only be performed by an organization or individual entitled and trained to carry out maintenance on AutoGyro aircraft.

Estimated man-hours to complete the task as a stand-alone item is:

1.5 hrs.

## **Compliance**

This bulletin is recommended and has no compliance timeline.

#### **Customer Support**

Materials and labour hours are not covered by this SB; this is a product improvement, each aircraft has been previously tested and approved.

#### **Tooling required**

Standard tools.

#### **Weight and Balance Effects**

Nil

## **Manuals affected**

POH & AMM AutoGyro is not affected.

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

None

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

Effective date of this SB is 23 November 2020.

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



#### Instructions

- 1. Ensure the wheel brakes are applied and the mag switches/ignition are switched in the "off" position.
- 2. Remove the 6 screws (3 left, 3 right) securing the oil cooler air scoop to the rear fairings and remove the scoop paying particular attention not to damage the antenna aerial (Pic. 1).
- 3. Disconnect the aerial from the antenna foot and the antenna foot from the frame mounting (Pic. 2).
- 4. Cut any cable-ties securing the antenna cable between antenna foot and keel tube. Reapply cable ties to the remaining cables.
- 5. Remove the 3 left screws securing the left side rear cockpit cover to the cockpit panel to gain access to the antenna cable behind the cockpit (Pic. 3).
- 6. Disconnect the antenna plug from the rear of the radio unit (Pic. 4) and remove any cable ties securing the antenna cable between radio and insertion into the keel tube.
- 7. Using suitable side-cutters, cut the plug at the radio end of the cable from the cable. Dispose of the plug. From the antenna foot end, extract the complete cable/antenna assembly from the aircraft by pulling the cable through its internal routing in the keel tube. Dispose of this item.
- 8. Re-secure the wiring behind the cockpit, and re-fit the left side rear cockpit cover removed in step 5.
- 9. Re-fit the oil cooler air scoop using Loctite 221 on all 6 screws (Pic 1).
- 10. Using a suitable tapered or stepped drill, drill a 14.5mm hole on the underside center line of the forward nose structure, 95mm from the rear edge (Pic. 5) and de-burr the hole.
- 11. Assemble the ground plane from set 47988 inside the foot area of the nose structure, aligning with the hole drilled in step 8. Assemble the antenna foot from set 47988 to the nose structure with the antenna cable positioned starboard (Pic. 6) using the same assembly configuration as the originally removed antenna assembly. Assemble the antenna into the antenna foot.
- 12. Route the cable using the securing pads provided, along the rear and left lip of the nose structure to the rear cockpit area as shown in photos 6, 7 & 8. It is recommended that the area where the pads are to be placed have the paint removed, and the rear of the pad have cyanoacrylate (superglue) applied for secure adhesion. Secure the antenna cable to the pads and existing cockpit wiring behind the cockpit panel using cable ties, and connect the cable plug to the radio socket.
- 13. Carry out a ground run and radio check.
- 14. Carry out a loose tool and article check.
- 15. Complete any documentation required by the country of operation.



## **Illustrations**





(Pic. 1)

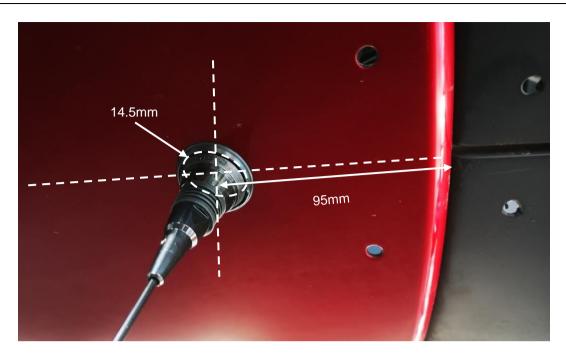




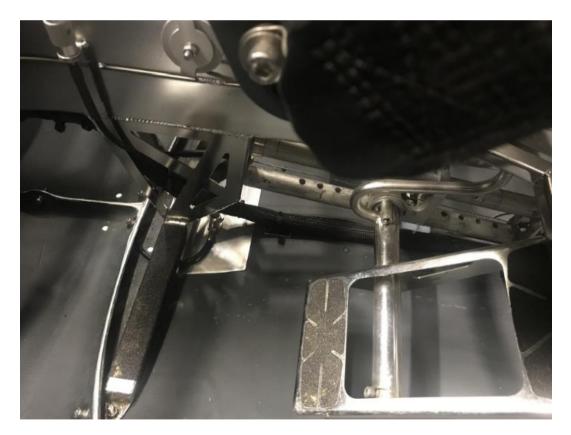


(Pic. 3) (Pic. 4)





(Pic. 5)



(Pic. 6)







(Pic. 7) (Pic. 8)

Completion of this Service Bulletin must be recorded within the aircraft documentation, in line with the requirements of the country of operation.

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

Nil

## List of components (with purchasable part numbers)

47988 Antenna Kit On Body II (2017) 30487 Loctite 221 Red

## Interchangeability

Not affected

## **Parts disposition**

- a) Disposal requirements Standard waste disposal requirements.
- b) Environmental hazards of parts containing hazardous materials Nil
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) Nil