

RotorSport UK Ltd Service Bulletin (Permit)

Title: Funke radio adaptor		
SB-119 Iss1	Related documents Modification: MC-359 CCAR No.: None	Compliance Category: OPTIONAL or RECOMMENDED or MANDATORY
Applicability		
Aircraft type & model: MT-03 MTOsport Calidus Cavalon	Aircraft serial Nos. affected: RSUK/MT03/ RSUK/MTOS/ RSUK/CALS/ RSUK/CVLN/ any requiring upgrade of radio to 8.33 kHz channel spacing	
The maintenance manual to be referenced is this stated or subsequent issue.		RSUK0012 Iss9 RSUK0044 Iss8 RSUK0061 Iss7 RSUK0288 Iss5
<p>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.</p> <p>The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: DAI/9917/06</p>		

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-119 Funke radio adaptor incorporated*' 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 an SB worksheet (attached). This must contain a PMR statement, and a final check item that no tools or equipment have been left within the aircraft)
- c) There is no requirement for a type approval change application document but the Owner/Pilot must notify the CAA details of the new radio installation (CAA Safety and Airspace Regulation Group, Radio Licensing Section, Telephone 020 7453 65555)
- 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
	Not required as MC-359 approved	Not required as MC-359 approved	

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

From www.funkeavionics.de on 16.01.17:

Note: From 01 January 2018 an operator shall not operate an aircraft in European airspace where carriage of radio is required unless the aircraft radio equipment has the 8,33 kHz channel spacing capability (see Commission Implementing Regulation (EU) No 1079/2012 of 16 November 2012). Further information for aircraft holders can be obtained from Eurocontrol's website 833radio.com. This register is an information resource on 8,33 kHz radio equipment, mandates and funding opportunities for General Aviation operating in the European airspace.

Older RSUK gyroplanes may be fitted with a Funkwerk ATR500 radio (with 25 kHz spacing), not the later Funke Avionics ATR833 radio (with the required 8.33 kHz spacing). This SB-119 describes how to fit a simple adaptor cable, designed and manufactured by Funke Avionics, to enable the use of an ATR833 with the existing wiring harness for an ATR500.

Manpower estimates

Accomplishment of this Service Bulletin requires the following personnel

- (i) A3-7 Authorised engineer

Estimated man-hours to complete the task as a stand-alone item are; 1 hour

Tooling required

Hand tools only

Weight and Balance Effects

No significant effect

Manuals affected

The various POH RSUK and AMM RSUK are not affected. However, the Funke Avionics User Manual for the ATR833 must be read and understood before use of the new installation

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

Effective date of this SB is 16.01.17

There is no relevant MPD or other outside body documentation to be referenced.

Instructions

1. It may be possible to complete the installation with the instrument panel in place, but this is dependent on cable/pipework freedom for access. If the instrument panel is removed, then when replaced the pitot-static system must be checked as described in the aircraft AMM.
2. The ATR833 is essentially the same frame-size as the ATR500 but has two rotary knobs coaxial with the two right-hand mounting screws. It also has a 25-way D-type connector instead of the 15-way D-type connector.



The centre picture shows the early ATR833 with four rotary knobs (Part No 833-(1xx)-(1xx). As of June 2011 there are two knobs only, at RHS (Part No 833-(2xx)-(2xx).

3. Remove the ATR500 (if fitted)
Drill through the two right-hand mounting holes 6.5mm dia, removing the swarf with a Hoover or similar. Deburr. Leave the two left-hand mounting holes 4.6mm dia. Fit the radio to the panel using a minimum amount of Loctite243 on the fittings
4. Fit the adaptor to the ATR833, ensuring that the two retaining clips are correctly located
5. Fit the wiring harness to the adaptor, again ensuring that the clips are correctly located
6. Cable-tie the audio connector to a convenient location behind/under the panel
7. Fit the antenna cable to the radio by means of the BNC connector
8. Check all cable routings and cable-tie accordingly
9. Refit the instrument panel fasteners. Note that on MT-series the lower two fasteners should be thread-locked with low-torque Loctite 222 in accordance with RSUK Service Bulletin SB-055.
10. Test the radio installation to a local ground station before the aircraft is released for flight

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

No parts manufactured during embodiment

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List of components (with purchasable part nos)

ATR500 to ATR833 adaptor RSD4823
ATR833 transceiver RSD4658

Interchangeability

Radios or adaptors may be interchanged.

Parts disposition

- a) Disposal requirements – N/A
- b) Environmental hazards of parts containing hazardous materials – N/A
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) – N/A

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Service Bulletin implementation Worksheet			
Aircraft type:	Serial no:	G-	
Worksheet completed by:		Document ref:	
Worksheet cross-checked by (if applicable):		SB-119 iss 1	
Purpose – record service bulletin implementation actions taken to inspect aircraft and return to service.			
Maintenance manual referred-to and issue level:			
Note: attach SB sheets to this document			
Task	Notes	Eng'r check/date	Inspector check/date
Remove instrument panel	If required		
Remove ATR500 fit ATR833			
Fit adaptor			
Reconnect antenna			
Check cable management			
Refit instrument panel/mounting screws			
Confirm satisfactory functional test of intercom			
Confirm satisfactory functional test of radio	To local ground station		

Customer acceptance:	
Name:	Aircraft hobbs meter reading:
Signature/date:	Confirm logbooks annotated:
Permit Maintenance Release:	
<i>'The work recorded above has been completed to my satisfaction and in that respect the aircraft is considered fit for flight. I confirm that no tools, equipment or debris have been left in the aircraft'</i>	
Engineer signature and date:	Location where work completed
CAA PMR Authorisation ref :	