RotorSport UK Ltd

Service Repair Request and Evaluation/Approval

This form (Part 2 of 2) is the response from RotorSport UK Ltd to a Service Repair and Evaluation/Approval request, which specifies the company authorised repair method. Deviation from this method renders the authorisation ineffective. Upon completion of the repair the repairer must enter details into the logbook/worksheet with the repair number and sign as normal.

If any problems with carrying out the work authorised, contact RSUK immediately on 44(0)1588 650769, or email info@rotorsport.org.

Repair No.: 006 issue 1, 29/06/10	CCAR No.: None Mod approval No. MC-140	Repair classification: MAJOR or
	Aircraft serial No.: RSUK/MT-03/005	

Repair problem description & cause of problem if known

Aircraft has received significant airframe damage during impact into a lake in Thailand whilst circumnavigating the world. The owner wishes to continue the trip with the same aircraft. The enclosure suffered significant damage, but is not a structural part of the aircraft. A repair is proposed to allow the original enclosure to be repaired and retained on the aircraft.

Note: The repair is considered 'Minor' only inasmuch as the enclosure is a non structural part.

Service repair authorised by RotorSport UK Ltd (and only permitted to be carried out under RSUK supervision):

- 1. To enable the repair, the aircraft is disassembled, and the enclosure moved to a composite repair facility ('Helix')
- 2. Repair patches to be applied to the inside of the enclosure, whilst the outside is retained in the proper shape.
- 3. The original composite assembly sheets have been supplied to Helix used in the original manufacture of this enclosure.
- 4. Epoxy resin used, 100 parts resin YDL 586 to 38 parts Hardener TH8281.
- 5. Two layers laminated over each break first layer 80mm wide, second layer 100mm wide.
- 6. Cloth used: Glass 200 mat where glass used in original enclosure, and carbon 290 ('12k carbon') where with carbon fibre.
- 7. After completion of the repair, the enclosure has been touched up with acrylic paint (spray can, no significant weight). Then to be refitted to the aircraft as per the maintenance manual RSUK0012
- 8. Enclosure weight gain noted as ~1 Kg

Notes: the area of damage is forward of the pilots seat, and therefore forward of the enclosure attachment points.





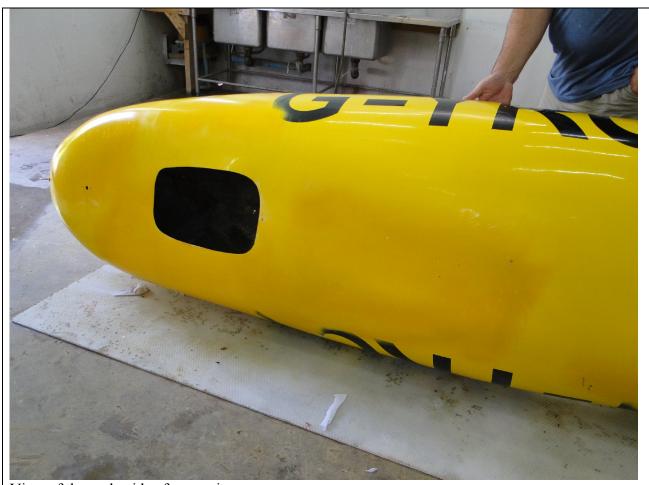




View inside before repair. From this and the other photos it can be seen that the attachment points to the airframe are sound, and that the damage is limited to the nose section only.



View inside the nose of the enclosure



View of the underside after repair







View of repaired enclosure. The paint is a rough match only, and has still to be cleaned off the registration letters

Special tools & Health and Safety requirements, and/or components required for repair:

None – other than normal resin and fibre material handling techniques

Quality Inspection requirements after repair:

Ensure no cracks are left uncovered. Fit to airframe and mating parts as per maintenance manual RSUK0012.

CAA BCAR A3-7 Authorised Person to certify that the work is completed by writing 'SRA-006 Enclosure repair' 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.

Service repair authorised by: (name, signature, and date of signature)

Quality Conformance Manager	Engineering Manager	Chief Test Pilot (whe an effect o flight performan or safety)	re n	Structures (where required)	Civil Aviation Authority (if a major repair)
Document	Issued to:	When	Issu	er name	Signature
completion date:	Internal				
	CAA				
	Owners				
	PFA/BMAA Inspectorate				

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