

16.03.2012

Freedom of Information Request Reference No: FOIA 532 – CARP Appliance YK57AOL

Thank you for your email of 21 March 2012 where you requested information about CARPs.

The information you requested followed by our responses is as follows:

1. *A detailed report of the repair work carried out by Hilton NL, and what Guarantee has been provided on the work carried out.*

The repair of the boom was as follows:

- Demounting of cage and boom
- Demounting of electrics and hydraulics
- New segment on the boom
- All weldings inspected by MPT and X-ray
- Painting
- Mechanical mounting
- Electrical and hydraulic installation
- Test and commissioning

All repairs are done within Hilton's normal terms and conditions - ORGALIME S 2000, (General Conditions for the supply of mechanical, electrical and electronic products)

Note 23 of ORGALIME states: The supplier's liability is limited to defects which appear within a period of one year from delivery.

2. *A report by Hilton NL as to why this incident occurred*

Please see attached report. A small amount of information has been redacted and has been exempted under Section 40 of the Freedom of Information Act, as the information constitutes third party data. Section 40(2) provides that personal data about third parties is exempt information if one of the conditions set out in section 40(3) is satisfied. Under the FOIA, disclosure of this information would breach the fair processing principle contained in the Data Protection Act (DPA), where it would be unfair to that person's confidentiality.

The Information Commissioner suggests a three-part test for the fulfilment of this condition:

Firstly, there must be a legitimate public interest in disclosure; we believe we have addressed the public interest with the other information we have provided. Secondly, the disclosure must be necessary to meet that public interest and we believe that any further disclosure would interfere with the privacy of the individuals. Thirdly, the disclosure must not cause unwarranted harm to the interests of the individual. We believe that the reasonable expectation of the individuals was that this information would not be disclosed.

and what if any modifications have been carried out to prevent this type of incident occurring again.

We have removed the possibility of premature override of the collision protection system.

3. *If any modifications have been carried out to the Boom Control system when will these modifications be carried out to the other Three CARP Appliances and by whom and at what cost to whom, in other words will this work be carried out by Hilton NL under Warranty?*

A software alteration was made to AOL, which was removed on 22 February 2012 and there is no intention to replicate it on the other CARPs.

A further software programme upgrade has been made to all 4 CARP vehicles to prevent premature override.

4. *Please provide a full breakdown of all the costs involved by SYF&RS covering this incident including the repair work, (and just how much of the repair work was carried out under Warranty),*

the Ferry charges, the Fuel costs and the costing of the personnel and their subsistence in getting the Appliance to and from the Factory in Holland.

The price of this repair: £29,930.00 excluding the replacement of malfunctioning sensors and electronic or hydraulic parts.

The ferry transportation costs for CARP AOL to and from Holland were £1812.00. No further staff costs incurred.

5. *When will this Appliance be back "On the Run" at Doncaster.*

This has not been determined as yet.

6. *What arrangements have been made by Hilton NL to set up a Service Department in the UK, or at least appoint an Agent so that any Service and or Repair work can be carried out in the UK rather than have to the considerable expense of having to send an appliance all the way over to Holland to have any Service or Repair work carried out in the future?.*

We hold no information on Hilton's UK plans.

The supply of information in response to a freedom of information request does not confer an automatic right to re-use the information. Under UK copyright law you can use any information supplied for the purposes of private study and non-commercial research without requiring permission. Similarly, information supplied can also be re-used for the purposes of news reporting. An exception to this is photographs.

For other forms of re-use, for example publishing the information, you would need the permission of the organisation or person who owns the copyright.

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date of receipt of the response to your original letter and should be addressed to:

Maureen Oades, Monitoring Officer, South Yorkshire Fire & Rescue Authority

By email: mvoades@syjs.gov.uk

or

The Monitoring Officer

South Yorkshire Fire & Rescue Authority

18 Regent Street

Barnsley

S70 2HG

Please remember to quote the reference number above in any future communications.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF and at www.ico.gov.uk

Inspection report

Date: 01.11.11
Customer: South Yorkshire Fire and Rescue
Contact person: [REDACTED]
Date of visit: 27.10.11-28.10.11
Inspection reason: Damage on top boom CARP (YK57AOL)

Inspection results:

1) Cage floor

- Ultrasonic cage collision sensor is damaged
- Cage protection nozzle is damaged
- One of the rubber pads under the cage shows scratches
- Load hook under the cage shows slight damage

2) Topboom

- The topboom is bended and damaged on several places. Repair needs to be done by Hilton in the factory.

3) Control system

- The boom was taken out of its storage position to test the control functions. The control system of the CARP works without any problem.
- The monitor control also still works without any problem.
- Load cell is still working but needs to be reprogrammed due to the mechanical impact.
- No errors were saved in the black box because no movement was done with the cage when the damage happened.

Root cause:

The root cause is still not 100% clear due to a lack of information from the customer side. After analysis the damage has most likely been caused by an operator mistake in the following way:

1. The control was done with the R/C box as the monitor ceased to function.
2. The operator wanted to check the functions of the monitor and lowered the cage to ground level.
3. The operator left the R/C box on the ground and checked the monitor
4. The operator checked the monitor movements with the control box in the cage and was not aware that this box was still in normal operation mode and not switched to monitor operations. So he operates the joystick and was checking the monitor movements. The monitor movements on the control box are the same as the monitor movements. Because the cage was already on the ground the cage could not move but by this operation with the joystick the load on the top boom was severe and caused the buckling of the boom.

Corrective actions:

- Hilton will analyze together with South Yorkshire Fire and Rescue how to avoid this type of problems in the future. The following options will be evaluated:

1) Removal of the cage sensors:

Most problems seem to be caused by inexperienced operators who always move the platform with full speed to an obstacle and only rely on the ultrasonic sensors to stop the platform at the moment the warning signal is given. It must be emphasized to the operators that the collision sensors are a secondary safety device only! The operator must always slow down the platform movement when approaching an obstacle. To avoid this discussion, [REDACTED] proposed to take off all sensors and give the full responsibility to the operator. This could help to reduce some of the current CARP criticisms and avoid an abuse of the function of the collision sensors. Hilton is not happy with this solution because we take away an important safety support for the operator, which is also mentioned in the EN 1777 hazard analysis.

2) Reducing the speed of the platform

Alternatively the speed of the platform could be set to creeping speed when the operator is approaching an obstacle after overruling the obstacle protection. In combination with a buzzer alarm the operator is more aware of the situation. Further we recommend to take away the start and brake damping out of this slow motion , so the control is more direct. This needs to be discussed with SY.

3) Offer for repair of the damaged topboom

Hilton will make an offer for the repair of the CARP in week 45 and inform SY how long the repair will take.

Maastricht, 1.11.2011

[REDACTED]