



Defence
Infrastructure
Organisation

SAFETY ALERT

PART A

Subject: Inspection and Maintenance of Efflux doors to Hardened Aircraft Shelters (HAS)

Number: SA 2018/01

DIO SEE Sponsor: Bryan Dunn

Date of issue: 27 February 2018

Contact if different from above Sponsor:

Tim Lord

Engineering & Construction

Defence Infrastructure Organisation

Kingston Road, Sutton Coldfield, West Midlands, B75 7RL

Tel: 94421 2005 / 0121 311 2005.

Email: DIOSEE-EngStructuralAH@mod.uk

Who Should Read this: Top Level Budget Holders, Prime Contractors, Private Finance Initiatives, Public-Private Partnership and other traditionally procured contracts, Project Managers, Infrastructure Managers and Property Managers with responsibility for MOD projects and Property Management Works Services (including the legacy work of EWCs/WSMs), Coordinating Authorising Engineers, Heads of Establishment and Health & Safety Advisors.

This Safety Alert does not necessarily cover all aspects of the subject matter and readers should make themselves aware of other potential issues. Readers should also not rely on DIO Safety Alerts as their only means of becoming aware of safety issues, but they should consult widely across other media to maintain awareness.

When it takes effect: immediately

When it is due to expire: When updated or rescinded.

Health and Safety

Aim

1. To bring to the attention of appropriate persons the need to inspect and maintain the efflux tunnel sliding doors in Hardened Aircraft Shelters (HAS), whereby the lack of appropriate maintenance has led to steelwork parts falling to ground from height with the risk of serious harm.

Introduction

2. Compliance with the contents of this Safety Alert will enable compliance with the Health & Safety at Work etc Act 1974 and its subordinate Regulations.
3. The appropriate MOD officer shall arrange for the Maintenance Management Organisation (MMO) contractor to carry out all actions in accordance with this Alert.
4. Contractors and MMOs are to keep informed the establishment Health, Safety and Environmental Protection Adviser and 4Cs Duty Holder, on behalf of the Head of Establishment, regarding progress of actions required of this Safety Alert.
5. Any work required as a result of this Safety Alert must be carried out in accordance with JSP 375.
6. On MOD Establishments occupied by United States Visiting Forces (USVF), responsibility is jointly held by USVF and DIO (USF). At base level this jointly managed organisation is to take appropriate action to implement the contents of this safety Alert. Where this Safety Alert contains procedures, which differ significantly from USVF practice, DIO (USF) code of practice will be issued.

Background

7. A steel shim of approximately 1kg weight fell some 5m to ground from one of the 7 runway beam support brackets.



Photo 1 Showing efflux door, runway beam and supporting brackets

8. The original shims have slotted holes, as shown in photo 2 below, which may aid inserting them, but this also makes them prone to sliding out and falling should the bolts become loose.



Photo 2 Original slotted shim

9. It was noted that shims were missing from other brackets and had been replaced with several washers to pack out the gap. See photographs below.



Photo 3 Bracket with shim missing



Photo 4 Adjacent bracket with washers in lieu of shim

10. Use of washers is considered an inappropriate solution to replace the shims. Whereas shims would enable a tight connection between the steel brackets and the runway beam, washers could allow lateral movement of the runway beam, as the installation is subject to vibration from both use of the doors and by aircraft engine run-up.
11. Examination of site records would also indicate that inspection may not be adequate in that routine inspections of these doors are sometimes not being carried out or are only undertaken at ground level and so do not check tightness of bolts at height.
12. Inspection of the doors may be within the scope of the ESTC 6 inspections, and it is also included at Serials 220 and 221 in the Hard FM Standards & Tasks schedule. There is no requirement to separately undertake these inspections, but the full requirements of each must be met and the necessary certification issued.

Requirement

Part A

13. To ensure compliance with Regulations 5 and 6 of the Provision and Use of Work Equipment Regulations 1998 (PUWER), there must be appropriate inspection and maintenance to ensure safe operation of industrial doors.

14. Inspection and maintenance of hangar doors is to be carried out in accordance with the DIO Schedule of Hard FM Standards and Tasks, where Serials 220 & 221 require:
 - 6 monthly Inspect, clean, service, adjust & overhaul as necessary all components of the door system.
 - Annually Competent Person's Inspection (Insurance) (Doors, Cranes & Runways - Specialist Maintenance Contractor to be available for repairs at the time of inspection). Independent inspection.
15. Suitable references include:
 - BS EN 12604 – Industrial Doors – Mechanical Requirements
 - BS EN 12635 – Industrial Doors – Installation and Use
16. Any manufacturer's requirements or recommendations should also be followed (PUWER ACOP clauses 53, 74 and 115).
17. Inspection is required of all fittings including those at high level to adequately check tightness of bolts and wheel condition etc., for which suitable access must be used.
18. Previous inspection records should be retained, for example to check for trends and potential recurrence of defects.
19. Users should also be encouraged to be vigilant and to report any concerns or observed defects to the MMO.
20. If the Efflux doors are no longer used or required, then the doors can be taken out of service, provided they are left in a safe condition, locked in a fixed position and given appropriate signage that they are not to be used; and that this status is documented.
21. On direction from the DIO Service Manager or equivalent, the MMO is to check:
 - a. HAS Efflux door installations to ensure all existing bolts and fittings are tight, especially those at high level, and to determine if shims are missing, displaced or if alternative inappropriate packing such as washers have been installed.
 - b. Associated records (H&S file, O&Ms, inspection records) for completeness.
 - c. And advise on suitable arrangements could be applied to prevent the bolts from working loose and the shims from slipping out.
22. **All Establishments with Hardened Aircraft Shelters need to respond, whatever their current use.** The MMO is to notify the DIO Service Delivery Performance Management Team – DIO SD-Perf Mgt Team (MULTIUSER) account, through their respective DIO Service Manager:
 - a. Which HAS Efflux door installations have adequate records and which do not.
 - b. Which doors have been inspected at high level and which have not.
 - c. Which doors have adequate installations and are safe to operate.
 - d. What remedial work is required for each if any, to ensure they have valid certification.
 - e. Nil returns are required.
23. The requested data is required by 28 March 2018.
24. Further information will follow with the issue of **Part B** to this Safety Alert once the extent and scope of the affected estate has been established.