



Defence
Infrastructure
Organisation

SAFETY ALERT

PART A

Subject: Hardened Aircraft Shelter – Re-ingestion of Heating System Products of Combustion

Number: SA 2018/03

DIO SEE Sponsor: Bryan Dunn

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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When it is due to expire: When updated or rescinded.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 a potentially dangerous occurrence that resulted in the onsite Maintenance Management Organisation (MMO) supply chain personal being exposed directly to combustion gases whilst servicing the boiler heating system of a Hardened Air Craft Shelter (HAS).

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 Safety 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. In this particular incident, (see figure 1 below) the air intake to the plant room and air handling equipment air intake grills are installed too close to the boiler flue which prevents the products of combustion from the boiler heating system to be released safely without being ingested back into the building.
8. To protect the maintenance personal from exposure to the products of combustion it was deemed necessary to isolate the heating system until such time adequate vertical and/or lateral separation can be achieved to ensure adequate and safe dispersal of products of combustion.

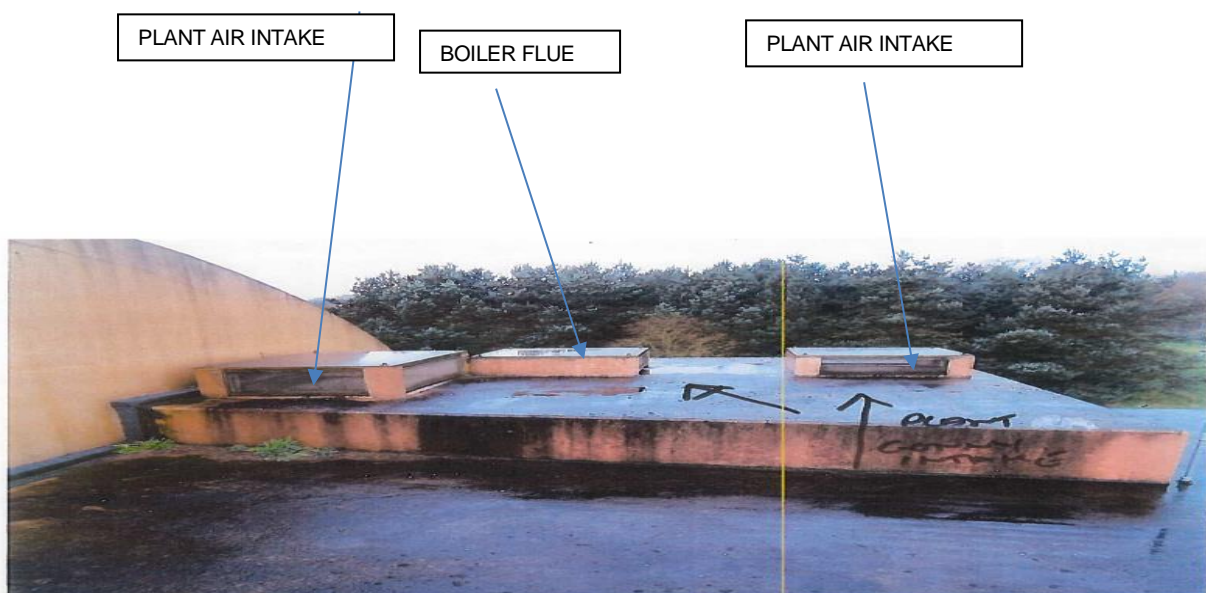


Figure 1 Showing air intakes for the plant room and boiler heating system flue

Requirement

Part A

9. To ensure compliance with Gas Safety (Installation and Use) Regulations 1998; Building Regulations 2010 (Combustion appliances and fuel storage systems); Approved Document J / JSP 375 Volume 3 Chapter 4.
10. The MMO, on direction from the DIO Service Manager (or equivalent), is to:
 - a. Identify establishments with HAS, and how many there are at each location.
 - b. Establish if the HAS is in use and for what purpose, if not is current use have they been decommissioned?
 - c. Where HAS is in use, determine what heating system is installed and maintained.
 - d. Ensure suitable and sufficient risk assessment are in place which includes the hazards potentially resulting for use of heating systems.
 - e. Confirm that records of inspections confirm that boiler flues are suitable for continues use.
11. **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, with a copy to Establishment 4Cs duty holder:
 - a. The number of both in use and decommissioned HAS for each establishment.
 - b. The use of the HAS (is it being used as designed or for other purposes such as storage).
 - c. The existence of suitable and sufficient risk assessment, copy of which should be held by building custodian/end user and Establishment 4C Duty Holder.
 - d. If a heating system is installed, has it been maintained to assure safety of occupants, and are any remedial measures required to ensure compliance.
 - e. Suitable and sufficient records of inspections, maintenance and testing of heating systems and associated flues are held and available.
 - f. Nil return is required.
12. The requested data is required by the 28 March 2018 and will be reviewed by 14 April 2018.
13. 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.
14. The contents of this Alert should be considered when undertaking Technical Inspections or Appraisals of this type of asset

Ends