Defence Infrastructure Organisation

Safety Alert Part A

Subject: Powered Industrial Doors – Motor Cable and Fail-Safe Device Assurance

Number SA 2020/52

Health and Safety

DIO Sponsor: Bryan Dunn	**Date of issue:** 14th July 2020

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This Safety Alert is to be read by the following so appropriate action can be taken:

1. DIO Service Manager (or equivalent for non-NGEC contracts)

2. DIO's Maintenance Management Organisations

3. Others

Others interested in the content of this Safety Alert might include:

Heads of Establishments, Prime Contractors, Private Finance Initiatives, Public-Private Partnership and other traditionally procured contracts, Infrastructure Managers and Property Managers with responsibility for MOD projects and Property Management Works Services (including the legacy work of EWCs/WSMs), Health & Safety Advisors.

When it takes effect: immediately	**When it is due to expire:** When updated or rescinded.

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 publications as their only means of becoming aware of safety, operational or technical issues, but they should consult widely across other media to maintain awareness.

Aim

1. To bring to the attention of appropriate persons the risks associated with Powered Industrial Doors, and to highlight the importance of Planned Preventative Maintenance (PPM) and Inspection in ensuring that fitted safety devices will operate safety and correctly, in all circumstances, including in the event of a critical component failure. This Safety Alert also highlights the need for vigilance when completing PPM to identify the absence of Safety devices, the installation of non-standard parts, unapproved modifications, defects including those unrectified or unreported, ensuring they are not are left unmanaged which could adversely affect safety for the operators of these systems.
2. Additionally, to ensure that where issues are identified they are to be promptly reported to the appropriate persons, including Heads of Establishments (HoE), that suitable and detailed risk assessments are undertaken, and appropriate risk mitigation put in place.

Introduction

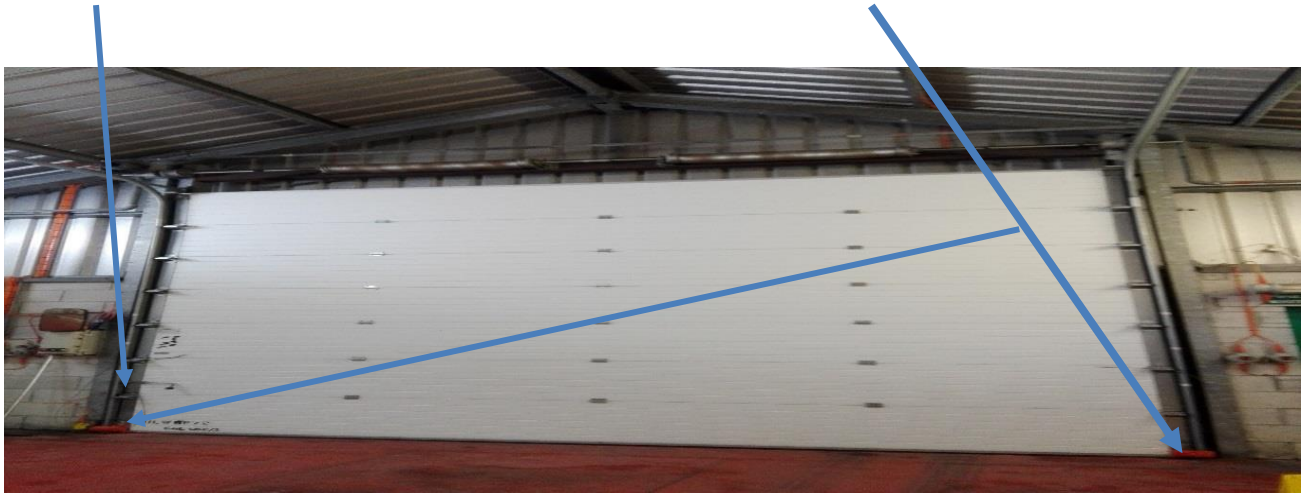
4. Compliance with the contents of this Alert will enable compliance with the Health & Safety at Work etc. Act 1974 and its subordinate Regulations.
5. The appropriate MOD officer shall arrange for the Maintenance Management Organisation (MMO) contractor to carry out all actions in accordance with this Safety Alert.
6. Any work required because of this Safety Alert must be carried out in accordance with JSP 375 Parts 1 & 2.
7. 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 Alert. Where this Alert contains procedures, which differ significantly from USVF practice a DIO (USF) code of practice will be issued.

Background

8. On the 2nd January 2020, a member of staff had a near miss when a Roller Shutter door he started to operate suffered a critical components failure, resulting in an uncontrolled descent of the door, narrowly missing another member of staff. The cause of this incident was the breaking loose of a galvanised motor cable and the additional failing of the safety device that should have prevented the door falling back to the floor. This door system was originally manufactured and supplied by Kone UK and was installed by them in 2012; it is not known how many of these door systems, or similar systems with suspended motor/drive cables have been fitted across the estate.

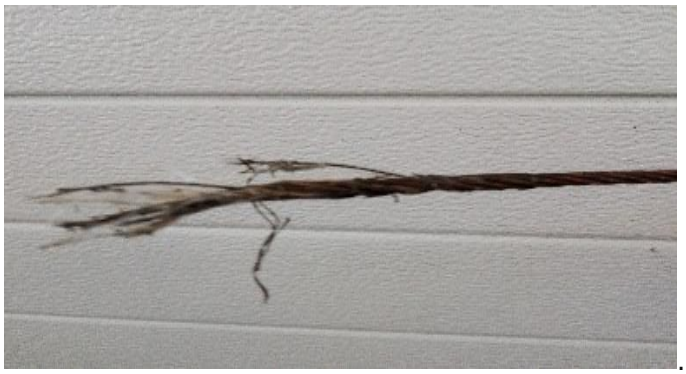
Photo 1 The Door System concerned showing:

a. Broken galvanised cable b. Location of anti-drop devices

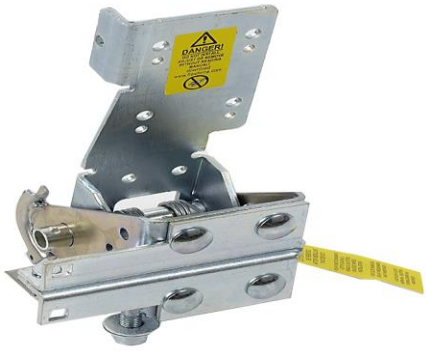


9. Investigation of the door concerned found that the main reason for the incident was the motor cable failing due to corrosion, this causing the cable to weaken and eventually break in normal use, resulting in the door descending to ground in an uncontrolled and unsafe manner, the safety devices did not operate once the motor cable had broken. The last service sheets had noted that the cable was worn but serviceable. The service sheet also noted no safety devices were fitted and therefore no tests of the devices were carried out, despite them been clearly fitted.

Photos 2 and 3 Showing critical components that failed



Failed galvanised cable



Anti-fall device

Requirements

11. All Powered Industrial Doors should be subject to Planned Preventive Maintenance (PPM) and be assigned relevant tasks for the door type and its safe operation. Hard FM Standards and Tasks, Task 220, 6 monthly service identifies this maintenance requirement, with Task 221 detailing the requirement for a 12 monthly Competent Person Inspection. Further it is also identified that this inspection should be Independent from those maintaining the doors. This inspection should provide a full condition report, identifying that the equipment is safe for continued use, or otherwise, and give details of any faults or defects requiring rectification prior to it being deemed safe for continued use.
12. Those undertaking PPM and Inspection must be vigilant in identifying unapproved modifications, the installation of non-standard components or where safety devices are fitted have not been damaged or defeated. The absence of anti-fall devices or other anti-fall design features should also be noted and recorded.
13. Those responsible should satisfy themselves that appropriate separation betweeen those undertaking the maintenance and the competent person undertaking the annual inspection provides the necessary degree of independance to aviod conflict of interests in the assurance arrangements.
14. Any work incurring expenditure of MOD funding requires appropriate authority from the MOD officer responsible for the establishment.

Part A

15. Personnel working on or inspecting Powered Industrial Doors should be reminded of the need for vigilance when inspecting motor/drive and cable condition. Particular emphasis should be placed on the assessment of these components and their suitability for continued safe service until at least the next PPM visit or Competent Person inspection, whichever comes the sooner, taking into consideration the operating environment of the Door System.
16. The MMO is to notify the DIO Service Manager, HoE and establishment 4Cs Duty Holder of Powered Industrial Doors that are fitted with suspended motors/drive cables and those door systems not fitted with an anti-fall device; the 4Cs risk register should be suitably annotated and local risk assessments reviewed.
17. The MMO is to notify the DIO Regional Delivery Safety Alerts Team (DIO-RDSafetyAlerts@mod.gov.uk) account, through their respective DIO Service Manager

a. The identification of the location, quantity and model number of Powered Industrial Doors or, shutters, identifying date of last inspection, maintenance and testing; advising if the equipment is CE marked

b. The HoE must be notified where unrecorded or unmaintained Powered Industrial Doors systems are identified.

A nil return is required from Establishments with no Powered Industrial Doors Systems.

18. Upon receipt of information from MMO, the HoE may need to review risk assessments and door inspection reports considering any new information or previously unidentified risk. Support to undertake suitable and sufficient risk assessments may be obtained from respective TLB Chief Environment and Safety Officers (CESOs), or alternatively through DIO Regional Health and Safety Support Team.

19. The data requested at paragraphs 15 to 17 is required by October 2020 and will be reviewed in November 2020.

20. Where work orders are raised to retrofit anti-fall devices, this information should be included in the data reported under Para 17 above.

21. The contents of this Alert should be considered when undertaking Technical Inspections or Appraisals of this type of asset.

End