



Defence
Infrastructure
Organisation

Safety Alert

Parts A, B & C

Subject: Failure of assault course climbing ropes

Number: SA 2021/08

DIO Sponsor: Clare Read

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

1. TLB CESOs
2. Head of Establishments
3. MMO's
4. Facility Managers

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

Assurance Managers, Assurance Managers in Regional (Service) Delivery Health & Safety Advisors, Top Level Budget Holders, Prime Contractors, Project Managers, Infrastructure Managers and SD Training.

When it takes effect: Immediately

When it is due to expire: When updated or rescinded.

Health and Safety

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 issues, but they should consult widely across other media to maintain awareness.

Aims

1. The aim of this Safety Alert is to bring to the attention of appropriate persons or organisations the correct selection and inspection of assault course climbing ropes.

Introduction

2. Compliance with the contents of this Safety Alert will enable Defence to reduce personal injury on the Estate.
3. Any work required because of this Safety Alert must be carried out in accordance with the Management of Health & Safety in Ministry of Defence - JSP375 & Estate Management in Ministry of Defence - JSP 850

Background

4. Students were using obstacle course climbing ropes when one of the 30-foot ropes parted from its securing 'tulip', fortunately the student had only taken one heave on the rope.
5. The PTI in charge immediately stopped the activity and reported the incident to the range staff, and the 30-foot rope climbing apparatus was immediately placed out of use.
6. HQ DIO Overseas and Training issued a Near Miss notification to all DIO Regional Commands early on 22 Oct 21. This contained a recommendation that the use of all natural-fibre ropes on obstacle courses be placed out-of-bounds, pending re-inspection.
7. Evidence of the failed rope would appear that this was of natural-fibre construction, as opposed to the JSP 315 recommended polypropylene type for 'climbing ropes'. The rope that failed, along with others on the same obstacle, was renewed on 22 May 2020.
8. Subsequently, additional rope failures have come to light on the estate.



Failed natural hemp climbing rope



30ft climbing frame

Part A

9. Design of Obstacle Course features are covered by a series of standard drawings issued by Defence Estates. Different recommended designs exist for both Trained Personnel (A Series drawings) and Recruits (B Series drawings).
10. The relevant extract from JSP 315 / Defence Estates Standard Drawings for rope features on obstacle courses is as follows:
 - a. "Ropes / Net: All cordage, nets and ropes are to be polypropylene or other suitable synthetic material and are to be supplied by the specialist manufacturer as part of the obstacles.
 - b. Rope Swing Ropework: The main rope is to be 28mm-34mm diameter, natural (manila grade 1 – preferred) or synthetic (polypropylene) and conform to BS EN698 (for Manila) or BS EN 699 (for Polypropylene rope) or a suitable alternative approved by CD IPT." (Drawing E8949/DE/AB01)
11. TLBs should take all climbing ropes out of use until they can confirm the inspection of obstacle course ropes have been undertaken IAW 2012DIN07-136.
12. That the correct type of climbing ropes are in use. (Design drawing DE Drawing E 8949/DE/A18 – Obstacle A 18 – Climbing Ropes indicates that the rope material for 'climbing ropes' should be polypropylene.)

Part B.

13. Any climbing ropes isolated under Part A of this Safety Alert are not to be returned to service until they have been subject to appropriate condition inspection and confirmation of correct rope type and ALL remedials identified are completed.
14. On completion of any necessary inspection and any remedial work the units can be returned to service.
15. The MMO is to notify the DIO Service Manager, HoE and establishment 4Cs Duty Holder when any unit is returned to service.
16. Once the condition and serviceability of the assts are known the MMO is requested to provide an establishment specific Asset Management Plan, for approval of DIO Service Manager, confirming their strategy for the planned preventative maintenance IAW 2012DIN07-136 (or replacement where appropriate) of these assets by 4th February 2022.

Part C.

17. 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 of the date action detailed in Part B was completed.