

LibMAS 09.10/1

Annex D

Second Edition: January 2017

DETECTION OF TRIP WIRES

Responsible National entity:

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NOTE:

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1. Introduction

- 1.1 Trip wires area commonly used to initiate mines, i.e. anti-personnel fragmentation stake, bounding or directional.
- 1.2 Manual mine clearance operations may involve the search of trips wires commonly used to initiate mines.
- 1.3 Searching for trip wires used for other purposes such as booby traps or improvised explosive devices (IEDs) shall require specialised training which is not normally taught during manual mine clearance courses.
- 1.4 This Annex details procedures which shall be adhered to during manual mine clearance when searching and locating trips wires commonly used to initiate mines.

2. Tripwire Search

- 2.1 When searching for trip wires the person conducting the procedure shall face towards the immediate area to be searched.
- 2.2 If the vegetation permits, a tripwire feeler may be used to locate tripwires.
- 2.3 This should be made from light-gauge wire (or other approved material) and fabricated in such a way to allow the detection of both slack and taut wires.
- 2.4 Starting from a stable position, i.e. kneeling or prone, the tripwire feeler shall be moved over the surface of the (or as close as possible), forward of the base stick and raised slowly upwards until clear of the vegetation or above head height when standing, ensuring that any high trip-wires are not missed.
- 2.5 This shall be completed a minimum of three times at intervals, across the full width of the demining lane and overlap.
- 2.6 In addition, the feeler should be held vertically (point facing downwards) and moved across the complete width of the lane (including the overlap to the sides) at least once in order to search for any wires running forward and across the lane.
- 2.7 In order to deploy the trip wire feeler safely, the operator should be able to see the end of the feeler at all times, and if may be necessary to mark the end of the feeler, i.e. with paint to aid observation.
- 2.8 The trip wire feeler shall be used to search a maximum distance of 50 cm into the uncleared area.
- 2.9 If the vegetation does not allow the use of a tripwire feeler, the search shall be completed using the eyes and hands may be used to assist, with extreme caution.
- 2.10 After a thorough visual search of the area, the Deminer search the area by slowly moving the hands forward, gently parting any thick vegetation that may obscure tripwires. The Deminer shall not pull vegetation and shall avoid touching any trip wires.

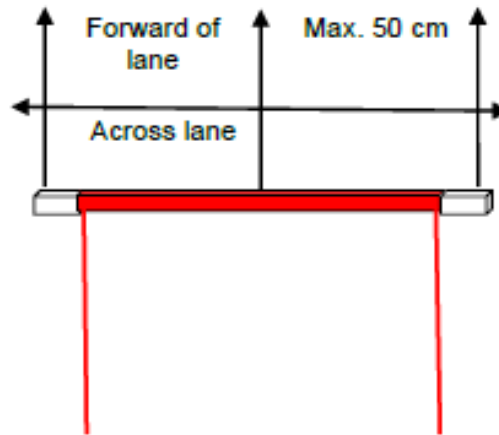


Figure 1: Example – Tripwire Search

3. Action on Locating a Tripwire

- 3.1 The Deminer shall stop, place a hazard marker a minimum of 10 cm before the tripwire, in the clear area, and notify the supervisory person of the find.
- 3.2 The supervisory person shall confirm the hazard and make an assessment as to safety requirements at the worksite, i.e. increase the distance between working Deminers.
- 3.3 The supervisory person is responsible for ensuring that both ends of the tripwire are located and cleared, which may require the deployment of one or more Deminers to search for the trip wire.
- 3.4 Normally a demining lance is deployed parallel and no closer than 50 cm to the wire, to locate both ends.
- 3.5 In cases where thick vegetation or other obstacles which prohibits visually following the tripwire at 50 cm, the supervisory person may authorise a closer distance.
- 3.6 Where it is assessed as impractical or unsafe to search parallel to the trip wire, or if the trip wire is no longer visible, then it may be possible to deploy demining lanes in other directions to carefully locate the trip wire or the ends.
- 3.7 In circumstances where the wire is buried then depending on the type of wire, it may be possible to search for it using detectors, otherwise by excavation.
- 3.8 At no point during the search procedure is the tripwire to be disturbed.
- 3.9 A threat assessment shall be made by the supervisory person with regards the possible area covered by the tripwire(s) and the configuration in which mines may be laid. The conclusion may be to move all personnel not involved in the tripwire search to another part of the working area or to an administration area during the search procedure.
- 3.10 Where it is suspected or confirmed that a tripwire may be connected to a mine then this shall be considered as **increased risk** and the minimum safety requirements shall be adhered to in accordance with LibMAS 10.20/1 Demining Worksite Safety, Table 1.

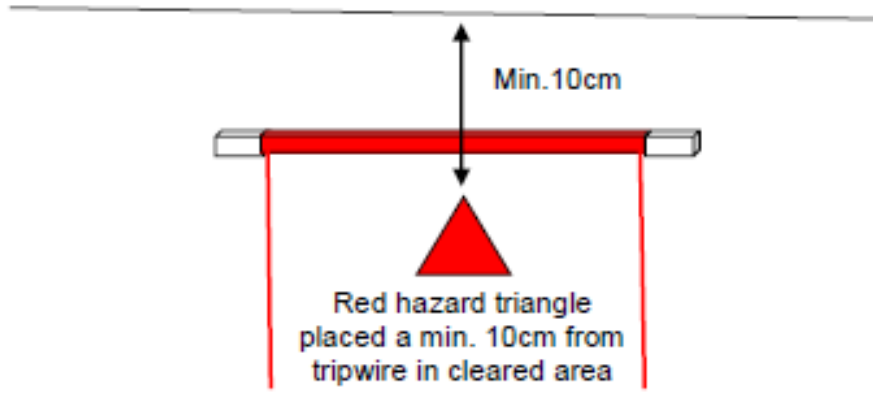


Figure 2: Actions on Locating a Tripwire

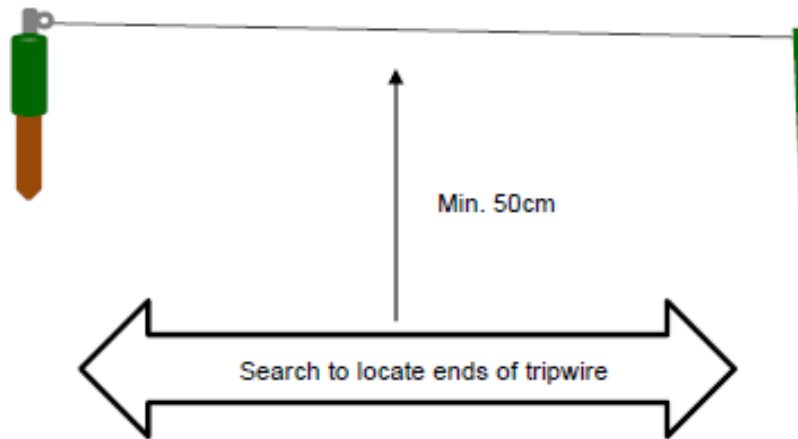


Figure 3: Actions on Locating a Tripwire