

## UNITED STATES DEPARTMENT OF DEFENSE HUMANITARIAN DEMINING R&D PROGRAM

# Long Handle Tools

Rapid clutter investigation during manual mine clearance operations

#### STATUS

Operational evaluations have taken place in Ecuador (2010) and Mozambique (2012-2014).

Operational evaluations in Angola, Cambodia, Sri Lanka and Zimbabwe are ongoing.

With the significant reduction in time no longer needed to investigate every detection, demining organizations have to date saved over 2,900 man years worth of donor funds that were made available for reallocation. Long Handle Tools are modified commercially available power tools capable of preparing the ground for manual detection operations, and conducting rapid investigation of clutter calls made by the dual sensor Handheld Standoff Mine Detection System (HSTAMIDS). Power strimmers, tillers and blowers with long shafts speed lane preparation and clutter investigation with increased safety. Long Handle Tools provide deminers with a means to dramatically increase the speed and efficiency of manual demining while greatly reducing the cost.



Manual mine clearance operations using handheld metal detectors and common handheld digging tools are extremely slow and dangerous. This is particularly true where the density of non-mine metallic "clutter" in the ground is very high. Every detection must be carefully investigated as a possible mine, although 95% of the time it is clutter.

The key to achieve such vastly improved speed and efficiency is the use of long handle tools with digging attachments, and mine detectors such as the HSTAMIDS that are capable of discriminating non-mine metallic clutter from mines. In Cambodia, a typical manual investigation that once required 10 to 15 minutes is now being accomplished in approximately 1 minute with the use of long handle ground engaging tools, and a standard operating procedure guiding the process.



### FEATURES

- Clutter investigation
- Prepare the ground for HSTAMIDS operation





**Clutternator and Close-up of Clutternator Head** 

#### APPLICATIONS

- Safely confirm handheld detector clutter indications
- Prepare ground for manual demining



Vegetation cutter preparing lanes for HSTAMIDS operation







Blower

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