

FY 2023 Outside Witness Testimony for the Senate Appropriations Committee  
Subcommittee on Defense  
Department of Defense

Chris Whatley, Executive Director, The HALO Trust (USA)  
Jamie Franklin, Executive Director, Mines Advisory Group (MAG) America

**Please Support \$21M for the Humanitarian Demining Research and Development Program**

As the world's largest humanitarian demining organizations, The HALO Trust and Mines Advisory Group (MAG) America protect lives and restore livelihoods for those threatened by explosive hazards. We remove and destroy landmines, improvised explosive devices (IEDs) and other explosive remnants of war and help secure weapons that could fall into the hands of terrorist groups. For 20 years, HALO and MAG have partnered with the U.S. Department of Defense's (DOD) Humanitarian Demining Research and Development (HD R&D) Program in more than ten countries and territories. This program, implemented by the U.S. Army, specializes in developing and testing innovative technologies to detect and clear landmines, unexploded ordnance (UXO), and IEDs. These technologies increase the effectiveness, efficiency, and safety of demining operations for military and humanitarian use – saving lives and taxpayer money.

The HD R&D team designs technologies to respond to technical challenges in the field, drawing from new commercial technology, equipment currently in use by the DOD, and advanced sensor technology available only through other DOD R&D programs. They then trial prototypes in real field conditions through partnerships with the Department of State's (DOS) humanitarian demining programs. During field evaluations, operators provide feedback on the functionality and effectiveness of the equipment. This allows HD R&D to modify and improve the equipment and increase the U.S. technical capacity to respond to explosive threats.

HD R&D produces four specific outcomes. First, the field evaluation process collects data that helps to improve demining technologies used by the U.S. Armed Forces and to support geographic combatant commands in achieving humanitarian mine action objectives. Second, successfully trialed equipment is used to train and equip explosive disposal units of the U.S. military as well as allied militaries. By equipping partner militaries to address their own explosive threats, U.S. soldiers are more likely to remain out of harm's way. Third, HD R&D equipment saves civilian lives from landmines, most frequently children, and amplifies the impact of American assistance by increasing the amount of clearance performed on DOS projects without increasing costs. Fourth, the HD R&D program supports American jobs by utilizing American manufactured machines and products when possible in their equipment development process.

The HD R&D Program has a track record of success, having performed nearly 250 operational field evaluations in 43 countries since 1995. The program is responsible for developing advanced technology for the Handheld Standoff Mine Detection System (HSTAMIDS), which combines metal detection with ground penetrating radar, the rotary mine comb, designed to efficiently excavate low metal content anti-vehicle mines, and TRAXX, built to cut through hard-to-see tripwires and lift mines from soil. Overall, HD R&D equipment has been used to clear more than

22,000 acres of land, and to destroy more than 396,300 mines and UXO.

As you know, HD R&D now receives funding from the following account: **Research, Development, Test & Evaluation, Army / Advanced Component Development & Prototypes / PE: 0603920A / Program Title: Humanitarian Demining.** Due to strong bipartisan support, the program received \$19 million in Fiscal Year 2022. However, the FY23 President's Budget proposes only \$8.933 million for HD R&D, which would represent a 53% decrease from the previous year's appropriation, and the lowest funding level in over ten years. This proposed funding reduction would substantially curtail the ability of the HD R&D program to develop necessary demining equipment that would otherwise protect members of the Armed Forces.

HD R&D equipment has created huge cost savings for humanitarian demining programs managed by the State Department through increased efficiencies. Through the deployment of HD R&D-developed HSTAMIDS detectors, HALO's program in Zimbabwe estimates a cost savings of approximately \$16 million over the last five years and the program was able to clear in five years what would have otherwise taken eight. The Rebel Crusher, a mobile soil sifter and rock crusher used by MAG in Lebanon and Iraq has allowed for mine clearance at a rate five times faster than with a traditional demining team. Remote-controlled Robocut machines, used to cut through tripwires in Ukraine, has accelerated clearance rates by an estimated 400%. The Wirehound in Afghanistan, used to identify hard-to-detect IED components, has increased clearance by over 200% compared to traditional methods. The FAE Mulcher, a vegetation clearing tool being used by MAG in Cambodia, can clear 200% more area than a single deminer using a handheld strimmer. Investing in resources for HD R&D will allow humanitarian and military deminers to eliminate threats far more quickly.

Innovative technology developed by HD R&D also protects deminers. Advanced machines including the Mini MineWolf and the Medium MineWolf, can operate remotely to physically destroy anti-personnel (AP) and anti-tank (AT) landmines with no threat to demining personnel.

This program has a long list of unfunded projects it is waiting to trial, including magnetic technology in Iraq, and HD R&D equipment will also be essential to demining efforts in Ukraine, where technological advancements could support the removal of removing anti-tank mines, and clearing trenches and bunkers of explosives.

We appreciate the support this subcommittee has provided for this valuable program, and **urge the subcommittee to raise funding to a level of \$21 million in FY23 for HD R&D.** This additional funding will improve the ability of U.S. soldiers and our allies' ability to safely detect and clear landmines, UXO, and IEDs. This funding is especially important as new conflicts uncover new challenges in Ukraine and the Middle East.

Thank you for your consideration of this request.