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## 3-D Printed Landmines and Mine Clearance Tools

News Brief

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## 3-D Printed Landmines and Mine Clearance Tools

3-D printing offers an inexpensive, customizable, mine action training solution to militaries and explosive ordnance disposal (EOD) teams. 3-D printers use digital files to create objects, such as simulated landmines, with layers of molten plastic.<sup>1</sup> The mine replicas can be wired to blast simulators to train personnel in a safe, controlled environment.<sup>2,3,4</sup>

British design engineer Chris Natt at EOD Life recently created 3-D-printed, simulated mines for training purposes.<sup>4</sup> These simulated mines are placed in the ground and if triggered, emit a loud bang and flashing lights.<sup>5</sup> One newly-created simulated 3-D-printed YM-1 mine, when triggered, sends a wireless signal to a box and sets off a siren.<sup>6</sup> Most 3-D printed, simulated landmines are customizable and print quickly. They are not yet mass-produced.<sup>1,6</sup>

For more information about simulated landmines, see "[Advanced Ordnance Teaching Materials](#)," by Allen Tan in Issue 18.2 of *The Journal of ERW and Mine Action*. In his article, Tan describes various replicated learning tools used for a hands-on experience in EOD education.<sup>7</sup> 

~ Julie Stern, CISR staff

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### Endnotes

1. Hsu, Jeremy. "3D Printing: What a 3D Printer Is and How It Works." *Live Science*. <http://bit.ly/1v7FKhe>. 21 May 2013.
2. "Blast simulators emulate explosive events without the use of explosive materials." *EOD life*. <http://bit.ly/1wxaFEj>. Accessed 15 September 2014.
3. "Little Boy." *Improvised Electronics*. <http://bit.ly/1oRcbcq>. Accessed 15 September 2014.
4. Natt, Chris. "Blastproof – Humanitarian Tools for the Ongoing Conflict with the Mechanical Soldiers of War." <http://bit.ly/1r0f8My>. Accessed 15 September 2014.
5. Shubber, Kadhim. "3D-printed artificial landmines could make demining safer." *Wired*. 12 July 2013. <http://bit.ly/XqFOkw>. Accessed 15 September 2014.
6. "3D Printed Bomb Suit Figure EOD." *Kickstarter*. <http://kck.st/1uE9waI>. Accessed 15 September 2014.
7. Tan, Allen. "Advanced Ordnance Teaching Materials." *The Journal of ERW and Mine Action*. Issue 18.2 (Summer 2014.) Accessed 9 October 2014. <http://bit.ly/1s09mtb>.

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