

# Marines to get Smart Phones to call in Fire Support

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This fiscal year Marines will receive smart phones that make calling for fire support easier, quicker and more accurate. The Target Handoff System Version 2 is a portable system designed for use by dismounted Marines to locate targets, pinpoint global positioning coordinates and call for close air, artillery and naval fire support using secure digital communications.



The system is an upgrade to the Corps' current Target Handoff System and is made up of a laser range finder, video down link receiver and a combat net radio.

"Our current THS, though capable, needed to be smaller and lighter to better support dismounted operations," said Capt. Jesse Hume, THS V.2 project officer for Marine Corps Systems Command. "With the new version, Marines will obtain a lightweight device equipped to provide immediate situational awareness on where friendly and enemy locations are, and the ability to hand off target data to fire support to get quick effects on the battlefield."

THS V.2 also allows Marines to coordinate fire support missions more precisely, minimizing collateral damage, Hume said. THS V.2 uses commercial off-the-shelf smartphones that reduce the system's total weight from roughly 20 to 10 pounds, making it easier to transport. It also features new, more intuitive software. Information is transmitted via an encrypted combat net radio, ensuring mission security. Matthew Bolen, assistant engineer for THS, said the use of COTS products eliminates the cost of investing in proprietary hardware and decreases the time it takes to equip the Corps with new technology.

"With the new commercial products, THS V.2 will be half the price of the previous system, while incorporating the speed of current advancements in

handheld technology and encryption," he said.

Designed for use by forward observers, air controllers and joint terminal attack controllers, THS V.2 allows users to quickly and accurately determine a target's location and digitally transmit (hand-off) the data to supporting arms elements. The system automatically generates coordinates for targets identified by a Marine and digitizes the information into a map application pre-installed on the smartphone, eliminating the need for manual input.

Once digitized, the information is transmitted to the Fire Support Coordination Center, where the proper approach of attack is determined. The FSCC then coordinates air, artillery or naval fire support to extinguish the threat.

"THS V.2 provides embedded, real-time tactical information with ground combat element units down to the squad or platoon level," said Gunnery Sgt. Nicholas Tock, THS operations chief. "If we are on patrol and we take contact from machine guns in a tree line, a satellite that passes over once every few hours is not going to help an infantry unit kill that target. THS V.2 is for that close combat."

The system's upgraded software includes a new, easy-to-understand interface similar to operating systems used by everyday mobile users. THS V.2 will also come with a pre-installed "Start Guide" help app with step-by-step tutorials ranging from configuration to trouble shooting operations.

"Start Guide is an intuitive app that goes through setup procedures, troubleshooting procedures and many other quick-reference materials," said Chuck Schuster, MCSC's liaison to the Aviation and Missile Research Development and Engineering Center.

"This is the first time to our knowledge that a feature like this has been pre-installed on a system for Marines." THS V.2 is part of the MCSC's joint fires and combined arms arsenal. Joint fires describe the use of weapon systems in a joint environment involving forces from two or more components in coordinated action in support of a common objective.

