



# ENFIRE

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

## Background

The Instrument Set, Reconnaissance and Surveying (common name: ENFIRE)<sup>i</sup> is a tactical engineering tool set designed to modernize the collection and dissemination of engineer information. It enables the user to auto-populate bridge, road, hasty minefield, IED, and other engineering data on standard Army forms in a digital format. ENFIRE places the right tools in the hands of engineer soldiers conducting tactical reconnaissance under hazardous conditions. The capabilities found within the ENFIRE system allow soldiers to more rapidly collect information while minimizing exposure to enemy observation.



## Capabilities

ENFIRE expedites reconnaissance, construction, and inventory management efforts by using digital tools that are integrated into a common platform. The system includes commercial off-the-shelf (COTS), government off-the-shelf (GOTS), custom hardware and software, and computer-based geographic information systems (GIS) linked to peripheral components. Using ENFIRE, construction and facilities engineers can effectively plan and efficiently undertake projects. ENFIRE's project management tools can create Gantt charts to track project progress and milestones. The ENFIRE construction site-planning tool supports structure design, cut and fill requirements, material needs, and personnel and time requirement calculations.

## Current Status and Operations

Final hardware and software development was completed in February 2008 to facilitate Developmental and Reliability testing, leading to a successful Milestone C decision in June 2008. Approval for Full Rate Production was granted in March 2009 and integration of the first 361 has been completed. The first unit equipped was the 19th Engineer Battalion in April 2009, with approximately 340 systems fielded to date. It is currently in use in both theaters of operation. The versatility and adaptability of the system for the mission at hand has been a recurrent theme in the feedback received from the field. The overall fielding plan identifies fielding to deploying units down to the platoon level with an Army Acquisition Objective of 2633 through 2017. ENFIRE requirements have been programmed into the FY10-15 and FY12-17 POM cycles.

ENFIRE is a modularized hardware and software solution designed to utilize COTS and GOTS hardware and software, enabling easy replacement of individual components to maintain low development costs while adapting to the most recent digital innovations. It is becoming VISTA compliant in FY11. Moreover, the U.S. Marine Corps have determined that the current and evolving ENFIRE hardware & software baseline is compatible with their reconnaissance requirements. As a result, USMC has partnered with Army to make ENFIRE an integral part of their Route Reconnaissance and Clearance family of systems starting in FY12.

## Benefits

ENFIRE allows reconnaissance teams and decision makers to interact in real-time. This enables:

- **Interoperability with existing C2 systems**

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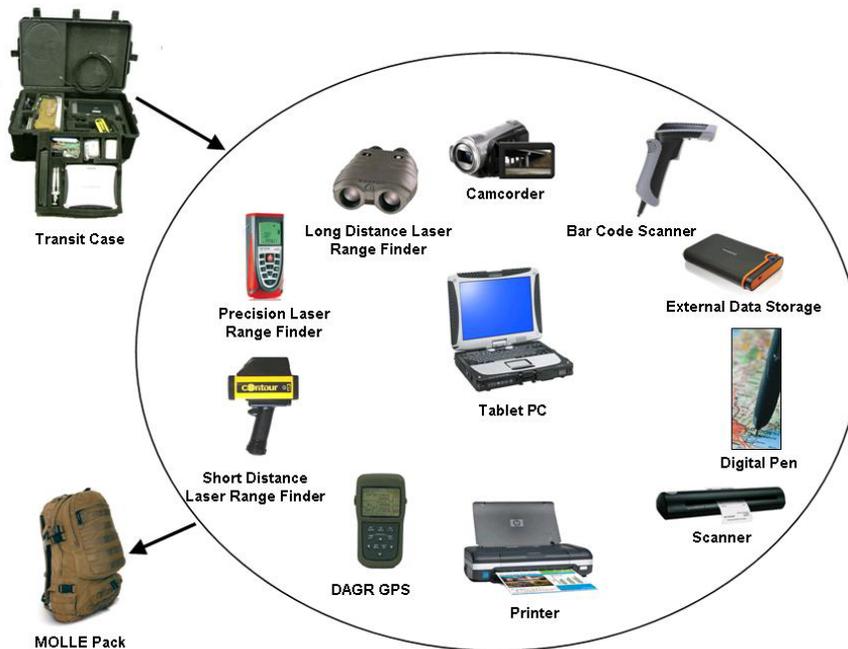
Updated Nov 11

- Current information can be quickly disseminated back to the TOC giving commanders and staffs increased knowledge of the common operating picture through the Engineer Mobility Web Service and Battle Command.
- **Safer and more accurate data collection**
  - Engineers will be able to conduct reconnaissance operations using GPS, laser range finders, digital photography, and standardized Army electronic reconnaissance forms to collect information. This limits exposure during mission execution.
- **Rapid transmission of information and enhanced situational awareness**
  - Rapid transmission of reconnaissance and engineering information provides the opportunity for better decision making. Decisions on gathering more information or modifying the reconnaissance can be made while the operation is taking place.
- **Modern tools made available at the squad level**
  - ENFIRE places modern technology in the small unit leader's hands and provides maintenance and sustainment support.

**Point(s) of Contact**

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ENFIRE Components

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