

# Excalibur (XM982)

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



## MISSION

Provides improved fire support to the maneuver force commander through a precision-guided, extended-range, artillery projectile that increases lethality and reduces collateral damage.

## DESCRIPTION

Excalibur (XM982) is a 155mm, Global Positioning System (GPS)-guided, extended-range artillery projectile, in use as the Army's next-generation cannon artillery precision munition. The target, platform location, and GPS-specific data are entered into the projectile's mission computer through an enhanced, portable, auto-inductive artillery fuze setter (EPIAFS).

Excalibur uses a jam-resistant internal GPS receiver to update the inertial navigation system, providing precision in-flight guidance and dramatically improving accuracy regardless of range. Excalibur has three fuze options: height-of-burst, point-detonating, and delay/penetration; and is employable in all weather conditions and terrain.

The program is using an incremental approach to provide a combat capability to the Soldier as quickly as possible, and to deliver advanced capabilities and lower costs as technology matures. The initial variant (Increment Ia-1) includes a unitary high-explosive warhead capable of penetrating urban structures and is also effective against personnel and light materiel targets. Increment Ia-2 will provide increased range (up to 40 kilometers) and reliability improvements. The third variant (Increment Ib) will maintain performance and capabilities while significantly reducing unit cost and increasing reliability.

Excalibur is designed for fielding to the Lightweight 155mm Howitzer (LW155), the 155mm M109A6 self-propelled howitzer (Paladin), and the Swedish Archer howitzer. Excalibur is an international cooperative program with Sweden, which contributes resources toward the development in accordance with an established project agreement and plans to join in procurement.

## SYSTEM INTERDEPENDENCIES

### In this Publication

Advanced Field Artillery Tactical Data System (AFATDS), LW155, Paladin/Field Artillery Ammunition Support Vehicle (FAASV)

### Other Major Interdependencies

EPIAFS, Modular Artillery Charge System

## PROGRAM STATUS

- **Current:** Increment Ia-1 fielded to Iraq and Afghanistan; Army and Marine Corps units in Afghanistan and Iraq are Excalibur capable
- **FY10:** Completed initial operational test and evaluation for Increment Ia-2
- **FY10:** Conducted competitive shoot-off to downselect between Increment Ib competitors to one contractor team for Phase 2

## PROJECTED ACTIVITIES

- **FY11:** Full-rate production of Increment Ia-2
- **FY12:** Milestone C decision for Ib
- **FY13:** Operational assessment for Increment Ib
- **FY14:** Full materiel release for Increment Ib

## ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

## Excalibur (XM982)

### FOREIGN MILITARY SALES

Australia, Canada, Sweden, United Kingdom

### CONTRACTORS

#### Excalibur Increment Ia:

Raytheon (Systems Integration)  
(Tucson, AZ)

Atlantic Inertial Units (Plymouth, England)

BAE Systems Bofors Defense (teamed  
with Raytheon) (Karlskoga, Sweden)

General Dynamics Ordnance and Tactical  
Systems (Healdsburg, CA; Niceville, FL)

#### Increment Ib Phase 1 (Design

#### Maturation):

Alliant Techsystems (Minneapolis, MN)

Raytheon (Tucson, AZ)

