

## Excalibur

### Precision-Guided, Long-Range, 155mm Artillery Projectile



Essential in all combat operations, **Excalibur** exceeds requirements for accuracy and range.

#### Benefits

- Accuracy ensures lower collateral damage and faster mission effects
- Ideal for targets in urban and complex terrain
- Greatly reduced logistics, fits current logistics structure
- Compatible with current and future 155mm artillery platforms

Excalibur is the first precision cannon artillery system for the U.S. Army, Marines and coalition artillery. It is a 155mm precision-guided, autonomous artillery round with extended range. Excalibur is a joint U.S.-Swedish development and will be fielded with the Swedish forces. Excalibur was deployed with U.S. and Canadian forces in 2007.

The Excalibur precision-guided projectile provides accurate, first round fire-for-effect capability to current and future 155mm howitzers.

Excalibur's better than 10-meter accuracy is achieved with a highly maneuverable, precision-guided airframe. Its accuracy requirement is met throughout its range with extremely low round-to-round dispersion. Compared with Excalibur, other concepts for achieving cannon artillery precision increase the chances of rounds

striking outside the intended target area. Excalibur is the only solution to limit collateral damage and optimize effects with the fewest number of rounds.

Excalibur has significantly increased effectiveness when compared with current artillery rounds. Excalibur's lethality is achieved with precise terminal accuracy, near-vertical angle-of-attack, multiple-function fuze and a fragmenting warhead with concrete penetration capability. Its accuracy will reduce collateral damage, permit its use close to friendly units and reduce the number of rounds required for desired effects — increasing artillery flexibility and enabling decisive maneuvering. Excalibur's accuracy greatly reduces the number of rounds required to perform any lethal artillery mission. The near-vertical angle-of-attack is ideal for achieving effects in urban or

complex terrain and increases the performance of the fragmenting warhead while minimizing collateral damage. The multifunction fuze provides height-of-burst (HOB), point detonating (PD) and point-detonate delay (PDD) fuze settings. The HOB setting will enable soldiers and Marines in contact to engage enemy forces on rooftops and in trenches while the PDD setting is ideal for penetrating structures and other enemy strong points. The PD setting is effective against dismounted soldiers and towed artillery crews, light armor and trucks. This extensive target set for a single round and integral fuze, combined with the round savings achieved through accuracy, makes Excalibur the most logistically sound precision engagement weapon organic to close-combat units.

Excalibur is employed as one piece of the artillery system. Used in conjunction with





Excalibur can greatly increase range, lethality and logistical supportability of current and future artillery platforms.



M777A2 LW155



FH77BW Archer



M109A6 Paladin



NLOS-C

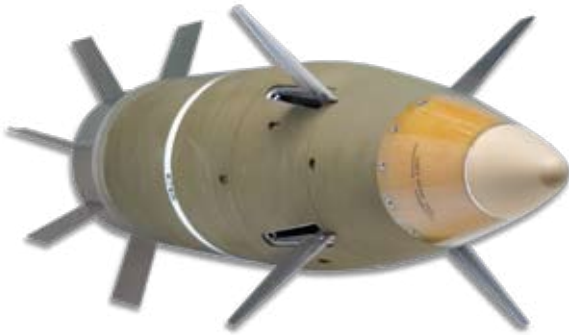
Advanced Field Artillery Tactical Data System (AFATDS) and digitized howitzers equipped with the Enhanced Portable Inductive Artillery Fuze Setter (EPIAFS), Excalibur provides immediate responsive fires. In

a dedicated fire support role, a single gun or platoon can also be linked directly to specific ground or aerial observers using AFATDS to provide maximum responsiveness. By incorporating the stand-alone configuration

EPIAFS known as the Portable Excalibur Fire Control System (PEFCS) Excalibur can also be fired from nondigitized 155mm howitzers provided Excalibur compatibility requirements are met. PEFCS integrates EPIAFS with a fire control system.

Excalibur provides the brigade commander with immediate responsiveness that is unavailable from any other source. The combination of unprecedented accuracy, high lethality and increased range provides the necessary reach and responsiveness of effects on the dispersed battlefield, while reducing the logistical burden to the entire force.

Excalibur is the only precision weapon organic to the Brigade Combat Team.



**Excalibur Versatility Demonstrated Against a Wide Array of Targets.**



Excalibur detonates inside after penetrating 4-inch thick concrete structure



First two of four impacts on towed howitzer



Successful 40-kilometer testing

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**The Team**



**Raytheon**

Customer Success Is Our Mission