



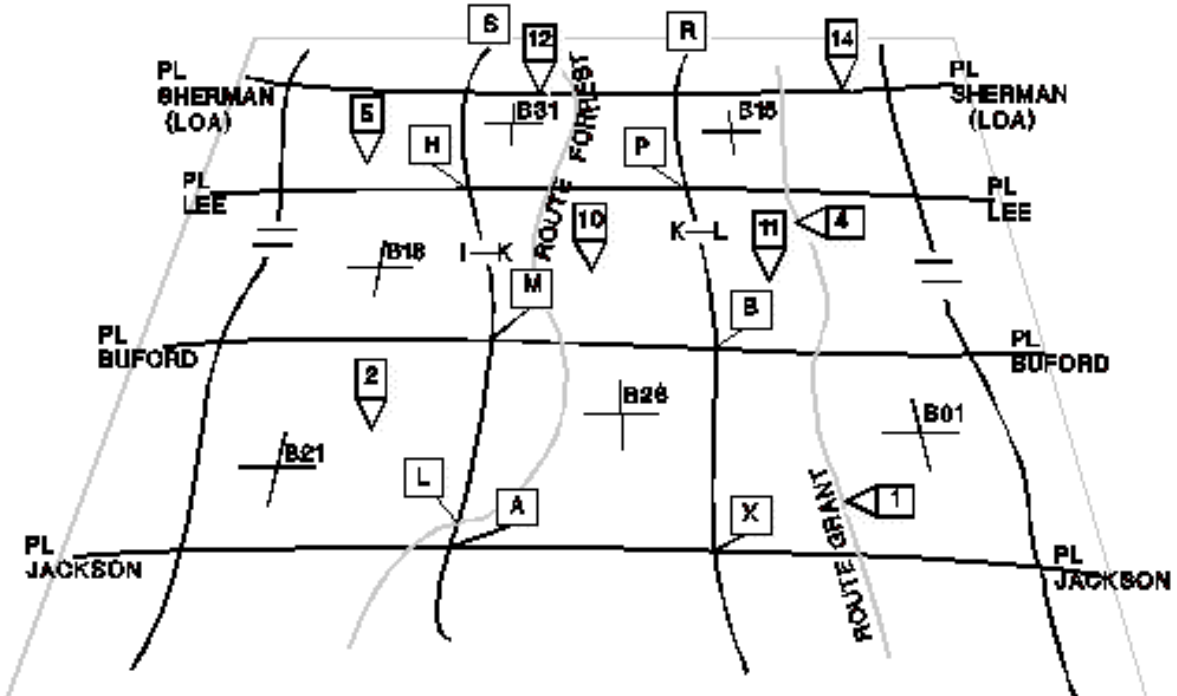
U.S. Army Research, Development and Engineering Command



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TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

Fuze Conference
22 May 2007





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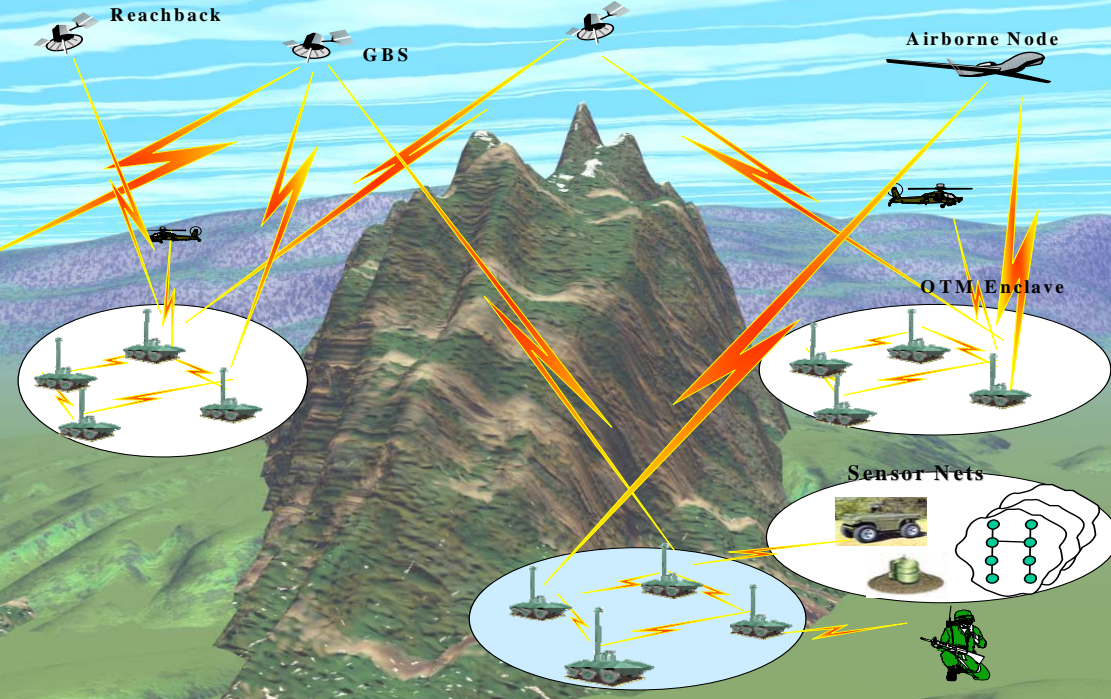


WWII Soldier

Future Force Warrior



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.



➤ How do we assure that design and safety standards keep pace with the increased sophistication of weapons systems?

NORTH ATLANTIC TREATY ORGANIZATION
(NATO)



NATO STANDARDIZATION AGENCY
(NSA)

STANDARDIZATION AGREEMENT
(STANAG)


SUBJECT: FUZING SYSTEMS - SAFETY
DESIGN REQUIREMENTS

NOT MEASUREMENT
SENSITIVE

MIL-STD-1316E
10 JULY 1998
SUPERSEDED
MIL-STD-1316D
9 APRIL 1991

DEPARTMENT OF DEFENSE
DESIGN CRITERIA STANDARD

FUZE DESIGN,
SAFETY CRITERIA FOR



AMSC N/A FSC 13GP

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

- How do we increase the reliability of Dual Purpose Improved Conventional Munitions or replace them?



- Integration of guidance functions into previously "dumb" ammunition requires sharing space with the traditional fuze functions



Tech Demo PGK Test Round

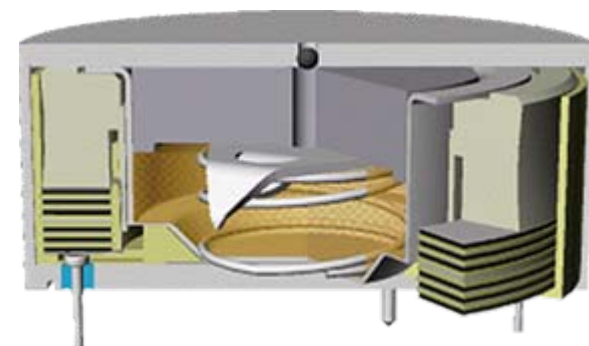
- **Power Sources - Increased sophistication means power source requirements in all shapes, sizes and consumptions**



Reactive multilayer foil being ignited

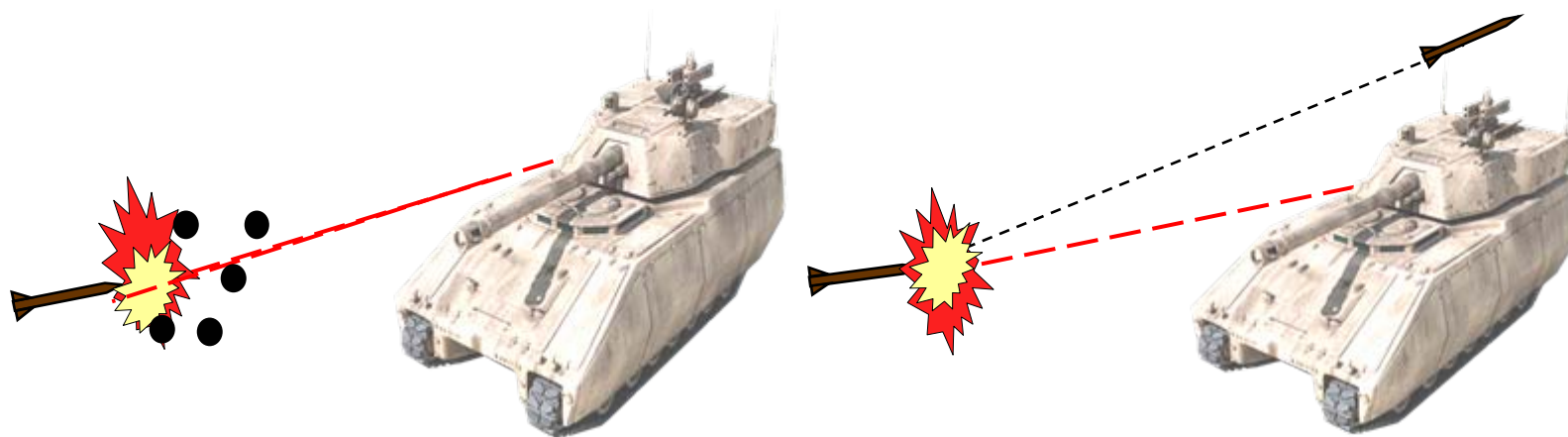


Excalibur Thermal Battery



Multi-Option fuze for Artillery liquid reserve battery

- KE - APS and the autonomous target detection and precision functioning of the warhead



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Critical Path Roadblock



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