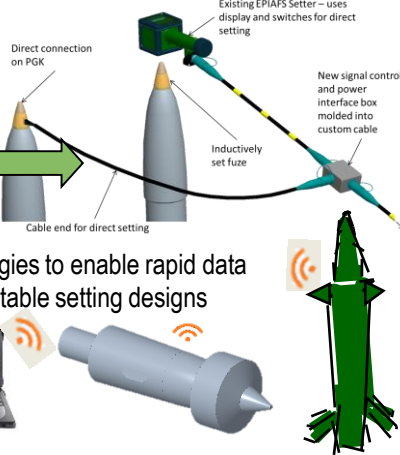


Wireless Technologies to Enable Hot Start

Path to reliably initializing precision munitions in autonomous operations

Conventional Approach to modernizing setter interface

Gun/Target Locations
Trajectory data
GPS Data, Keys, SAL Code & Precise
Time
Power



Leverage Secure Wireless Technologies to enable rapid data transfer, higher reliability, more adaptable setting designs



Schedule & Cost

MILESTONES	1st	2nd	3rd	4th
Draft Scope and plan of study				
Procure hardware and develop experimentation setup				
Conduct Experiments and capture results				
Capstone presentation				
Program Costs	TBD	TBD	TBD	TBD

Purpose: The U.S. Army is investigating the use of secure wireless technologies for use in fire control and fuze setting applications for weapon systems. Precision munitions require GPS and other data, to include cryptography, in order to self-locate and guide to target. This information is transferred at the gun, and is susceptible to cybersecurity threats, making integration of wireless technologies difficult. The intent is to investigate technologies that allow data and power transfer at stand off, and how to secure these data streams.

Deliverables (Work with CCD Armaments Center Position Navigation

Timing (PNT) SME):

- Documented architecture of hardware/software setup used to conduct experiments
- Study plan and conclusions

Warfighter Payoff:

Warfighter will have increased reliability in both manual and automated setting operations

Army CFT Alignment:

- LRP CFT (Primary)
- A-PNT CFT (Secondary)

CCDC Armaments Center Support:

- Jim Hartranft, SME, (973) 724-9919
- Kerri Ivey, SME, (973) 724-1983
- Greg Panas, (973) 724-3686