



Solid Fuel Ram-Jet (SFRJ) Demonstration



• Naval Air Warfare Center Weapons Division

Objectives:

- Accelerate the development of solid fuel ram-jet technology
- Train workforce in technologies which are critical to the continued success of high speed air breathing propulsion
- Design, analyze, manufacture, and flight test a solid fuel ram-jet (SFRJ) vehicle within a 6 month program while demonstrating:
 - Boost of SFRJ flight vehicle to takeover condition
 - Successful ramjet transition and takeover
 - Sustained SFRJ combustion

Warfighter Benefit:

Current solid rocket motor propellants are near theoretical maximum performance. Modern propellant packaging techniques enable small improvements in total impulse and range but fall short of the fleet need. SFRJ technology has the potential to meet the current fleet need by providing a 3x increase in range over a comparable size solid rocket motor.

• Display and Demos

- TV used to display PowerPoint Presentation
- An easel (if the quads will be printed out for display)
- 6'x30" table to display hardware and place laptop

