## Reconfigurable Accessory Integrated Load Carriage System (RAILS)

**BULLDOG TACTICAL EQUIPMENT** 

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POC: Rob Jones / Jason Simione Tel: (706) 536-0418 / (954) 448-5221 Email: rjones1465@gmail.com or Jason@bulldogequipment.us **1. Technology Title.** Reconfigurable Accessory Integrated Load Carriage System (RAILS).

**2. Description.** RAILS pack frame is an integrated pack frame that can be fitted with mission essential gear. The RAILS Pack Frame has the increased durability of the Alice frame as well as the ability to accept current issued MOLLE equipment (All MOLLE rucks and pouches) on one frame. The RAILS provides the additional capability of mounting pouches horizontally and vertically. The RAILS pack frame can be configure for any mission requirements while maintaining the ability to carry personal items in a two day patrol bag. RAILS is Constructed from aircraft grade aluminum, which is CARC (Chemical Agent Resistant Coating) coated.

**3. Relevance to Experiment Objectives**. The RAILS offers an alternative to the MOLLE Pack frame while decreasing the over all weight while maintaining access to mission essential equipment. Re-configurability is becoming increasingly more important as our forces are routinely placed in situations where quick employment and rapid recovery is critical to mission success. The AEWE 2017 experiment objective that is addressed by this technology is #1, "How do we enable small units to conduct combined arms air-ground maneuver to defeat enemy organizations and accomplish missions in complex operational environments?" Because Soldiers don't always know ahead of time how their mission's operational environment could change, it is important to have the capability to integrate a mission configured pack frame that can be employed in dynamic situations where potential hostiles may engage in an austere environment.

## 4. Value to the Warfighter

a. Value: The benefit of the RAILS is that it provides a lighter reconfigurable pack frame for employment than the currently available MOLLE systems. Current MOLLE systems can only be configured in one manner and mission essential equipment has to be placed in a non-standard format. In order for the Soldier to find their mission essential equipment it is necessary to unpack and deconstruct their individual loads because of lack of accessibility. The RAILS provide a 360 degree reconfigurable capability that allows the individual to configure their equipment for missions that allow for easy and quick access.

b. Measure: A reconfigurable system like this entry from Bulldog Tactical will allow the Soldiers to configure their mission essential equipment as needed, so that the equipment can be employed in a wider range of operational scenarios. The RAILS system will be more flexible, lighter and effective at maintaining access and accountability of mission essential equipment.

5. Concept of Operation, Employment, and Proposed Force Structure (Post-Experiment). It is expected that this technology will be employable in the following situations:

• M249 SAW Gunner's pack

- M240 Crew Served Weapons Assistant Gunner support Pack.
- 60mm Mortar Gunner and 60mm Mortar Assistant Gunners support Pack.
- Additional configurations the Company leadership will require.

This technology will be employed by the dismounted Soldier (particularly Infantry).

**6. Experiment Environment.** The proposed venue is live fire against wooden or paper targets (non-living). A formal safety evaluation has not been conducted for this system; however, this is not a weapon system and risk of injury risk is very low.

**7. Availability/Maturity.** The level of maturity is prototype level (approximately TRL 7) with limited manufacture of hardware. These prototypes are currently undergone initial operational review with 1-23 INF at the National Training Center. More than likely there will be no changes to the current system, at most, minor changes to the current accessories that mount on the RAILS frame may be requested due to increased capability and other mission requirements between now and the AEWE 2017 execution in Jan-Feb 2017.

**8. Training.** This product is very simple to configure. Very little training is necessary. There is basic documentation available. Personnel from Bulldog Tactical who are familiar with the RAILS will be available to assist AEWE participants. Additionally, Bulldog Tactical is willing to attend the AEWE in an advisory role to help instruct participants and troubleshoot problems that may arise. Because this item is only at TRL 7 and not a production item, there is no formal maintenance plan or service documentation.

9. Interfaces. The RAILS is worn with or without body armor.

**10. Nett Warrior Integration.** The level of Nett Warrior integration needed/desired is none. The RAILS has no possible technical/logistical challenges pertaining to Nett Warrior integration.

**11. Identify Known Safety Concerns or Potential Issues.** As of time of writing, there are no known safety concerns or issues with Soldier training, handling, or employment of the technology. Bulldog Tactical is coordinating with Aberdeen Proving Ground to fund and conduct a U.S. Army Safety Release.