

## Next Gen Austere Basecamp Desiresments: SOF Power Generation, Distribution, Planning and Usage Enhancements

### **Desirement:**

Will consist of deliverables for short term and long-term goals set at a two year and five-year deadline. The deliverable(s) per deadline must be man-portable in single or multiple packages weighing less than 350lbs per package, transportable in a C-146 (36" wide x 55" tall, 75 lbs/sf) and in a Hilux truck (600lb tongue weight, 2,900 lbs towed weight, 1.56m x 1.52m (1.0m between wheel arches)).

### **Short Term Deliverable(s):**

Within two years a system consisting of a man-portable: Energy storage unit, ruggedized inverter capable of providing at a minimum 100A at 3 phase 50/60 Hz and compatible with AMMPs generators. A HVAC solution with a maximum power consumptions at 6 kW, and capable of cooling a 20'x32.5' (AK-SS-V3-2) Alaskan style tent to 60°F when 125°F outside; And capable of providing fuel fired heating to the same style tent heated to 70°F when -60°F outside. A reduction of heat generated by military server stacks by 35% or an independent cooling solution for military sever stacks. A product line that will interconnecting existing low voltage distribution connections between LEX, PDISE, standard US and international connectors to increase interoperability across different manufactured distribution and cabling. Increased interoperability of the end user distribution via modification or expansion to the M46 PDISE kit. A user friendly portable media devices (tablet) capable of providing power generation and distribution solutions/configurations for military and civilian materials.

### **Long Term Deliverable(s):**

Within five years a system consisting of a man-portable: Energy storage unit, ruggedized inverter capable of providing at a minimum 200A at 3 phase 50/60 Hz and capable of paralleling, syncing and load sharing with all military and commercial technologies. A HVAC solution with a maximum power consumption at 4.5 kW, and capable of cooling a 20'x32.5' (AK-SS-V3-2) Alaskan style tent to 60°F when 125°F outside; And capable of providing fuel fired heating to the same style tent heated to 70°F when -60°F outside. A reduction of heat generated by military server stacks by 60% or an independent cooling solution for military sever stacks. A unified DOD electrical distribution adapter kit for all Services interoperable with military and commercial power generation. A unified SOCOM solution for surface laid distribution.

A user friendly portable media devices (tablet) capable of providing power generation and distribution solutions/configurations for military and civilian materials.

**Judging Criteria:**

- Availability
- Complexity (less is better)
- Organic employment and maintenance
- Reliance upon contractors (less is better)
- Reusability
- Transportability, air and ground
- Scalability between 5 kW and 500+ kW
- Resiliency (graceful degradation as damaged)