



Mobile Electric Power Systems (MEPS) Joint Standardization Board (JSB)

COL Kathy Brown
Project Manager

kathy.m.brown8.mil@mail.mil



13 Oct 2020

2020 Defense Standardization Program (DSP) Virtual Conference



Purpose/Agenda



- Introduce our Mobile Electric Power Systems (MEPS) Joint Standardization Board (JSB)
- Summarize the Problem – the Need for DoD Standardization for Battlefield Tactical Power
- Role and Responsibilities of the MEPS JSB
- Recent Accomplishments with Impact



Project Office Portfolio



Product Manager Small Expeditionary Power Sources (PM SEPS)



2kW Military Tactical Generator (MTG)

3kW Tactical Quiet Generator (TQG)



Platoon Power Generator (PPG)



Small Tactical Electric Power (STEP)



(Notional)



Product Manager Mobile Electric Power Systems (PM MEPS)



5-60kW Tactical Quiet Generator (TQG)



100kW / 200kW Tactical Quiet Generators (TQG)



5-60kW Advanced Medium Mobile Power Sources (AMMPS)



Prime Power Deployable Power Generation & Distribution System (DPGDS) 840kW

Power Unit (PU)



100kW 200kW Large Tactical Power



Power Plant (PP)



Power Distribution Illumination Systems Electrical (PDISE)



Product Manager Force Sustainment Systems (PM FSS)

Expeditionary Support



Cargo Aerial Delivery

- EHLSCDS
- ALVADS
- JPADS
- LCADS
- SADE
- RRDAS



Shelter Systems

- ASF-RWS
- ASF-SWS
- ULCANS
- ASLMS

Expeditionary Service Support



Force Provider Expeditionary Modules

Heaters & Environmental Control Units

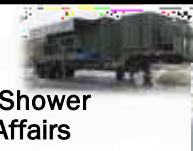


Field Feeding

- Assault Kitchen
- Containerized Kitchen
- Mobile Kitchen Trailer

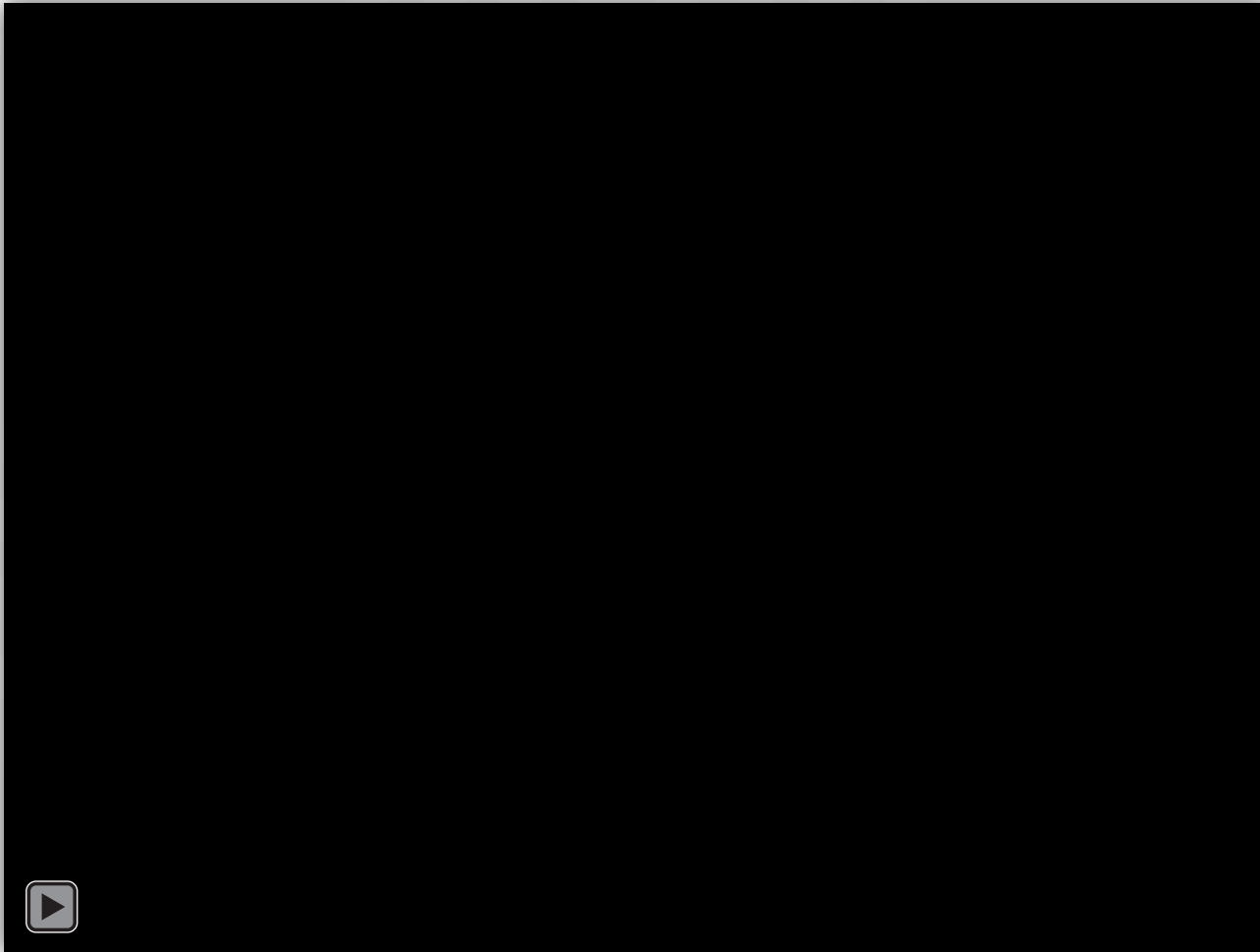
Field Services

- MTRCS
- MIRCS
- 12 Head Shower
- Mortuary Affairs





The Problem



WWII Era Video Clip (2:15)

**Last Near Peer Conflict (WWII) Resulted in
Immediate Action to Standardize Tactical Power**



History -- 1945



Standardization was important reason DoD was formed

“...in the field, **our unity of operations was greatly impaired by the differences in training, in doctrine, and in supply and distribution systems**, that stemmed from the division of leadership in Washington.

It is true, we were able to win in spite of these handicaps. But it is now time to take stock...to provide for the future the soundest, the most effective and the most economical kind of structure.”




President Harry S Truman
Special Message to the Congress
Recommending the Establishment of a Department of National Defense
December 19, 1945



History -- 1967



AMCPH-MEP. OFFICIAL RECORD FILE
File folder
August 10, 1967
NUMBER 4120.11
Original Charter
ASD(I&L) - DDE&E



Department of Defense Directive

SUBJECT Mobile Electric Power (MEP)

Refs.: (a) DoD Directive 5010.14, "System/Project-Management," May 4, 1965.
(b) DoD Directive 4120.3, "Defense Standardization Program," April 23, 1965.
(c) DoD Instruction 4115.1, "DoD Coordinated Procurement Program - Commodity Assignments," June 9, 1964.
(d) DoD Instruction 4140.26, "Item Management Coding of Items in Federal Supply Classes Assigned to the DSA," April 30, 1965.
(e) DoD Directive 4151.1, "Policies Governing the Use of Commercial and Military Resources for Maintenance of Military Materiel," July 28, 1960.
(f) DepSecDef Multiaddress Memo, Subject: "Engine Generator Management," April 19, 1967. (Encl. 2).
(g) Armed Service Procurement Regulation (5-1106.3).

I. PURPOSE AND OBJECTIVES

This Directive establishes Department of Defense policy on mobile electric power generating sources to assure the attainment of the following objectives:

A. Establish, maintain, and provide for maximum use, a DoD Standard Family of Electric Power Generator Sets.

B. Implement DoD Directive 4120.3 (reference (b)); relative to mobile electric power sources, in the establishment of common military operational requirements; design and development; procurement; logistic support; and operational use by:

1. Planning and coordinating the DoD research and development effort.

When same WWII generator problems repeated in Vietnam, OSD issued DoDD 4120.11 in 1967 directing standardization of Mobile Electric Power



Problem Mitigation -- 2020



- **If standardization is not enforced, it will atrophy.**
 - ✓ Today's Soldiers will experience same problems their Great-Grandfather's experienced in WWII
- The most effective way to enforce standardization across the Joint Force is through our MEPS JSB
- OSD Policy (DoDI 4120.11):
 - ✓ “Recognizes MEPS JSB as a forum to coordinate joint interoperability and standardization”
 - ✓ Empowers Service MEPS Offices to address their tactical power issues internal to their Service



What our MEPS JSB Does



- **Meets together twice a year**
 - Builds relationships for trusted coordination throughout the year
 - Establishes Working Groups to focus on more detailed issues in-between meetings
- **Empowers Service MEPS Offices**
 - Updated OSD policy to reflect our modern practices
 - Leverages OSD policy to:
 - ✓ “Maintain an interoperable and reliable MEPS standard family”
 - ✓ “Maximize the use of the MEPS standard family both in end items and as a component of a system.”
 - Leverages Defense Standardization Program tools, like ASSIST, to work standardization and as a repository for our MIL-STDs



- **Tactical Microgrid Standards (TMS) Working Group has Drafted Tactical Microgrid Standards (TMS) for Tactical Ground Power (TGP) MIL-STD for Joint Coordination**
- 100kW generators redistribution:
 - USMC replaced all 100kW generators in their inventory with 120kW military standard microgrids
 - Using our DoDI 4120.11 Joint authorities, we redistributed to Navy and Air Force to meet immediate readiness gaps; working to fill Army Medical shortages
- Internal to the Army, we have standardization MOUs in place with five PEOs (future Joint implications)
- Internal to the Army, working with PEO Missiles and Space and Lower Tier Air and Missile Defense Sensor (LTAMDS) Cross-Functional Team to work new requirement for large power (future Joint implications)
- Just this year, MEPS Standardization compliance is now in OSD policy for compliance at every milestone review



References



References:

- a. **Department of Defense Instruction (DoDI) 4120.11, Mobile Electric Power Systems (MEPS), 24 August 2018.**
- b. **Department of Defense Instruction Manual (DoDM) 4120.24, Defense Standardization Program (DSP) Procedures, Incorporating Change 2, Effective October 15, 2018**
- c. **Defense Federal Acquisition Regulation Supplement (DFARS), Subpart 208.70, Coordinated Acquisition, 1 December 2006.**
- d. **Memorandum, Office of the Under Secretary of Defense (Research and Engineering), 22 July 2020, Subject: Joint Standardization Board for Mobile Electric Power Systems [Charter]**



CONTACT INFORMATION



PM Expeditionary Energy & Sustainment Systems 5850 Delafield Rd, Fort Belvoir, VA 22060

- COL Kathy M. Brown/Ms. Lisa Stone: PM/DPM 703.704.3162
- Mr. Shane Whitlock: OPS Chief 703.704.0954
- Ms. Chenxi Dong-O'Malley PD Small Expeditionary Power Sources 703.664.5338
- LTC Tony Leach, PM Mobile Electric Power Systems 703.704.3155
- LTC Alex Babington, PM Force Sustainment Systems 508.206.2812
- Mr. Cory Goetz, Lead Engineer 703.704.1995
- Ms. Jennifer Whitmore, Tactical Systems Integration Lead 703.704.1848
- Mr. John Spiller, MEPS, Joint Standardization Board 703.704.0921

MILSUITES

- **PM E2S2 MilBook:**
 - <https://www.milsuite.mil/book/groups/pm-mobile-electric-power> (PM E2S2)
 - <https://www.milsuite.mil/book/groups/meps-jsb> (Joint Standardization Board)
- **PM E2S2 MilWiki:**
 - https://www.milsuite.mil/wiki/PM_Expeditionary_Energy_and_Sustainment_Systems

COMPUTER BASED TRAINING MODULES ON LANDWARNET:

- <https://lwn.army.mil/training/-/wiki/main/mobile%20electric%20power>
 - Advanced Medium Mobile Power Sources (AMMPS)
 - Tactical Quiet Generator (TQG)
 - Improved Environmental Control Unit (IECU)

We provide Standardized • Optimized • Integrated • Scalable Energy & Sustainment Solutions