# Dannar Mobile Power Station at Joint Base Andrews

Krist Zimmerman
316 WG Community Planning Liaison
7 November 2023



1st DoD Installation Pilot (Feb-Sep 2021)

#### **500 kWh MPS Arrives**

#### Aims:

- Power buildings
- Provide backup energy support for operations
- Charge Electric Vehicles
- Provide power for onbase events
- Provide backup power for the 250 kWh MPS vehicle
- Test as power backup for airfield lighting vault



1st DoD Installation Pilot (Feb-Sep 2021)

#### **250 kWh MPS Arrives**

#### Aims:

- Support operations
- Conduct snow removal operations
- Provide power for base events
- Demonstrate capabilities for other Federal organizations
- Test up to 12 different attachments





#### **Joint Base Andrews Airmen**

Receiving brief on the electrical & hydraulic operations of the MPS

Training on the use of the remote-control driving capability of the MPS





Joint Base Andrews
Airmen get a look under
the "hoods" of the
500 kWh MPS

They learned that the MPS requires very little annual maintenance

The MPS required an electric vehicle charging station (JBA had 19 in the parking/staging area)



Joint Base Andrews
Airmen get a look at the
hydraulic connections for
the 250 kWh MPS

They learned that the MPS can connect more than 250 attachments from a variety of vendors

## The 250 kWh MPS eventually connected a:

- Cab on the top front (as pictured)
- Dumper on front (as pictured)
- Scissor lift on the top back
- Backhoe on the back

### Lessons Learned





- The 500 kWh MPS required a 3-phase 480V connection to power buildings
- Each MPS required a special modification to install a J-1772 EV charging cable connection to charge Electric Vehicles
  - The MPS could provide remote charging capability for fleet EVs on base
- The cab required modification to meet DoD vehicle control parameters (Dannar designed a new cab for testing)
- The Airmen enjoyed working with the MPS but commented it would be better if it was smaller (Dannar began developing a smaller version)
- MPS should be correctly classified as "equipment" to avoid the 12–18month process to add a vehicle to the inventory on an installation