



Net Zero

Energy

Water

Waste



Fort Polk Charged Up Over Lithium Battery Reuse

The aggressive training mission of the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana presents significant challenges to protecting the environment without impacting the mission. The JRTC provides highly realistic, stressful, joint and combined arms training for units in 3 week rotations, leaving little time for clean-up following the exercise, even less for the management required of the 12-volt lithium batteries (BA 5590 and BA 5390) used during their rotations. Each year units turn in about 1,200 of these batteries at the end of their 3 week training at the JRTC, nearly half of which are still usable (70% of battery's life span remaining). Seeing an opportunity to reduce battery expenditures, waste disposal costs and potential injury to soldiers, JRTC and Fort Polk personnel developed a program for the turn-in, testing and re-issue of these batteries. Testing the batteries to determine life span requires special equipment employed by personnel specifically trained in safely discharging and operating the testing equipment.



New Lithium Battery Tester to replace out dated LS 94 Tester at Fort Polk

The batteries were first tested using an Energage LS 94 State-of-Charge-Tester. Those batteries determined to have more than 70% of their life span remaining are reissued. Personnel working with the batteries are trained to operate the equipment safely and utilize personal protective equipment to avoid exposure to the acid gases in the event of a violent discharge. The antiquated (over 20 years old) LS 94 State-of-Charge Tester has been replaced with a newer, faster, less expensive test set manufactured by Raven Research & Development.

Re-issue of the BA 5590 and BA 5390 lithium batteries at JRTC & Fort Polk has resulted in a cost avoidance of more than \$450,000 annually. Additionally, environmental compliance, waste reduction, and worker health and safety have also improved.

For information on how to obtain your own battery tester contact Philip St Romain.

Contribution to Net Zero



Challenges for Fort Polk in Meeting Net Zero Goal

Most Challenging Waste Stream:
Field waste and all Consumer Contaminated Waste (CCW)

Largest Waste Stream:
By wt.: Construction and Demolition (C&D)
By concern: Field waste includes food/CCW

Most Successful Diversion: C&D

Least Successful Diversion: Field Waste

Most Progress: Paper