



# POWER

Version 1.2

**P**OWER **O**PTIMIZER FOR THE **W**ARFIGHTER'S **E**NERGY **R**EQUIREMENTS  
“Battery Calculator”

*Created by: US ARMY CE-LCMC, Power Sources Team, Fort Monmouth, NJ*

**2007 Joint Service Power Expo**

**Presented by Don Brockel,**

**Rechargeable Project Leader US Army**

# No Batteries: No Commo



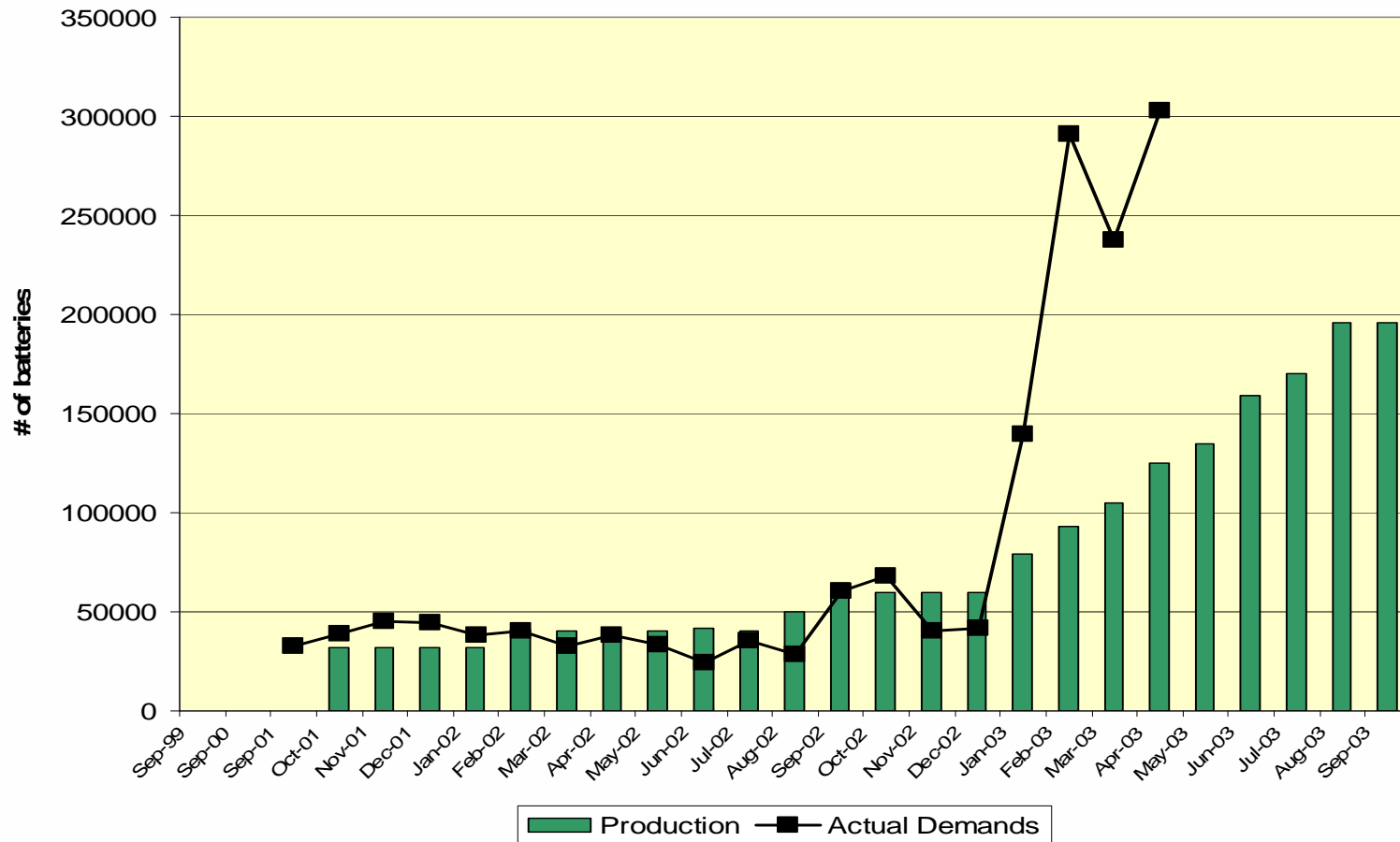
Army Capt. Chad Foster.

Photo by Petty Officer 1st Class Michael Larson, U.S. Navy.

PEO-EIS — CECOM — PEO-C3T — PEO-IEW&S — CERDEC

COMMUNICATIONS-ELECTRONICS LIFECYCLE MANAGEMENT COMMAND

# Supply vs. Demand



PEO-EIS — CECOM — PEO-C3T — PEO-IEW&S — CERDEC

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# POWER

**P**OWER **O**PTIMIZER FOR THE **W**ARFIGHTER'S **E**NERGY **R**EQUIREMENTS

- POWER is a battery requirement calculator
- Designed with the Warfighter in mind
  - Accessibility:
    - Can be downloaded from the internet
    - Stored on a secure server (AKO access required for download or can be emailed to “.mil addresses”)
    - Microsoft Excel based
  - Usability:
    - Full user instructions included
    - Simple step-by-step process
    - Data is saved in spreadsheet format



# Large Database

- Built around the data in SB 11-6  
(Supply Bulletin 11-6: Communications-electronics Batteries Supply And Management Data; 1 June 2001)
- Battery options for most portable devices in the DoD inventory
- Runtimes for many devices
- Temperature corrections



# Live Demonstration



# Sample Use:

## Comparing different battery options

- Example: AN/PRC-119F
  - Device always on
  - Battery swap times in 24 hour\* intervals
  - 24 hour re-supply time
  - Comparing battery options using FY07 pricing
  - Normal Temperature

\*20 Hours for the BB-390

# Comparing Battery Options

## Summary of Minimum Battery Requirements (ASIP)- Normal Temp

### Minimum for 1 day mission

### Minimum for 3 day mission

### Minimum for 30 day mission

	Batts (day)	Pkgs to order (day)	Weight (day)	Cost (day)	Batts (3dy)	Pkgs to order (3dy)	Weight (3dy)	Cost (3dy)	Batts (mo)	Pkgs to order (mo)	Weight (mo)	Cost (mo)
BA-5590B/U	1	0.3	2.25	\$88	3	0.8	6.75	\$235	30	7.5	67.5	\$2,199
BB-390B/U	5	5	21	\$1,213	5	5	21	\$1,213	5	5	21	\$1,213
BA-5390A/U	1	0.3	3	\$144	2	0.5	6	\$240	15	3.8	45	\$1,825
BB-2590/U	4	4	12.8	\$1,181	4	4	12.8	\$1,181	4	4	12.8	\$1,181
BA-8180/U	1	1	6	\$356	1	1	6	\$356	5	5	30	\$1,778

Lowest Weight

Lowest Cost



Commo Equipment Batteries...

# POWER for the Warfighter

HERE'S HOW TO GET TO IT.



ESTIMATING YOUR UNIT'S BATTERY NEEDS HAS JUST GOTTEN EASIER.

A MICROSOFT EXCEL-BASED APPLICATION, POWER OPTIMIZER FOR THE WARFIGHTER'S ENERGY REQUIREMENTS (POWER), IS AVAILABLE FOR YOU TO DOWNLOAD ON THE INTERNET.

First, go to:  
<http://www.monmouth.army.mil/cecom/lrc/lrc.html>  
At that site, click on Battery Support under the Logistics Support heading.

At the next site, click on Rechargeable Battery Program.

- ▼ Who We Are
  - Analyst Code Search
  - Send us your comments
- ▼ Logistics Support
  - Battery Support
  - Safety Messages
  - MSE Repair and Return
- ▼ Handy Tools



At this site, click on Battery Calculator. You will get instructions on how to use the spreadsheet from a step-by-step guide listed in the Table of Contents. This is the only place on the web the guide is shown



TO ACCESS THE POWER CALCULATOR SPREADSHEET, YOU'LL NEED AN AKO LOGIN.



The POWER spreadsheet is a step-by-step process in which you are asked a series of questions about device usage. After each step, information is given to assist you in making the right choices regarding battery type and frequency of changing the battery, plus other valuable information.

You can save your work and add to it later, too!  
If you run into problems or have questions about POWER, email: [cecom@us.army.mil](mailto:cecom@us.army.mil)  
Or call: DSN 992-6763 or (732) 532-6763.

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43

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# POWER: Battery Management



Army Capt. Chad Foster.

Photo by Petty Officer 1st Class Michael Larson, U.S. Navy.

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# Summary

- POWER helps the Warfighter estimate battery needs
  - Eliminates waste
  - Helps avoid needless battery shortages
- POWER allows the Warfighter to figure out which options work best for the mission profile
  - Weight
  - Runtime
  - Cost

# Questions & Contact Information



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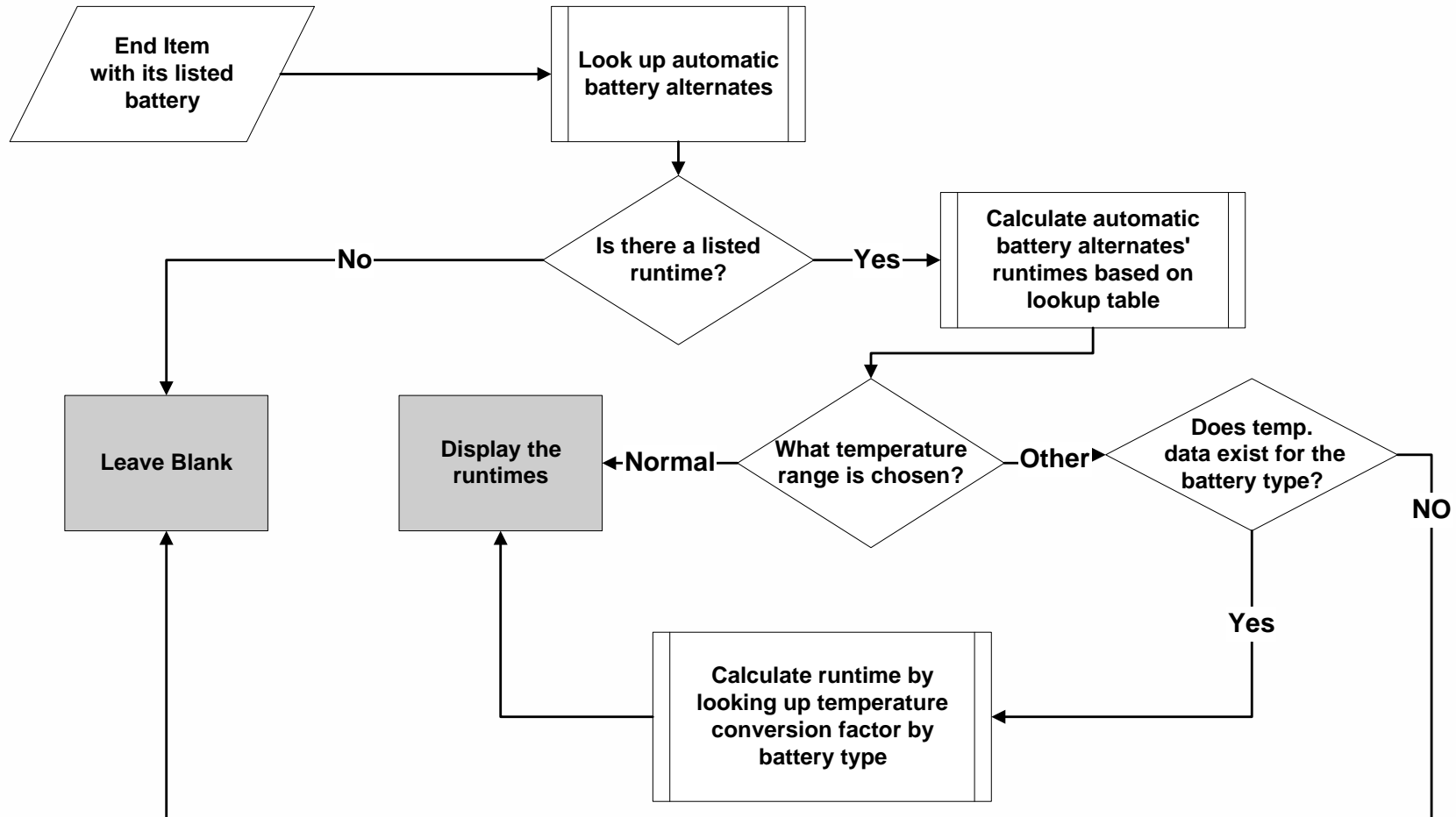
732-532-6763

# *Supplemental Slides*

PEO-EIS ——— CECOM ——— PEO-C3T ——— PEO-IEW&S ——— CERDEC

**COMMUNICATIONS-ELECTRONICS LIFECYCLE MANAGEMENT COMMAND**

# Runtime Calculations



# Comparing Battery Options

