



Defense Standardization Program Conference Joint Standards Board for Power Source Systems

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Chairperson

Army Power Division
5 March 2008




JSBPS² MANDATE



The purpose of the JSB for Power Source Systems is to:

- 🔊 Provide senior level visibility for standardization and interoperability initiatives.
- 🔊 Establish DoD Standards
- 🔊 Improve interoperability of forces.
- 🔊 Recommend joint doctrine, tactics, techniques and procedures.
- 🔊 Establish standardization of parts/components that have lowered cost, reduced inventories, shortened logistics chains and improved readiness.
- 🔊 Develop joint solutions to issues that impact the Power Source Systems domain.
- 🔊 Propose funding requirements for specific efforts/projects related to standardization and interoperability goals and objectives.
- 🔊 Provide the interface for commercial/military integration.



March 2007



**EXPAND ON PAST
SUCCESSSES**

**REDUCE NUMBER
OF NSNs**

**INSTITUTE
POLICY
CHANGES**

**BRING SUFFICIENT
RESOURCES TO BEAR**



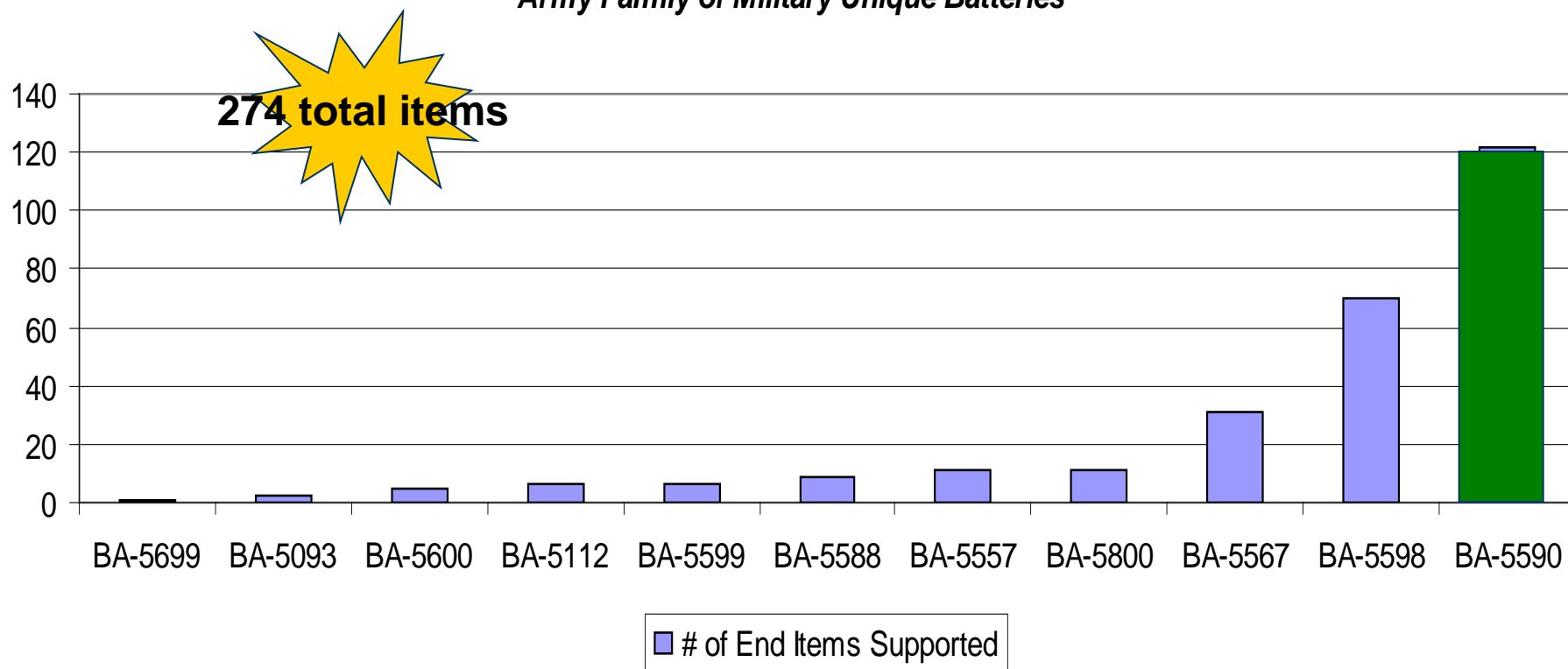
INDUSTRY
JSB
DOD



Build on previous success..



Army Family of Military Unique Batteries





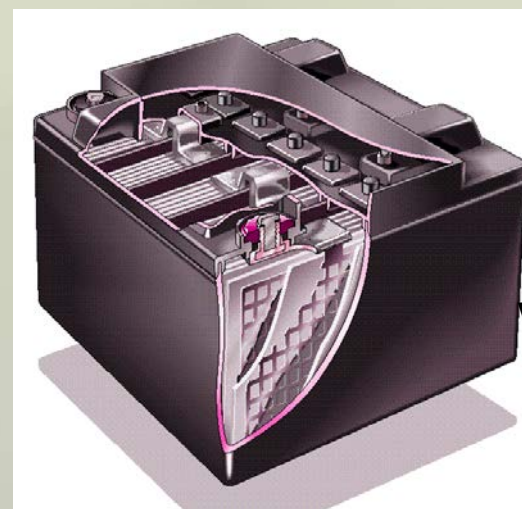
Lithium Ion



**Alkaline
Cells**



Commercial Chargers



**Lead Acid
Vehicle Batteries**



Expand on use of standard commercial technologies



MARCH 2008





The problems



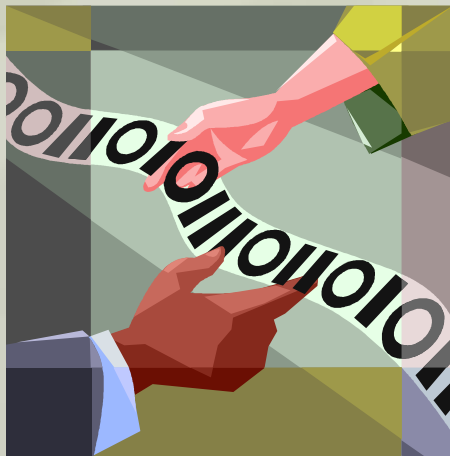
**NO ONE
IS
GUILTY!!**



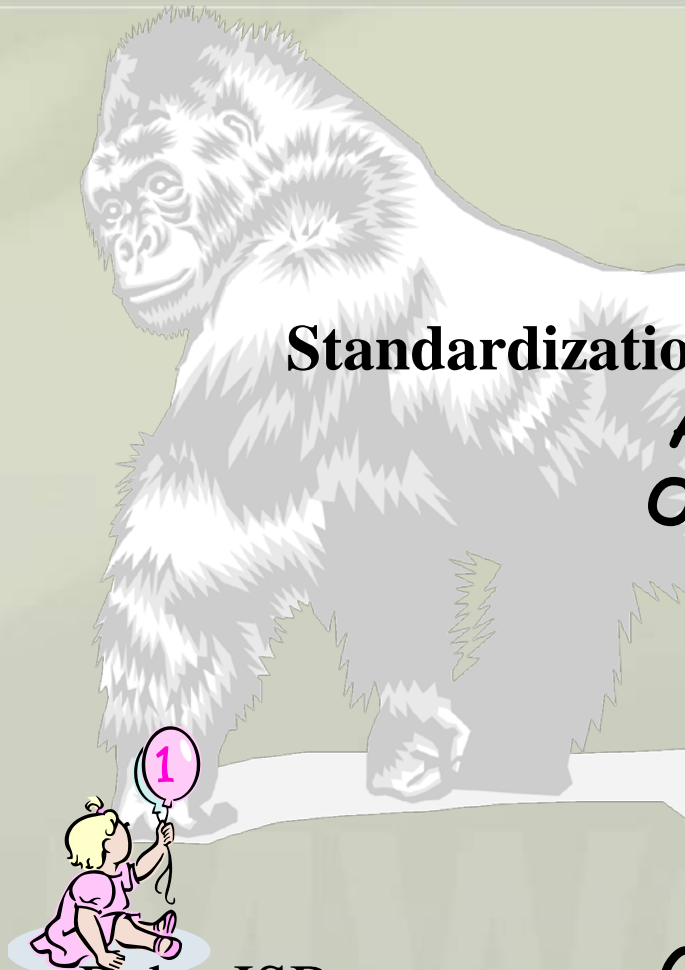
THE ISSUES



WHO CARES



BASIC DATA



Baby JSB

Standardization



**ALLOCATION
OF RESOURCES**



CONNECTORS



WHO CARES



➤ INDUSTRY

- Power source is last item to be considered in design
- It's a logistics problem
- Get paid to design new source
- Contractor part number-continual source of income

➤ Government PM

- Not a critical parameter
- It's a logistics problem
- Get it fielded
- System performance is key
- Contractors are "always right"

➤ Standardization

- Last to know
- Not in the approval loop
- Lots of other things to keep track of

ISSUE - ELIMINATE THE "CONSPIRACY OF COMPLACENCY"



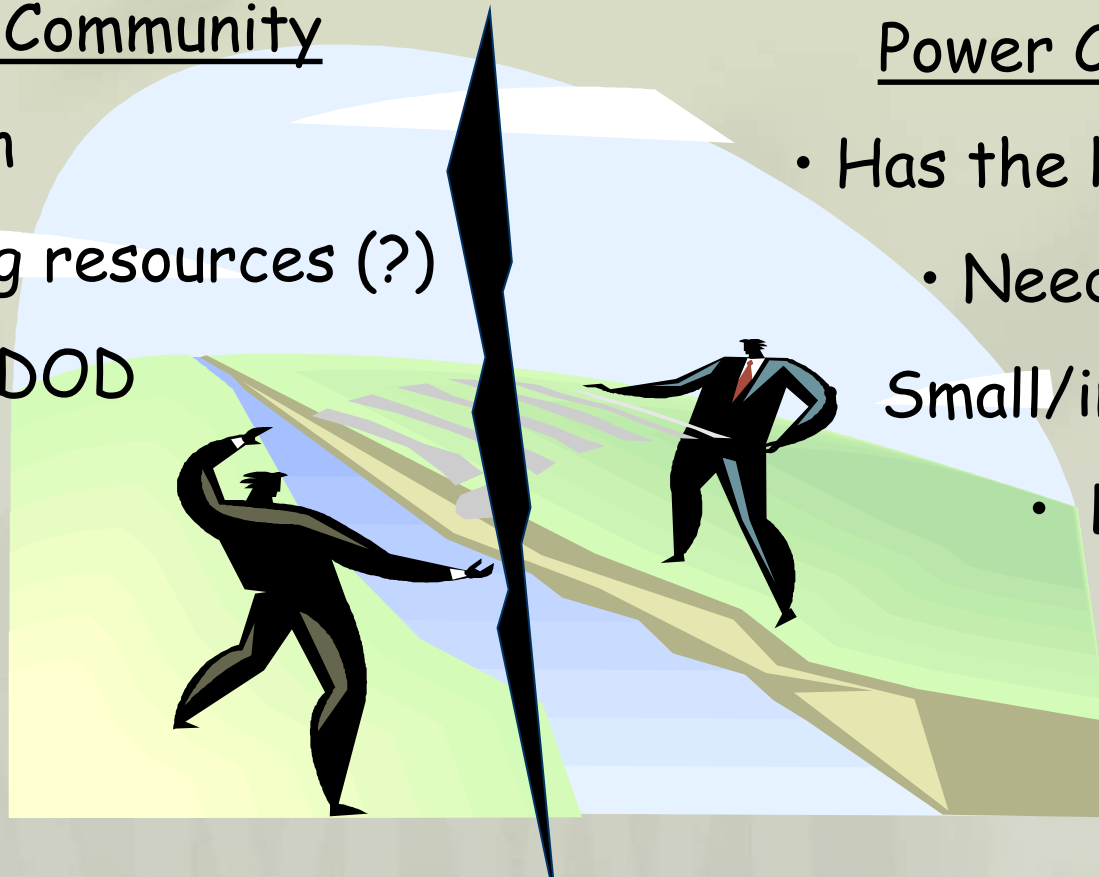
ALLOCATION OF RESOURCES

Standardization Community

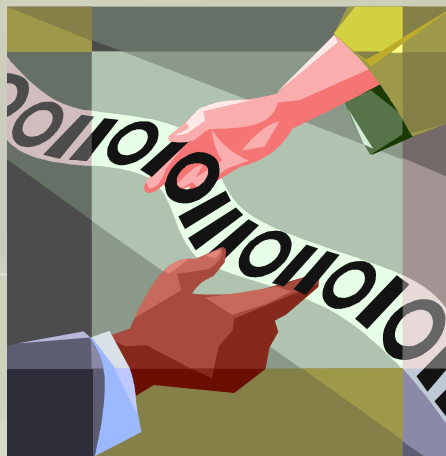
- Has the mission
- Has the funding resources (?)
- Diverse within DOD
- Lots to do

Power Community

- Has the knowledge
- Needs funding
- Small/integrated
- Lots to do



ISSUE - GETTING THE RIGHT PEOPLE INVOLVED¹⁰



BASIC DATA

- Technical data in FEDLOG needs to be updated
 - Data is missing
 - Incorrect
 - Out of date
- Battery FIIG need to be updated to address current technologies
- Manage company provided data (embellishments)

Battery PSCV Data
* 2800 NSNs
* 11,000 lines of data

**ISSUE - GETTING THE DATA CORRECTED -
MAJOR IMPACT ON POWER SOURCES COHERENT VIEW**



CONNECTORS

POWER SOURCES ARE NOT LIKE,
"O" RINGS, WASHERS, MREs OR TENTS,
ITS ALL ABOUT CONNECTORS, STUPID!!

ISSUE - IMPACTS ABILITY TO STANDARDIZE
LEGACY SYSTEMS
-IMPACTS ON INTEROPERABILITY OF
JOINT/COALITION FORCES



Same Basic Form Factor
Same WarFighter Mission
Same Battery Voltage



Radio Connector -
Both fit the other radio
Only one will power the other radio - with error message



Charger Connector -
No Way Interchangeable



Standardization Run Amok?



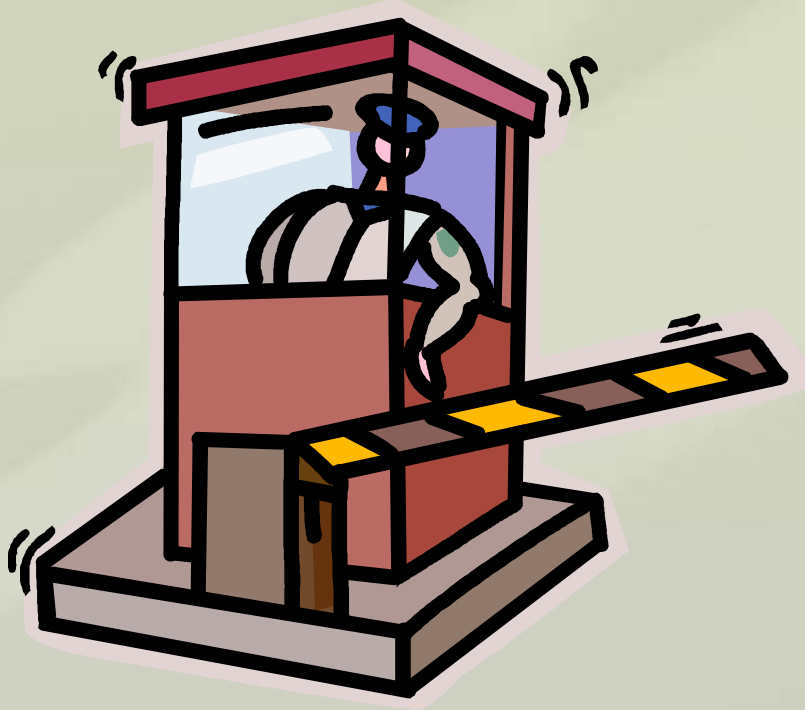
“The rifleman in each section responsible for the Lightweight Thermal Weapons Sight (LTWS) might carry 80 AA batteries each weighing 0.375 lbs . This rifleman will be carrying batteries weighing a total of 30lbs in addition to the weight of the LTWS equipment itself.”

Jane's Strategic Advisory Services

The obvious solution might not be the optimum solution



The Gatekeeper



- 💡 In the approval chain
- 💡 Have “clout”
- 💡 Enforce existing policies
 - 💡 Use standard items
 - 💡 Best fit solution
 - 💡 Consider life cycle costs
- 💡 Ensure the “exception” is the exception and not the “rule”



AN/PVS 14 (Night Vision)

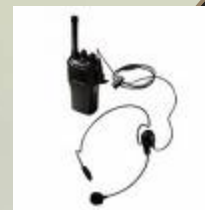
(2) AA
.1 lbs/30 hrs



Melios
(1) BB 516
.59 lbs/12 hrs

Head Set

(2) AA
.1 lbs/270 hrs



HTWS (Night)

(6) AA
.3 lbs/7 hrs



M68 CCO (Day)

(1) DL 1/3N
.04 lbs/75 hrs



Sure Fire Light

(2) CR-123A
.12 lbs/1 hr

PEQ-2A

(2) AA
.1 lbs/100 hrs



MBITR

(1) BB 521,
.88 lbs/8 hrs



ICOM F43

(1) BP 196
.35 lbs/8 hrs



P-Beacon

(1) 9V
.1 lbs/100 hrs



Mag Lite

(2) AA
.1 lbs/100 hrs

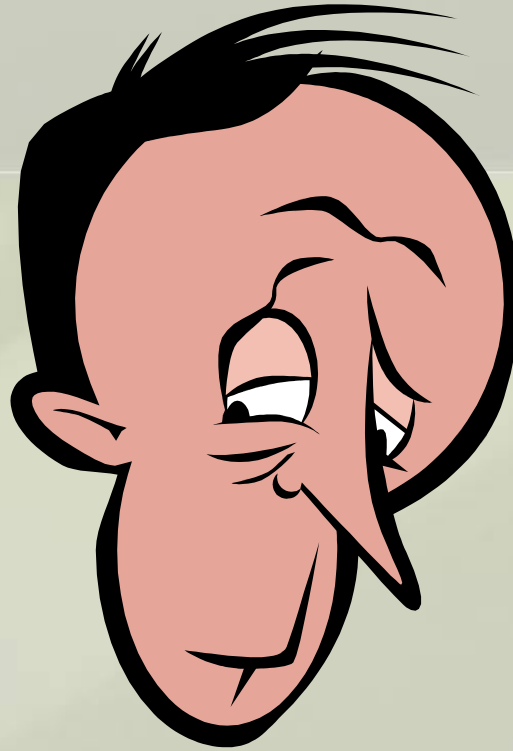


Battery Requirements for the Platoon Leader

**12 end items – 7
battery types**



What Happens when
There is no Gatekeeper



ALL IS NOT LOST!

Keys to Success



- 🔋 Provide resources
 - 🔋 Manpower
 - 🔋 Funding (internal and contract)
- 🔋 Get Coherent View operational
 - 🔋 identify legacy power sources for elimination/updating to new technologies
 - 🔋 Identify potential solutions for new weapon systems
 - 🔋 Identify preferred power source types
 - 🔋 Identify commercial products tested by military agencies
- 🔋 Standardize on future connectors
- 🔋 Develop DOD preferred batteries
- 🔋 Establish power of the “Gate Keeper”



Other Efforts

- 💡 Development of a fuel cell specification
- 💡 Working on fuel cell output and fuel input connectors
- 💡 Soldier System connector standardization
- 💡 Update FIIG
- 💡 Update FLIS data (funding permitting)
- 💡 Work with NDIA Power Forum
- 💡 Establish JSBPS² Steering Committee (all are invited)



What I Need From You!

- 💡 Support for JSB Power Sources efforts
- 💡 Help identify key resources to assist the effort
- 💡 Points of contact are:

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