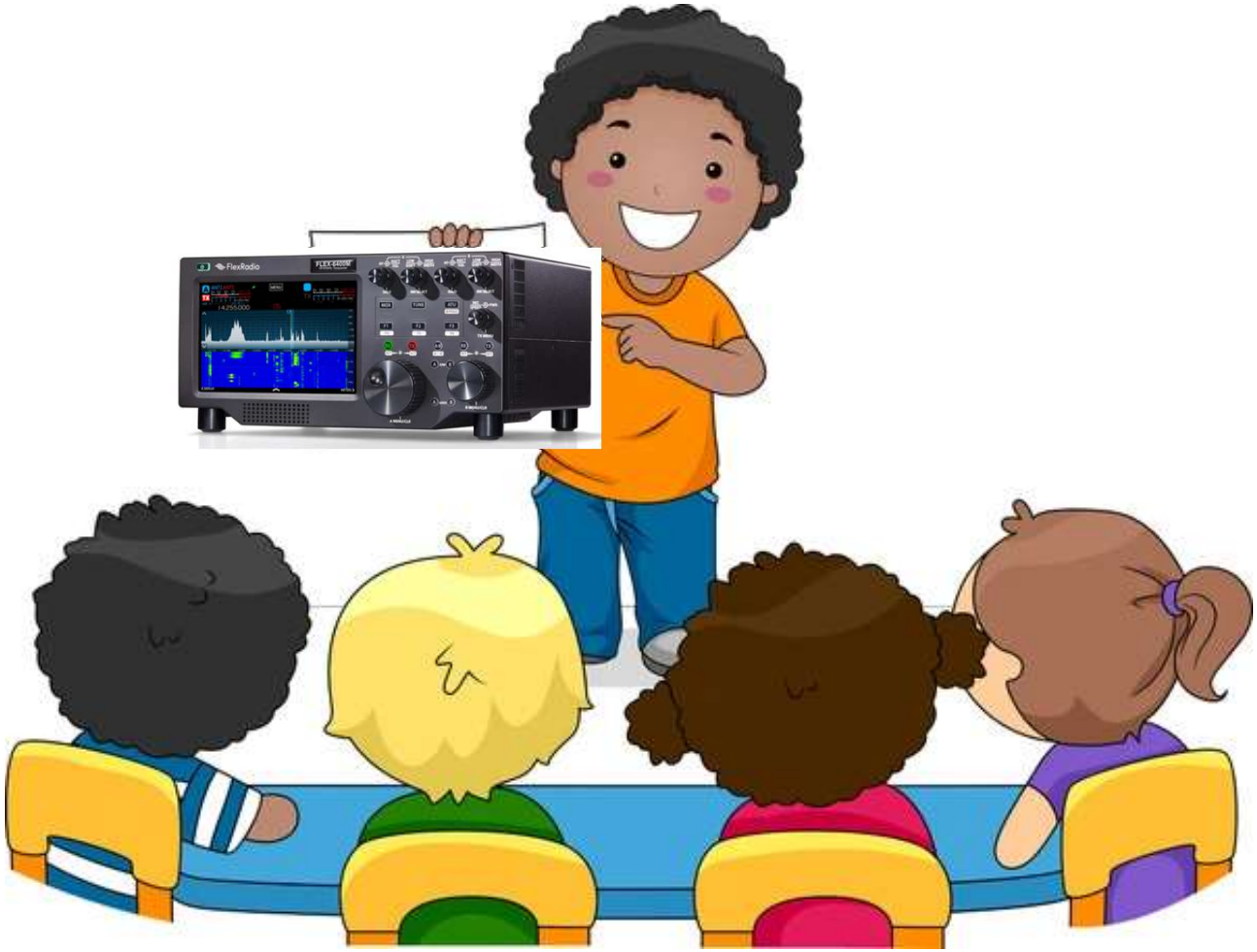
# Home Brew Show and Tell



# Building A Portable Ham Radio 13V LIFePO4, 105Ah Battery Pack

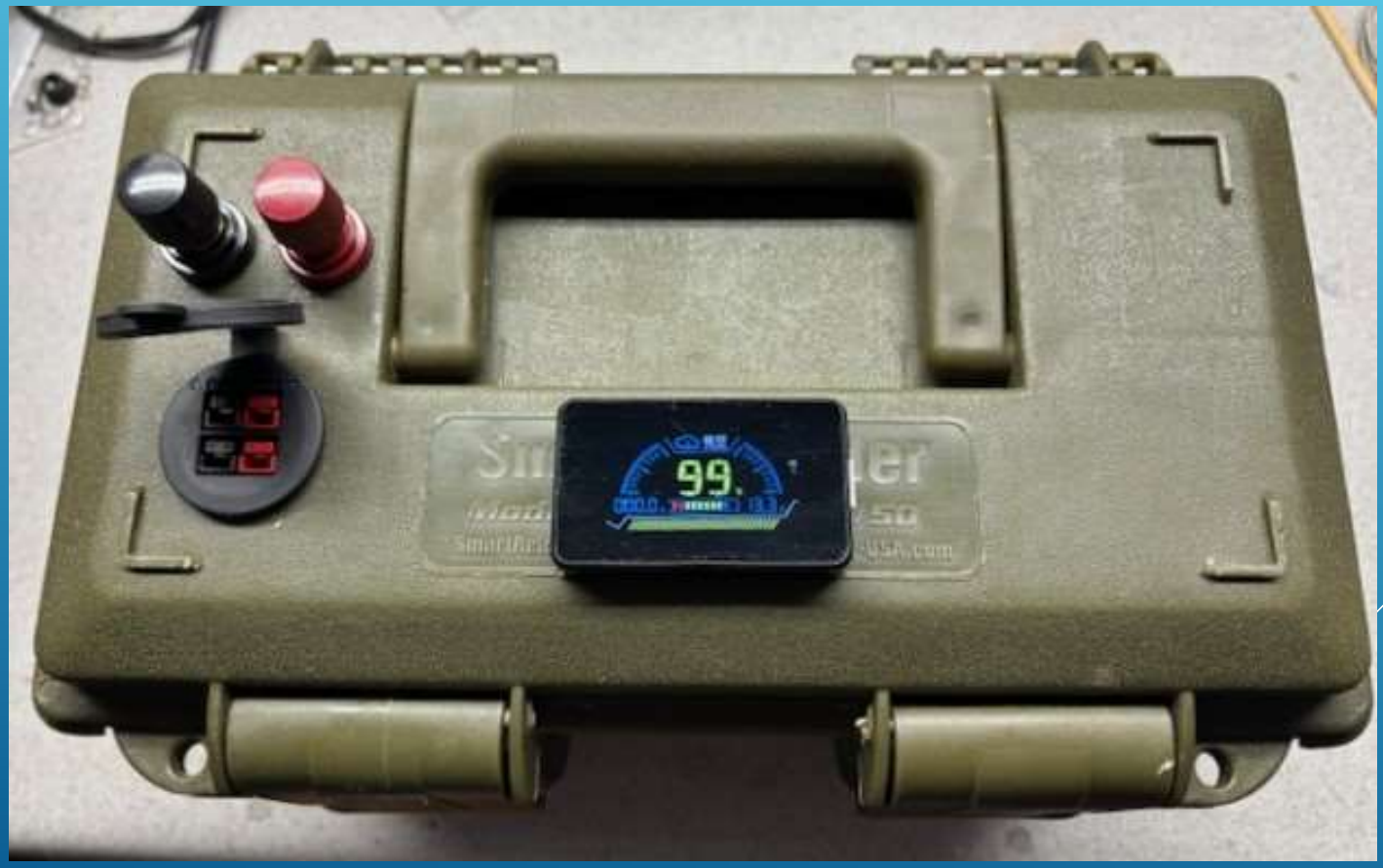
Alan Streitman, W4UB

- Design Goal: Build an economical 4+ hour Field battery Pack

# BILL OF MATERIALS

| LIFePO4 13V Battery BOM | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| Item | Qty | Cost | Sub Total | Source | | | | |
| EVE LF105 Cells | 4 | $39.00 | $156.00 | 18650 Battery Store (Sold out) | | | | |
| JK BMS 4-8S (200A) | 1 | $159.00 | $159.00 | Amazon | | | | |
| JK BMS 2.5" LCD Monitor Screen | 1 | $31.49 | $31.49 | Amazon | | | | |
| In-line 8 Gauge AWG Waterproof Fuse Holder | 1 | $11.00 | $11.00 | Amazon | | | | |
| 2 Pcs 1/4" Remote Battery Terminal Stud | 1 | $2.04 | $2.04 | Amazon | | | | |
| Powerwerx Panel Mount Housing for Two | 1 | $29.00 | $29.00 | Amazon | | | | |
| Anderson Powerpole Connectors with a Weather Resistant Cover | | | | | | | | |
| 10 AWG Inline Fuse Holder with 40 AMP ATC Blade Fuses (4pack) | 1 | $10.00 | $10.00 | Amazon | | | | |
| 50 Cal Plastic Ammo Box (Must be actual mil size inside dimensions) | 1 | ? | ? | ? | Original Mfg discontinued | | | |
| Battery Charger - your choice | 1 | | | | | | | |
| | | | | | | | | |
| | Total | | $400 | | | | | |

# BATTERY BOX VIEWS



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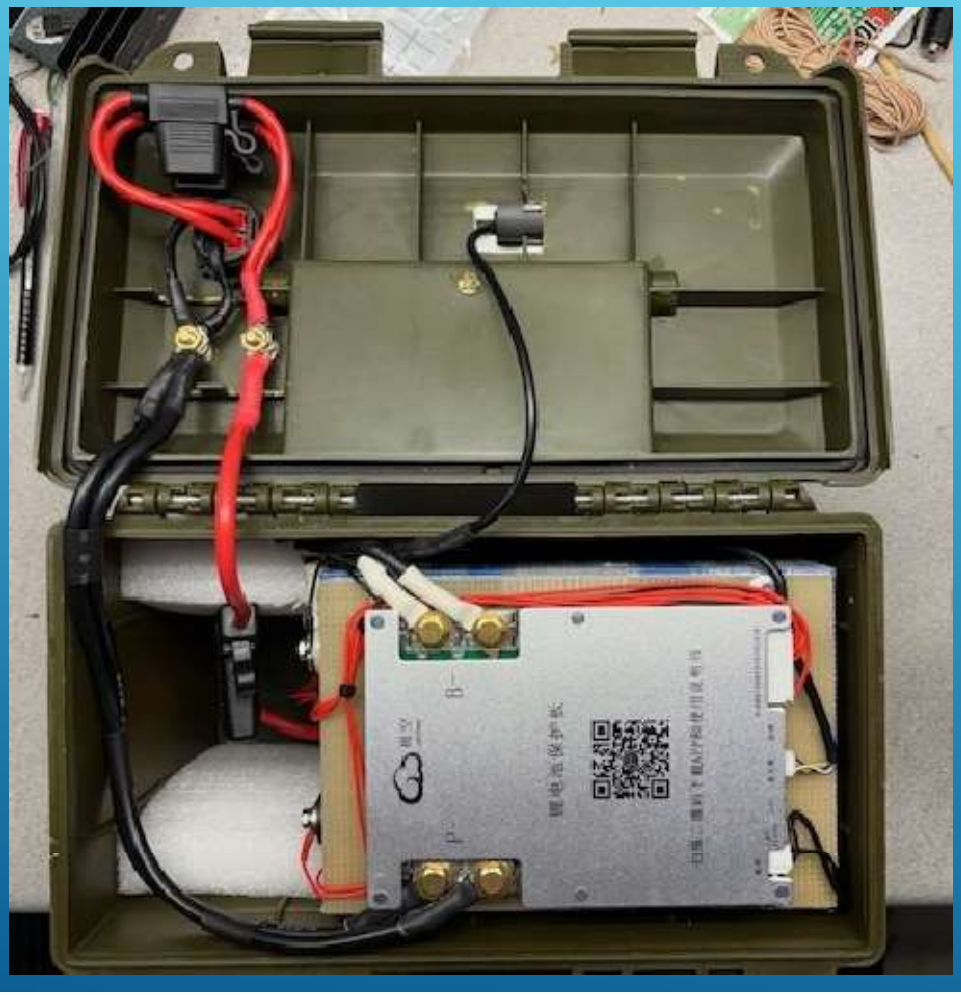

- Conclusion: Design goals met.
- Designed a year ago, battery costs have deceased as a result It would be prudent to do a build vs. buy study before buying parts.
- Bottom line it was a fun project.

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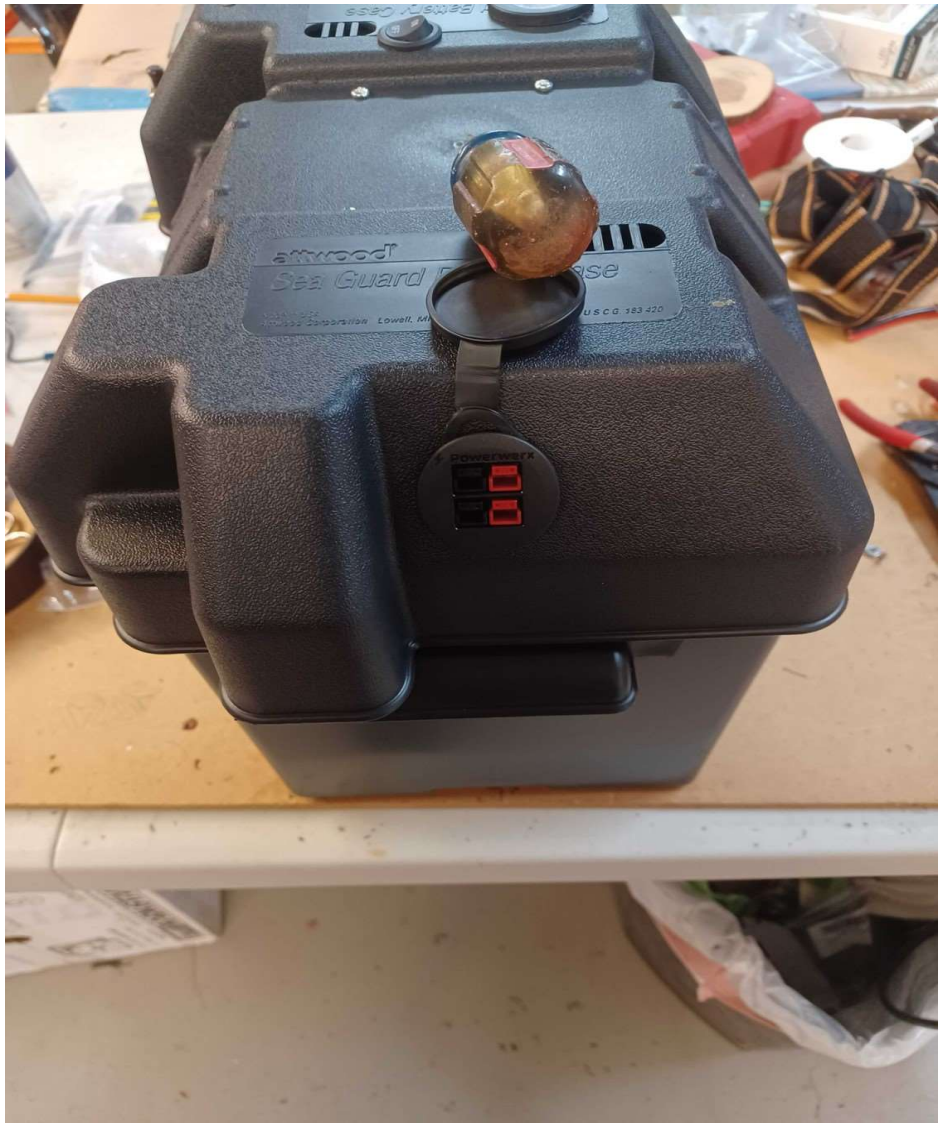

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