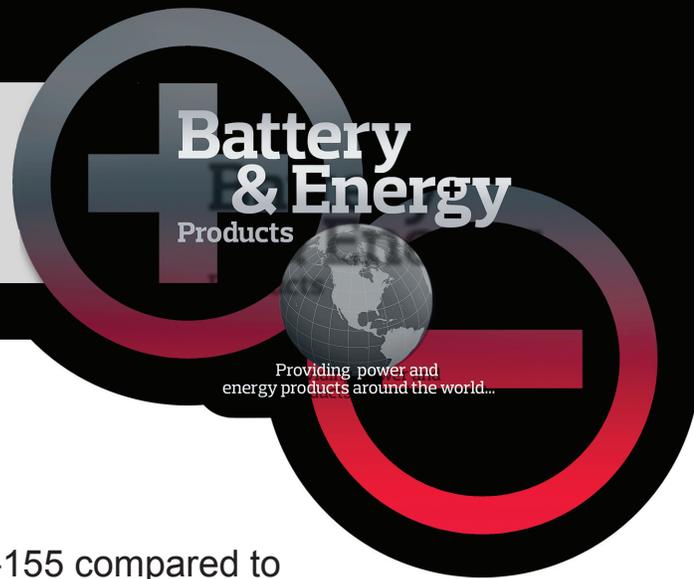


# NIE 13.1 Executive Briefing

## Primary UBI-5390 Extended Capacity CFx



### Benefits:

- 110-113% more capacity than BA-5590
- Fewer batteries for missions -
  - (1) UB0032: 20+ hours mission time in PRC-155 compared to
  - (1) BA-5590: 6-8 hours mission time in PRC-155
- Same weight as BA-5590 with over twice the capacity
- 12-15 year shelf-life versus 5 year shelf-life with the BA-5590
- Built-in state-of-charge indicator

(1) **Ultralife's New**  
P/N: **UB0032**



=



(2) **Legacy**  
**BA-5590**

### NIE 13.1 Reports:

#### IV. Training and Doctrine Command (TRADOC) Operational Assessment:

- **RECOMMENDED DISTRIBUTION PLAN:** Make available through the normal supply system as a *replacement* for the BA-5590, BA-5390, BB-390, and BB-2590.
- **JUSTIFICATION FOR RECOMMENDATIONS:** The BA-5390 battery's extended life (20 hours in a AN/PRC-155 Manpack versus six to eight hours using the BB-2590 battery) allowed the unit to carry fewer batteries than previously required. The BA-5390 [extended capacity CFx] significantly outperformed the legacy batteries.

#### V. Army Test and Evaluation Command (ATEC) Technical Assessment:

- **CONCLUSIONS:** The High Capacity BA-5390 performed well under stressful test conditions by providing extended duration power to a high power demand LLDR for much longer periods than Soldiers anticipated. The High Capacity BA-5390 demonstrated improved battery life over legacy BA-5590 and BB-2590 style batteries currently in the military inventory.

**Fielding Recommendations: Field the high capacity 5390**

## **Executive Summary:**

The High Capacity BA-5390 non-rechargeable battery provides support to Soldiers using military communications equipment requiring mobile 12-volt [and/or 24V] power sources.

The High Capacity BA-5390 battery demonstrated it can provide power to the AN/PRC-155 Manpack radio and the AN/PED-1 Lightweight Laser Designator Rangefinder (LLDR). The high capacity battery powers both pieces of equipment longer than the legacy BA-5590 and BB-2590 batteries. The improved battery life provides commanders with the ability to extend mission duration. It has the potential to decrease the logistical burden for resupply operations and reduce the amount units will have to load, store, and carry during missions.

The High Capacity BA-5390 battery's remaining life cannot be displayed on the AN/PRC-155 Manpack radio's liquid crystal display panel. The Soldier has to remove the battery from the radio to determine the remaining charge. Until the display compatibility issue is resolved, leaders will have to develop tactics, techniques, and procedures (TTPs) for Soldiers to monitor battery life during extended duration missions to mitigate the possibility of power loss.

Users should employ the High Capacity BA-5390 in the same manner as the legacy BA-5590, BA-5390, BB-390, and BB-2590 style batteries in the military inventory.

High potential for equipping. Continue to develop and test.

## **About Ultralife:**

A global corporation headquartered in Newark, New York, Ultralife has extensive North American as well as international operations in Europe, China and India backed by a direct sales and distribution network comprising resellers, distributors and agents. Through strategic growth and acquisitions, the corporation has expanded beyond its commercial and military battery business to include custom engineering design and services, tactical communications systems and a wide range of power accessories for global government and defense markets.