UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K

Current Report PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported):

December 23, 2004

ULTRALIFE BATTERIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

0-20852

16-1387013

(Commission File Number) (I.R.S. Employer Identification No.)

2000 Technology Parkway, Newark, New York 14513 (Address of principal executive offices) (Zip Code)

(315) 332-7100

(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- [] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- [] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- [] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)
- [] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01. Regulation FD Disclosure.

Ultralife Batteries, Inc. (the "Company") announced that it and its U.K. subsidiary have been awarded the 60 percent and the 40 percent shares, respectively, of the Next Gen II, Phase IV five-year battery production contracts by the U.S. Defense Department. The Company's press release is attached as Exhibit 99.1 to this Form 8-K, and the information set forth therein is furnished under item 7.01.

Item 9.01. Financial Statements, Pro Forma Financials and Exhibits.

(a) Financial Statements of Business Acquired.

Not applicable.

(b) Pro Forma Financial Information.

Not applicable.

- (c) Exhibits.
 - 99.1 Press Release dated December 23, 2004

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ULTRALIFE BATTERIES, INC.

Dated: December 23, 2004

By: /s/Peter F. Comerford Vice President of Administration & General Counsel

INDEX TO EXHIBITS

- (99) Additional Exhibits
- 99.1 Press Release dated December 23, 2004

3

Ultralife Batteries, Inc. And Its U.K. Subsidiary Win Entire Next Gen II, Phase IV Army Battery Award; Combined Contracts Valued at up to \$286 Million over Five Years

NEWARK, N.Y.--(BUSINESS WIRE)--Dec. 23, 2004--Ultralife Batteries, Inc. (NASDAQ: ULBI) and its U.K. subsidiary have been awarded the 60 percent and the 40 percent shares, respectively, of the Next Gen II, Phase IV five-year battery production contracts by the U.S. Defense Department. These contracts, which could reach a maximum value of \$286 million, are for the production of five types of primary (non-rechargeable) lithium-manganese dioxide batteries for the U.S. Military. Production shipments of each battery type will commence following qualification. Consistent with its previous guidance, the Company expects to recognize some revenue under these contracts in the second quarter of 2005, with substantial revenues anticipated in the second half.

"We have achieved another great milestone with this largest contract win in our company's history," said John D. Kavazanjian, Ultralife's president and chief executive officer. "This award supports the U.S. Military's goal of converting from lithium-sulfur dioxide to lithium-manganese dioxide batteries, as most of the major lithium battery types used by the military will now be available in this high-performance chemistry. It is also a powerful validation of our strategy of applying our leadership technology to markets in which it is advantaged. Combined with the award of the Next Gen II Small Cylindrical Battery contract, which we received in 2002, this new multi-year contract solidifies our position in the military market, one element of our strategic plan to achieve annual revenues of \$200 million within the next three to five years."

NextGen II is the U.S. Military's five-year battery procurement strategy. The Phase IV production contracts were awarded to Ultralife's U.S. and U.K. operations to provide five types of primary (non-rechargeable) lithium-manganese dioxide batteries. The five battery types - BA-5390/U, BA-5312/U, BA-5398/U, BA-5388/U and BA-5357/U - comprise the Rectangular Lithium Manganese Dioxide Battery Group. A major objective of this five-year procurement strategy is to establish and maintain a production base of a sufficient capacity to timely meet peacetime demands and have the ability to surge quickly to meet deployment demands.

The BA-5390/U, the most widely used of the five battery types, is a 15 or 30-volt battery used to power the PRC-119 SINCGARS (Single Channel Ground and Airborne Radio System), as well as more than 50 other applications. The BA-5312/U is a 12-volt battery used in the PRC-112 survival radio. The BA-5398/U is a 15-volt battery used in the PRC-77 radio and other applications. The BA-5388 is a 15-volt battery used in the PRC-126 and other handheld radios, and the BA-5357 is a 15 or 30-volt battery used in the PSG-2A message device and other applications.

About Ultralife Batteries, Inc.

Ultralife is a leading developer, manufacturer, and marketer of standard and customized lithium primary (non-rechargeable), lithium ion and lithium polymer rechargeable batteries. Ultralife's high-energy batteries use advanced lithium technology and are used in military, industrial and consumer portable electronic products. Through its range of standard products and ability to customize for a wide range of applications, Ultralife is able to provide the next generation of battery solutions. OEM, retail and government customers include Energizer, Kidde Safety, Philips Medical Systems, Radio Shack and the national defense agencies of the United States and United Kingdom, among others.

Ultralife's headquarters, principal manufacturing and research facilities are in Newark, New York, near Rochester. Ultralife (UK) Ltd., a second manufacturing facility, is located in Abingdon, U.K. Both facilities are ISO-9001 certified. Detailed information about Ultralife is available at www.ultralifebatteries.com.

This press release may contain forward-looking statements based on current expectations that involve a number of risks and uncertainties. The potential risks and uncertainties that could cause actual results to differ materially include: worsening global economic conditions, increased competitive environment and pricing pressures, disruptions related to restructuring actions and delays. Further information on these factors and other factors that could affect Ultralife's financial results is included in Ultralife's Securities and Exchange Commission (SEC) filings, including the latest Annual Report on Form 10-K.

Ultralife(R) is a registered trademark of Ultralife Batteries,

Inc.

```
CONTACT: Ultralife Batteries, Inc.

Peter Comerford, 315-332-7100

pcomerford@ulbi.com

or

Investor Relations:

Lippert/Heilshorn & Associates, Inc.

Jody Burfening, 212-838-3777

jburfening@lhai.com

or

Media:

Lippert/Heilshorn & Associates, Inc.

Chenoa Taitt, 212-201-6635

ctaitt@lhai.com
```