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

SCHEDULE 13D/A

UNDER THE SECURITIES EXCHANGE ACT OF 1934 (Amendment No. 2)

Ultralife Batteries, Inc. (Name of Issuer)

COMMON STOCK, par value \$.10 (Title of Class of Securities)

903899102 (CUSIP Number)

Jerald A. Trannel 290 South County Farm Road, Third Floor Wheaton, Illinois 60187-4526 Telephone: (630) 588-7200 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 25, 2006 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Section 240.13d-l(e), 240.13d-l(f) or 240.13d-l(g), check the following box. []

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7(b) for other parties to whom copies are to be sent.

The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

2 Schedule 13D/A

CUSIP No. 903899102 Page 2 of 7 Pages

1. Names of Reporting Person S.S. OR I.R.S. Identification No. of Above Persons Grace Brothers, Ltd.

2. Check the Appropriate Box if a Member of a Group (See instructions) (a) [ ] (b) [ ]

3. SEC Use Only

4. Source of Funds (See instructions) 00

5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) [ ]

6. Citizenship or Place of Organization

Illinois Limited Partnership

0

7 Sole Voting Power

Number of

Shares 8 Shared Voting Power Beneficially 3,583,948 shares Owned by Each Reporting 9 Sole Dispositive Power Person 0 10 Shared Dispositive Power With 3,583,948 shares 11. Aggregate Amount Beneficially Owned by Each Reporting Person 3,583,948 shares 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See instructions) [ ] 13. Percent of Class Represented by Amount in Row (11) 24.0% 14. Type of Reporting Person (See instructions)

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3 Schedule 13D/A CUSIP No. 903899102 Page 3 of 7 Pages 1. Names of Reporting Person S.S. OR I.R.S. Identification No. of Above Persons Bradford T. Whitmore 2. Check the Appropriate Box if a Member of a Group (See instructions) (a) [ ] (b) [ ] 3. SEC Use Only 4. Source of Funds (See instructions) 00 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) [ ] 6. Citizenship or Place of Organization United States 7 Sole Voting Power Number of 25,815 Shares Beneficially 8 Shared Voting Power Owned by 3,583,948 Each 9 Sole Dispositive Power Reporting Person 25,815 With 10 Shared Dispositive Power 3,583,948 11. Aggregate Amount Beneficially Owned by Each Reporting Person 3,609,763 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See instructions) [ ] 13. Percent of Class Represented by Amount in Row (11) 24.2% 14. Type of Reporting Person (See instructions) IN

4 Schedule 13D/A CUSIP No. 903899102 Page 4 of 7 Pages 1. Names of Reporting Person S.S. OR I.R.S. Identification No. of Above Persons Spurgeon Corporation 2. Check the Appropriate Box if a Member of a Group (See instructions) (a) [ ] (b) [ ] 3. SEC Use Only 4. Source of Funds (See instructions) 00 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) [ ] 6. Citizenship or Place of Organization Illinois Corporation 7 Sole Voting Power Number of 0 Shares Beneficially 8 Shared Voting Power 3,583,948 shares Owned by Each Reporting 9 Sole Dispositive Power Person 0 With 10 Shared Dispositive Power 3,583,948 shares 11. Aggregate Amount Beneficially Owned by Each Reporting Person 3,583,948 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See instructions) [ ] 13. Percent of Class Represented by Amount in Row (11) 24.0% 14. Type of Reporting Person (See instructions)

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The undersigned, Grace Brothers, Ltd. ("Grace") hereby amends its Schedule 13D as filed on June 7, 2006 relating to the Common Stock of Ultralife Batteries, Inc. Unless otherwise indicated, all capitalized terms used herein but not defined herein shall have the same meaning as set forth in the Schedule 13D. Except as set forth herein, the Schedule 13D, as previously amended, remains unchanged.

Item 5. Interest in Securities of the Issuer

(a) As of the date of this filing, Grace beneficially owns 3,583,948 shares of Common Stock, representing approximately 24.0% of the outstanding shares of Common Stock. As general partner of Grace, Spurgeon may be deemed beneficial owner of 3,583,948 shares of Common Stock, or 24.0% of the outstanding shares of Common Stock, although they otherwise disclaim beneficial ownership. As general partner of Grace, Whitmore may be deemed beneficial owner of 3,583,948 shares of Common Stock, and 25,815 shares of Common Stock as direct beneficial owner, or 24.2% of the outstanding shares of Common Stock.

(b) Grace: shared voting power (with Whitmore and Spurgeon) 3,583,948 Shares

Whitmore: shared voting power (with Grace and Spurgeon) 3,583,948 Shares sole voting power 25,815 Shares

Spurgeon: shared voting power (with Grace and Whitmore) 3,583,948 Shares

(c) The transactions effected by the Filers since the most recent filing on June 22, 2006 of Schedule 13D set forth in Schedule A.

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## SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information set forth in this Statement with respect to it is true, complete and correct.

Dated: September 28, 2006

Grace Brothers, Ltd.

By: /s/ Bradford T. Whitmore Name: Bradford T. Whitmore Its: General Partner

Bradford T. Whitmore

By: /s/ Bradford T. Whitmore Name: Bradford T. Whitmore

Spurgeon Corporation

By: /s/ Jerald A. Trannel Name: Jerald A. Trannel Its: Vice President

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SCHEDULE A
TRADE ACTIVITY FOR ULTRALIFE BATTERIES, INC.
EFFECTED BY GRACE BROTHERS, LTD. FROM JUNE 22, 2006
THROUGH SEPTEMBER 28, 2006.
 Amount
of Price
per Date
Security
 Shares
 Share
Purchased
9/22/2006
 COMMON
 STOCK
100 8.90
9/22/2006
 COMMON
 STOCK
100 8.91
9/22/2006
 COMMON
 STOCK
200 8.92
9/22/2006
 COMMON
 STOCK
 5,300
  8.94
9/22/2006
 COMMON
 ST0CK
200 8.95
9/22/2006
 COMMON
 STOCK
100 8.99
9/22/2006
 COMMON
 STOCK
  5,300
  9.00
9/22/2006
 COMMON
 STOCK
200 9.01
9/22/2006
 COMMON
 STOCK
  4,100
  9.02
9/22/2006
 COMMON
 STOCK
400 9.03
9/22/2006
 COMMON
 STOCK
100 9.04
9/22/2006
 COMMON
 ST0CK
 11,509
  9.05
9/22/2006
 COMMON
 STOCK
700 9.06
9/22/2006
 COMMON
 STOCK
200 9.08
9/22/2006
 COMMON
 STOCK
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1,897

9.09 9/22/2006 COMMON STOCK 17,880 9.10 9/22/2006 COMMON STOCK 100 9.11 9/22/2006 COMMON STOCK 397 9.12 9/22/2006 COMMON STOCK 2,000 9.13 9/22/2006 COMMON STOCK 918 9.14 9/22/2006 COMMON STOCK 5,400 9.15 9/22/2006 COMMON STOCK 1,791 9.16 9/22/2006 COMMON STOCK 400 9.17 9/22/2006 COMMON STOCK 500 9.18 9/22/2006 COMMON STOCK 2,200 9.19 9/22/2006 COMMON STOCK 43,060 9.20 9/22/2006 COMMON STOCK 1,400 9.22 9/22/2006 COMMON STOCK 600 9.29 9/22/2006 COMMON STOCK 3,877 9.30 9/22/2006 COMMON STOCK 500 9.31 9/25/2006 COMMON STOCK 200 9.12 9/25/2006 COMMON STOCK 260 9.14 9/25/2006 COMMON STOCK 18,176

9.15 9/25/2006 COMMON STOCK 2,600 9.16 9/25/2006 COMMON STOCK 11,253 9.17 9/25/2006 COMMON STOCK 4,200 9.18 9/25/2006 COMMON STOCK 3,200 9.19 9/25/2006 COMMON STOCK 3,606 9.20 9/25/2006 COMMON STOCK 200 9.21 9/25/2006 COMMON STOCK 391 9.22 9/25/2006 COMMON STOCK 4,400 9.23 9/26/2006 COMMON STOCK 400 9.0200 9/26/2006 COMMON STOCK 800 9.0486 9/26/2006 COMMON STOCK 5,667 9.0500 9/26/2006 COMMON STOCK 400 9.0600 9/26/2006 COMMON STOCK 500 9.0700 9/26/2006 COMMON STOCK 400 9.0775 9/26/2006 COMMON STOCK 800 9.0800 9/26/2006 COMMON STOCK 500 9.0940 9/26/2006 COMMON

STOCK 1,000 9.0960 9/26/2006 COMMON STOCK 41,865 9.1000 9/26/2006 COMMON STOCK 700 9.1100 9/26/2006 COMMON STOCK 300 9.1200 9/26/2006 COMMON STOCK 2,100 9.1300 9/26/2006 COMMON STOCK 2,700 9.1400 9/26/2006 COMMON STOCK 9,900 9.1500 9/26/2006 COMMON STOCK 200 9.1600 9/26/2006 COMMON STOCK 200 9.1800 9/26/2006 COMMON STOCK 100 9.1900 9/26/2006 COMMON STOCK 4,000 9.1993 9/26/2006 COMMON STOCK 36,019 9.2000