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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ULTRALIFE BATTERIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

16-1387013

(State or other jurisdiction of incorporation or organization)

(I.R.S Employer Identification No.)

2000 Technology Parkway Newark, New York (Address of Principal Executive Offices)

14513

(Zip Code)

Ultralife Batteries, Inc.

Amended and Restated 2004 Long-Term Incentive Plan
as amended June 8, 2006

(Full title of the plan)

John D. Kavazanjian
President and Chief Executive Officer
Ultralife Batteries, Inc.
2000 Technology Parkway
Newark, New York 14513
(Name and address of agent for service)

315-332-7100

(Telephone number, including area code, of agent for service)

CALCULATION OF REGISTRATION FEE

		Proposed maximum	Proposed maximum	Amount of
Title of securities	Amount to be	offering price per	aggregate offering	registration
to be registered	registered	share(1)	price(1)	fee
Common Stock, par value \$.10 per share	750,000	\$9.74	\$7,305,000	\$781.64

⁽¹⁾ Estimated in accordance with Rule 457(c), as of August 16, 2006, solely for the purpose of calculating the registration fee.

In addition, pursuant to Rule 416 under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the stock option plan described herein.

This Registration Statement on Form S-8 relates to an amendment to the Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan pursuant to which the Registrant was authorized to issue up to 750,000 shares of its Common Stock together with such additional shares as remain available for issuance under the Company's Amended and Restated 2000 Stock Option Plan, as amended, or shares which become available upon the lapse, expiration, termination or cancellation of outstanding stock options under the 2000 Option Plan. Such additional shares have been previously registered pursuant to two separate S-8 registration statements (File No. 333-60984 and File No. 333-114271 filed with the Securities and Exchange Commission on May 15, 2001 and April 7, 2004, respectively). The amendment, approved by the Registrant's stockholders on June 8, 2006, increased the number of shares of Common Stock authorized pursuant to the Plan from 750,000 to 1,500,000. The initial 750,000 shares were previously registered pursuant to an S-8 registration statement (File No. 333-117662). Pursuant to instruction E to Form S-8, the filing fee is being paid only with respect to the 750,000 shares of Common Stock covered by the amendment, which were not previously registered.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference

The following documents of the Registrant previously filed with the Securities and Exchange Commission are incorporated herein by reference:

- (a) the Registrant's Annual Report on Form 10-K for the year ended December 31, 2005;
- (b) the Registrant's Definitive Proxy Statement on Schedule 14A filed with the Commission on April 28, 2006;
- (c) the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 1, 2006 filed with the Commission on May 11, 2006; the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 1, 2006 filed with the Commission on August 10, 2006; the Registrant's Current Report on Form 8-K filed with the Commission on January 26, 2006; the Registrant's Current Report on Form 8-K containing disclosure under Item 5.02 thereof filed with the Commission on April 20, 2006; the Registrant's Current Report on Form 8-K filed with the Commission on May 2, 2006; the Registrant's Current Report on Form 8-K filed with the Commission on May 31, 2006; the Registrant's Current Report on Form 8-K filed with the Commission on June 9, 2006; both of the Registrant's Current Reports on Form 8-K filed with the Commission on June 14, 2006; the Registrant's Current Report on Form 8-K filed with the Commission on July 10, 2006, as amended by Form 8-K/A filed on July 21, 2006; and

(d) the description of the Registrant's Common Stock, par value \$.10 per share, contained in the Registrant's Registration Statement on Form S-1 (Registration No. 33-54470), filed with the Securities and Exchange Commission on December 23, 1992.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), after the date of this Registration Statement (and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold) shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities

Not Applicable.

Item 5. Interests of Named Experts and Counsel

Not Applicable.

Item 6. Indemnification of Directors and Officers

The Company's Certificate of Incorporation and By-laws, each as amended, provide for elimination of the liability of Directors to the Registrant to the fullest extent permitted by Section 102(7)(b) of the Delaware General Corporation Law, as the same may be amended and supplemented.

The Registrant's Certificate of Incorporation, as amended, provides, in accordance with the Delaware General Corporation Law, that Directors are not liable to the Registrant or its stockholders for monetary damages for breaches of fiduciary duty as a Director, except for liability (i) for any breach of the Director's duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for dividend payments or stock repurchases in violation of the Delaware General Corporation Law, or (iv) for any transaction from which the Director derived any improper personal benefit.

The Certificate of Incorporation and the By-laws of the Registrant include provisions by which the Registrant will indemnify all persons whom it shall have the power to indemnify under Section 145 of the Delaware General Corporation Law from and against any and all of the expenses, liabilities, or other matters referred to in or covered by said section. The indemnification provided for in Section 145 shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any Bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such person.

The general effect of these provisions will be to eliminate the rights of the Registrant and its stockholders (through stockholders' derivative suits on behalf of the Registrant) to recover monetary damages in the event of a breach of fiduciary duty as a director (including breach of duty in the case of negligence or grossly negligent behavior) except in the situations as described above. These provisions will not affect the availability of injunctive relief against directors of the Registrant (although such relief may not always be available as a practical matter) nor will it limit directors' liability for violations of the federal securities laws

Item 7. Exemption from Registration Claimed

Not Applicable.

Item 8. Exhibits

4.1	Restated Certificate of Incorporation of the Registrant (Exhibit 4.3)(1)
4.2	Amendment to Certificate of Incorporation (Exhibit 3.1)(2)
4.3	By-laws of the Registrant (Exhibit 3.2)(3)
4.4	Form of Common Stock Certificate of the Registrant (Exhibit 4.1)(3)
5.1	Opinion of Harter Secrest & Emery LLP*
23.1	Consent of PricewaterhouseCoopers LLP*
23.2	Consent of Harter Secrest & Emery LLP(4)
99.1	Ultralife Batteries, Inc. Amended and Restated 2000 Stock Option Plan (Exhibit 99.1)(5)
99.2	Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan (Exhibit 99.2)(6)
99.3	Amendment to Ultralife Batteries, Inc. Amended and Restated Long-Term Incentive Plan*

^{*}Exhibit filed with this Registration Statement

- (1) Exhibit previously filed as part of and is incorporated by reference to the Registrant's Registration Statement on Form S-8 (Registration No. 333-60984). The exhibit number contained in parenthesis refers to the exhibit number in such Registration Statement.
- (2) Exhibit previously filed as part of and is incorporated by reference to the Registrant's Form 10-Q for the quarterly period ended December 31, 2000 (Commission File No. 0-20852). The exhibit number contained in parenthesis refers to the exhibit number in the Form 10-Q.
- (3) Exhibit previously filed as part of and is incorporated by reference to the Registrant's Registration Statement on Form S-1 (Registration No. 33-544701). The exhibit number contained in parenthesis refers to the exhibit number in such Registration Statement.
- (4) Included in Exhibit 5.1 to this Registration Statement.
- (5) Exhibit previously filed as part of and is incorporated by reference to the Registrant's Registration Statement on Form S-8 (Registration No. 333-114271). The exhibit number contained in parenthesis refers to the exhibit number in such Registration Statement.
- (6) Exhibit previously filed as part of and is incorporated by reference to the Registrant's Registration Statement on Form S-8 (Registration No. 333-117662). The exhibit number contained in parenthesis refers to the exhibit number in such Registration Statement.

Item 9. Undertakings

- (a) The undersigned Registrant hereby undertakes (subject to the proviso contained in Item 512(a) of Regulation S-K):
 - (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
- (ii) to reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement;
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;
- (2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, controlling persons of the Registrant pursuant to the provisions described under Item 6 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Village of Newark, State of New York, on this 18th day of August 2006.

ULTRALIFE BATTERIES, INC.

By: /s/ John D. Kavazanjian

Name: John D. Kavazanjian

Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ John D. Kavazanjian John D. Kavazanjian	President and Chief Executive Officer and Director (Principal Executive Officer)	August 18, 2006
/s/ Robert W. Fishback Robert W. Fishback	Vice President-Finance and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	August 18, 2006
	Director	August, 2006
Carole L. Anderson	Director	August, 2006
Patricia C. Barron /s/ Anthony J. Cavanna	Director	August 17, 2006
Anthony J. Cavanna /s/ Paula H. J. Cholmondeley	Director	August 18, 2006
Paula H. J. Cholmondeley /s/ Daniel W. Christman	Director	August 18, 2006
Daniel W. Christman /s/ Ranjit C. Singh	Director	August 18, 2006
Ranjit C. Singh		

[LETTERHEAD OF HARTER SECREST & EMERY LLP]

August 18, 2006

Ultralife Batteries, Inc. 2000 Technology Parkway Newark, New York 14513

Re: Ultralife Batteries, Inc.

Registration Statement on Form S-8

Ladies and Gentlemen:

You have requested our opinion in connection with your Registration Statement on Form S-8, filed under the Securities Act of 1933, as amended (the "Registration Statement"), with the Securities and Exchange Commission (the "Registration Statement") in respect of the proposed issuance by Ultralife Batteries, Inc. (the "Company") of up to 750,000 additional shares of Common Stock, par value \$.10 per share (the "Common Stock"), of the Company pursuant to Amendment No. 1 to the Company's Amended and Restated 2004 Long-Term Incentive Plan (the "Amendment").

We have examined the following corporate records and proceedings of the Company in connection with the preparation of this opinion: its Certificate of Incorporation as amended and restated to date; its By-laws as currently in force and effect; its minute books, containing minutes and records of proceedings of its stockholders and its Board of Directors from the date of incorporation to the date hereof; the Registration Statement and the related exhibits thereto; applicable provisions of laws of the State of Delaware; and such other documents and matters as we have deemed necessary.

In rendering this opinion, we have made such examination of laws as we have deemed relevant for the purposes hereof. As to various questions of fact material to this opinion, we have relied upon representations and/or certificates of officers of the Company, certificates and documents issued by public official and authorities, and information received from searches of public records. Based upon and in reliance on the foregoing, we are of the opinion that the 750,000 shares of Common Stock to be issued by the Company will, when issued and, where required, paid for in accordance with the provisions of the Amendment and the respective award agreements pursuant to which awards are made under the Amendment, be validly authorized and legally issued and outstanding, fully paid and non-assessable.

We hereby consent to being named in the Registration Statement as attorneys who will, for the Company, pass upon the validity of the issuance of the additional 750,000 shares of Common Stock offered thereby, and we hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement.

Very truly yours,

/s/ HARTER SECREST & EMERY LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 (relating to 750,000 shares of Common Stock) of our report dated March 22, 2006 relating to the financial statements, financial statement schedule, management's assessment of the effectiveness of internal controls over financial reporting and the effectiveness of internal control over financial reporting, of Ultralife Batteries, Inc., which appears in Ultralife Batteries, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Rochester, New York August 16, 2006

Amendment No. 1

ΓO

Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan

The first sentence of Section 4(a) of the Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan is hereby amended to read as follows:

Section 4. Shares of Stock Subject to the Plan.

In General. The maximum number of shares of Stock which shall be available for the grant or issuance of Awards under the Plan (including ISOs) during its term shall not exceed 1,500,000 (plus any shares of Stock which are or become available under Section 2 hereof, which shares shall also be available for the grant or issuance of Awards under the Plan); provided, however, that no more than 200,000 shares of Stock may be used for Awards other than Options or SARs.

The balance of Section 4(a) shall remain the same as shall all of the other provisions of the Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan.

IN WITNESS WHEREOF, this Amendment No. 1 has been approved by the stockholders of Ultralife Batteries, Inc. on the 8th day of June, 2006.

/s/ Peter F. Comerford

Peter F. Comerford Vice President of Administration and General Counsel