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OMB APPROVAL  
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SECURITIES AND EXCHANGE COMMISSION Estimated average burden hours  
Washington, D.C. 20549 per response.....14.90  
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SCHEDULE 13G

INFORMATION STATEMENT TO BE INCLUDED IN STATEMENTS FILED  
PURSUANT TO RULES 13d-1 (b) (c) AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO RULE 13d-2 (b)

(Amendment No. \_\_\_ )\*

Ultralife Batteries, Inc.

-----  
(Name of Issuer)

COMMON

-----  
(Title of Class of Securities)

903899102

-----  
(CUSIP Number)

December 31, 2003

-----  
(Date of Event Which Requires Filing of This Statement)

Check the appropriate box to designate the rule pursuant to which this  
Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-(c)
- Rule 13d-1(d)

\*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 the disclosures provided in a prior cover page.

The information required in 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).

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CUSIP NO. 903899102

13G

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Page 2 of 5 Pages  
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1 NAME OF REPORTING PERSON  
S.S. or I.R.S. IDENTIFICATION OF ABOVE PERSON

Wall Street Associates (IRS No. 33-0238287)

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\* (a)   
(b)

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3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

A California Corporation

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5 SOLE VOTING POWER  
313,100

6 SHARED VOTING POWER  
-0-

7 SOLE DISPOSITIVE POWER  
761,600

8 SHARED DISPOSITIVE POWER  
-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
761,600

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
5.62%

12 TYPE OF REPORTING PERSON\*  
IA

\*SEE INSTRUCTION BEFORE FILLING OUT!

Item 1 (a) Name of Issuer:  
-----  
Ultralife Batteries, Inc.

(b) Address of Issuer's Principal Executive Offices:  
-----  
2000 Technology Parkway  
Newark, NY 14513

Item 2 (a) Name of Person Filing:  
-----  
Wall Street Associates

(b) Address of Principal Business Office:  
-----  
1200 Prospect Street Suite 100  
La Jolla, CA 92037

(c) Citizenship:  
-----  
Not Applicable.

(d) Title of Class of Securities:  
-----  
Common Stock

(e) CUSIP Number:  
-----  
903899102

Item 3 If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b),  
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check whether the person filing is a:  
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- (a)  Broker or dealer registered under Section 15 of the Exchange Act;
- (b)  Bank as defined in Section 3(a)(6) of the Exchange Act;
- (c)  Insurance company as defined in Section 3(a)(19) of the Act;
- (d)  Investment company registered under Section 8 of the Investment Company Act;
- (e)  Investment adviser registered under Section 203 of the Investment Advisors Act of 1940;
- (f)  Employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g)  Parent holding company or control person, in accordance with 13d-1(b)(ii)(G);
- (h)  Savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i)  Church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j)  Group, in accordance with Rule 13d-1(b)(1)(ii)(H).

If this statement is filed pursuant to Rule 13d-1(c), check this box.

Item 4 Ownership.  
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- (a) Amount beneficially owned: 761,600
- (b) Percent of Class: 5.62%
- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote: 313,100
  - (ii) Shared power to vote: -0-
  - (iii) Sole power to dispose or direct the disposition of:  
761,600
  - (iv) Shared power to dispose or direct the disposition of: -0-

Item 5 Ownership of Five Percent or Less of a Class.  
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If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ ].

Item 6 Ownership of More than Five Percent on Behalf of Another Person.  
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Not Applicable

Item 7 Identification and Clarification of the Subsidiary Which Acquired  
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the Security Being Reported on By the Parent Holding Company.  
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Not Applicable.

Item 8 Identification and Clarification of Members of the Group.  
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Not Applicable.

Item 9 Notice of Dissolution of Group.  
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Not Applicable.

Item 10      Certification.  
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By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE  
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After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 12, 2004

/s/ William J. Jeffery III  
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William J. Jeffery, III/President