

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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): November 13, 2006

Mercury Computer Systems, Inc.

(Exact Name of Registrant as Specified in Charter)

Massachusetts

000-23599

04-2741391

(State or Other Jurisdiction of Incorporation)

(Commission File Number)

(IRS Employer Identification No.)

199 Riverneck Road, Chelmsford, Massachusetts

01824

(Address of Principal Executive Offices)

(Zip Code)

Registrant's telephone number, including area code: (978) 256-1300

N/A

(Former Name or Former Address, if Changed Since Last Report)

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 (*see* General Instruction A.2. below):

- 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 5.02. Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers; Compensatory Arrangements of Certain Officers.

(a) – (d) Not applicable.

(e) At a special meeting in lieu of the 2006 annual meeting of shareholders held on November 13, 2006, the shareholders of Mercury Computer Systems, Inc. (the “Company”) approved an amendment and restatement of the Company’s 1997 Employee Stock Purchase Plan (as amended and restated, the “ESPP”).

A summary of the material terms and conditions of the ESPP is set forth in the Company’s definitive Proxy Statement dated October 16, 2006 (the “Proxy Statement”), filed with the Securities and Exchange Commission on October 16, 2006, under the caption “Proposal 2: Approval of Amendment and Restatement of our 1997 Employee Stock Purchase Plan.” Such description is incorporated herein by reference and is qualified in its entirety by reference to the full text of the ESPP filed as Exhibit 10.1 to this Current Report on Form 8-K.

(f) Not applicable.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
10.1	Mercury Computer Systems, Inc. 1997 Employee Stock Purchase Plan, as amended and restated through November 13, 2006.

SIGNATURES

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.

MERCURY COMPUTER SYSTEMS, INC.

(Registrant)

Date: November 15, 2006

By: /s/ Robert E. Hult

Robert E. Hult
Senior Vice President and Chief
Financial Officer

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
10.1	Mercury Computer Systems, Inc. 1997 Employee Stock Purchase Plan, as amended and restated through November 13, 2006.

MERCURY COMPUTER SYSTEMS, INC.
1997 EMPLOYEE STOCK PURCHASE PLAN
(as amended and restated through November 13, 2006)

1. PURPOSE.

It is the purpose of this 1997 Employee Stock Purchase Plan to provide a means whereby eligible employees may purchase Common Stock of Mercury Computer Systems, Inc. (the "Company") and any subsidiaries as defined below through after-tax payroll deductions. It is intended to provide a further incentive for employees to promote the best interests of the Company and to encourage stock ownership by employees in order that they may participate in the Company's economic growth.

It is the intention of the Company that the Plan qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Internal Revenue Code and the provisions of this Plan shall be construed in a manner consistent with the Code and Treasury Regulations promulgated thereunder.

2. DEFINITIONS.

The following words or terms, when used herein, shall have the following respective meanings:

- (a) "Plan" shall mean the 1997 Employee Stock Purchase Plan.
- (b) "Company" shall mean Mercury Computer Systems, Inc., a Massachusetts corporation.
- (c) "Account" shall mean the Employee Stock Purchase Account established for a Participant under Section 7 hereunder.
- (d) "Basic Compensation" shall mean the regular rate of salary or wages in effect during a Purchase Period, before any deductions or withholdings, and including overtime, bonuses and sales commissions, but excluding amounts paid in reimbursement of expenses.
- (e) "Board of Directors" shall mean the Board of Directors of Mercury Computer Systems, Inc.
- (f) "Code" shall mean the Internal Revenue Code of 1986, as amended.
- (g) "Committee" shall mean the Compensation Committee appointed by the Board of Directors.
- (h) "Common Stock" shall mean shares of the Company's common stock, \$.01 par value per share.
- (i) "Eligible Employees" shall mean all persons employed by the Company or its Subsidiaries, but excluding:
 - (1) Persons whose customary employment is less than twenty hours per week or five months or less per year; and

- (2) Persons who are deemed for purposes of Section 423(b)(3) of the Code to own stock possessing 5% or more of the total combined voting power or value of all classes of stock of the Company or a subsidiary.

For purposes of the Plan, employment will be treated as continuing intact while a Participant is on military leave, sick leave, or other bona fide leave of absence, for up to 90 days or so long as the Participant's right to re-employment is guaranteed either by statute or by contract, if longer than 90 days.

- (j) "Exercise Date" shall mean the last day of a Purchase Period; provided, however, that if such date is not a business day, "Exercise Date" shall mean the immediately preceding business day.
- (k) "Participant" shall mean an Eligible Employee who elects to participate in the Plan under Section 6 hereunder.
- (l) There shall be two "Purchase Periods" in each full calendar year during which the Plan is in effect, one commencing on January 1 of each calendar year and continuing through June 30 of such calendar year, and the second commencing on July 1 of each calendar year and continuing through December 31 of such calendar year. The last Purchase Period shall commence on July 1, 2016 and end on December 31, 2016.
- (m) "Purchase Price" shall mean the lower of (i) 85% of the fair market value of a share of Common Stock for the first business day of the relevant Purchase Period, or (ii) 85% of such value on the relevant Exercise Date. If the shares of Common Stock are listed on any national securities exchange, including without limitation the Nasdaq Stock Market, the fair market value per share of Common Stock on a particular day shall be the closing price, if any, on the largest such exchange on such day, and, if there are no sales of the shares of Common Stock on such particular day, the fair market value of a share of Common Stock shall be determined by taking the weighted average of the means between the highest and lowest sales on the nearest date before and the nearest date after the particular day in accordance with Treasury Regulations Section 25.2512-2. If the shares of Common Stock are not then listed on any such exchange, the fair market value per share of Common Stock on a particular day shall be the mean between the closing "Bid" and the closing "Asked" prices, if any, as reported in the National Daily Quotation Service for such day. If the fair market value cannot be determined under the preceding sentences, it shall be determined in good faith by the Board of Directors.
- (n) "Subsidiary" shall mean any present or future corporation which (i) would be a "subsidiary corporation" of the Company as that term is defined in Section 424(f) of the Code and (ii) is designated as a participating employer in the Plan by the Board.

3. GRANT OF OPTION TO PURCHASE SHARES.

Each Eligible Employee shall be granted an option effective on the first business day of each Purchase Period to purchase shares of Common Stock. The term of the option shall be the length of the Purchase Period. The number of shares subject to each option shall be the quotient

of the aggregate payroll deductions in the Purchase Period authorized by each Participant in accordance with Section 6 divided by the Purchase Price, but in no event greater than 833 shares per option, or such other number as determined from time to time by the Board of Directors or the Committee (the "Share Limitation"). Notwithstanding the foregoing, no employee shall be granted an option which permits his right to purchase shares under the Plan to accrue at a rate which exceeds in any one calendar year \$25,000 of the fair market value of the Common Stock as of the date the option to purchase is granted.

4. SHARES.

There shall be 800,000 shares of Common Stock reserved for issuance to and purchase by Participants under the Plan, subject to adjustment as herein provided. The shares of Common Stock subject to the Plan shall be either shares of authorized but unissued Common Stock or shares of Common Stock reacquired by the Company and held as treasury shares. Shares of Common Stock not purchased under an option terminated pursuant to the provisions of the Plan may again be subject to options granted under the Plan.

The aggregate number of shares of Common Stock which may be purchased pursuant to options granted hereunder, the number of shares of Common Stock covered by each outstanding option, and the purchase price for each such option shall be appropriately adjusted for any increase or decrease in the number of outstanding shares of Common Stock resulting from a stock split or other subdivision or consolidation of shares of Common Stock or for other capital adjustments or payments of stock dividends or distributions or other increases or decreases in the outstanding shares of Common Stock effected without receipt of consideration by the Company.

5. ADMINISTRATION.

The Plan shall be administered by the Board of Directors or the Compensation Committee appointed from time to time by the Board of Directors. The Board of Directors or the Committee, if one has been appointed, is vested with full authority to make, administer and interpret such equitable rules and regulations regarding the Plan as it may deem advisable. The Board of Directors', or the Committee's, if one has been appointed, determinations as to the interpretation and operation of the Plan shall be final and conclusive. No member of the Board of Directors or the Committee shall be liable for any action or determination made in good faith with respect to the Plan or any option granted under the Plan.

6. ELECTION TO PARTICIPATE.

An Eligible Employee may elect to become a Participant in the Plan for a Purchase Period by completing a "Stock Purchase Agreement" form prior to the first day of the Purchase Period for which the election is made. Such Stock Purchase Agreement shall be in such form as shall be determined by the Board of Directors or the Committee. The election to participate shall be effective for the Purchase Period for which it is made. There is no limit on the number of Purchase Periods for which an Eligible Employee may elect to become a Participant in the Plan. In the Stock Purchase Agreement, the Eligible Employee shall authorize regular payroll deductions of any full percentage of his Basic Compensation, but in no event less than one percent (1%) nor more than ten percent (10%) of his Basic Compensation, not to exceed \$25,000 per year. An Eligible Employee may not change his authorization except as otherwise provided in Section 9. Options granted to Eligible Employees who have failed to execute a Stock Purchase Agreement within the time periods prescribed in the Plan will automatically lapse.

7. EMPLOYEE STOCK PURCHASE AGREEMENT.

An Employee Stock Purchase Account will be established for each Participant in the Plan for bookkeeping purposes, and payroll deductions made under Section 6 will be credited to such Accounts. However, prior to the purchase of shares in accordance with Section 8 or withdrawal from or termination of the Plan in accordance with provisions hereof, the Company may use for any valid corporate purpose all amounts deducted from a Participant's wages under the Plan and credited for bookkeeping purposes to his Account.

The Company shall be under no obligation to pay interest on funds credited to a Participant's Account, whether upon purchase of shares in accordance with Section 8 or upon distribution in the event of withdrawal from or termination of the Plan as herein provided.

8. PURCHASE OF SHARES.

Each Eligible Employee who is a Participant in the Plan automatically and without any act on his part will be deemed to have exercised his option on each Exercise Date to the extent that the balance then in his Account under the Plan is sufficient to purchase at the Purchase Price whole shares of the Common Stock subject to his option, subject to the Share Limitation and the Section 423(b)(8) limitation described in Section 3. Any balance remaining in the Participant's Account shall be retained in the Participant's Account and added to the aggregate payroll deductions during the next Purchase Period for purposes of determining the number of shares which may be acquired by such Participant pursuant to Section 3, unless a refund is requested by the Participant. No interest shall be paid on the balance remaining in any Participant's Account.

9. WITHDRAWAL.

A Participant who has elected to authorize payroll deductions for the purchase of shares of Common Stock may cancel his election by written notice of cancellation ("Cancellation") delivered to the office or person designated by the Company to receive Stock Purchase Agreements, but any such notice of Cancellation must be so delivered not later than ten (10) days before the relevant Exercise Date.

A Participant will receive in cash, as soon as practicable after delivery of the notice of Cancellation, the amount credited to his Account. Any Participant who so withdraws from the Plan may again become a Participant at the start of the next Purchase Period in accordance with Section 6.

Upon dissolution or liquidation of the Company every option outstanding hereunder shall terminate, in which event each Participant shall be refunded the amount of cash then in his Account. If the Company shall at any time merge into or consolidate with another corporation, the holder of each option then outstanding will thereafter be entitled to receive at the next Exercise Date, upon exercise of such option and for each share as to which such option was exercised, the securities or property which a holder of one share of Common Stock was entitled upon and at such time of such merger or consolidation. In accordance with this paragraph and this Plan, the Board of Directors or Compensation Committee, if any, shall determine the kind or amount of such securities or property which such holder of an option shall be entitled to receive. A sale of all or substantially all of the assets of the Company shall be deemed a merger or consolidation for the foregoing purposes.

10. ISSUANCE OF STOCK CERTIFICATES.

The shares of Common Stock purchased by a Participant shall, for all purposes, be deemed to have been issued and sold at the close of business on the Exercise Date. Prior to that date none of the rights or privileges of a shareholder of the Company, including the right to vote or receive dividends, shall exist with respect to such shares.

Within a reasonable time after the Exercise Date, the Company shall notify the transfer agent and registrar of the Common Stock of the Participant's ownership of the number of shares of Common Stock purchased by a Participant for the Purchase Period, which shall be registered either in the Participant's name or jointly in the names of the Participant and his spouse with right of survivorship as the Participant shall designate in his Stock Purchase Agreement. Such designation may be changed at any time by filing notice thereof with the party designated by the Company to receive such notices.

11. TERMINATION OF EMPLOYMENT.

- (a) Upon a Participant's termination of employment for any reason, other than death, no payroll deduction may be made from any compensation due him and the entire balance credited to his Account shall be automatically refunded, and his rights under the Plan shall terminate.
- (b) Upon the death of a Participant, no payroll deduction shall be made from any compensation due him at time of death, the entire balance in the deceased Participant's Account shall be paid in cash to the Participant's designated beneficiary, if any, under a group insurance plan of the Company covering such employee, or otherwise to his estate, and his rights under the Plan shall terminate.

12. RIGHTS NOT TRANSFERABLE.

The right to purchase shares of Common Stock under this Plan is exercisable only by the Participant during his lifetime and is not transferable by him. If a Participant attempts to transfer his right to purchase shares under the Plan, he shall be deemed to have requested withdrawal from the Plan and the provisions of Section 9 hereof shall apply with respect to such Participant.

13. NO GUARANTEE OF CONTINUED EMPLOYMENT.

Granting of an option under this Plan shall imply no right of continued employment with the Company for any Eligible Employee.

14. NOTICE.

Any notice which an Eligible Employee or Participant files pursuant to this Plan shall be in writing and shall be delivered personally or by mail addressed to Mercury Computer Systems, Inc., 199 Riverneck Road, Chelmsford, MA 01824, Attn: ESPP Administrator. Any notice to a Participant or an Eligible Employee shall be conspicuously posted in the Company's principal office or shall be mailed addressed to the Participant or Eligible Employee at the address designated in the Stock Purchase Agreement or in a subsequent writing.

15. APPLICATION OF FUNDS.

All funds deducted from a Participant's wages in payment for shares purchased or to be purchased under this Plan may be used for any valid corporate purpose provided that the

Participant's Account shall be credited with the amounts of all payroll deductions as provided in Section 7.

16. GOVERNMENT APPROVALS OR CONSENTS.

This Plan and any offering and sales to Eligible Employees under it are subject to any governmental approvals or consents that may be or become applicable in connection therewith. Subject to the provisions of Section 17, the Board of Directors of the Company may make such changes in the Plan and include such terms in any offering under this Plan as may be necessary or desirable, in the opinion of counsel, to comply with the rules or regulations of any governmental authority, or to be eligible for tax benefits under the Code or the laws of any state.

17. AMENDMENT OF THE PLAN.

The Board of Directors may, without the consent of the Participants, amend the Plan at any time, provided that no such action shall adversely affect options theretofore granted hereunder, and provided that no such action by the Board of Directors without approval of the Company's shareholders may (a) increase the total number of shares of Common Stock which may be purchased by all Participants, (b) change the class of employees eligible to receive options under the Plan, or (c) make any changes to the Plan which require shareholder approval under applicable law or regulations, including Section 423 of the Code and the regulations promulgated thereunder.

For purposes of this Section 17, termination of the Plan by the Board of Directors pursuant to Section 18 shall not be deemed to be an action which adversely affects options theretofore granted hereunder.

18. TERM OF THE PLAN.

The Plan shall become effective on the Effective Date, provided that it is approved within twelve months after adoption by the Board of Directors by the affirmative vote of holders of a majority of the stock of the Company present or represented and entitled to vote at a duly held shareholders' meeting. The Plan shall continue in effect through December 31, 2016, provided, however, that the Board of Directors shall have the right to terminate the Plan at any time, but such termination shall not affect options then outstanding under the Plan. It will terminate in any case when all or substantially all of the unissued shares of Common Stock reserved for the purposes of the Plan have been purchased. If at any time shares of Common Stock reserved for the purposes of the Plan remain available for purchase but not in sufficient number to satisfy all then unfilled purchase requirements, the available shares shall be apportioned among Participants in proportion to the amount of payroll deductions accumulated on behalf of each Participant that would otherwise be used to purchase Common Stock and the Plan shall terminate. Upon such termination or any other termination of the Plan, all payroll deductions not used to purchase stock will be refunded, without interest.

19. NOTICE TO COMPANY OF DISQUALIFYING DISPOSITION.

By electing to participate in the Plan, each Participant agrees to notify the Company in writing immediately after the Participant transfers Common Stock acquired under the Plan, if such transfer occurs within two years after the first business day of the Purchase Period in which such Common Stock was acquired. Each Participant further agrees to provide any information about such a transfer as may be requested by the Company or any subsidiary corporation in order to assist it in complying with the tax laws. Such dispositions generally are treated as

“disqualifying dispositions” under Sections 421 and 424 of the Code, which have certain tax consequences to Participants and to the Company and its participating Subsidiaries. The Participant acknowledges that the Company may send a Form W-2, or substitute therefor, as appropriate, to the Participant with respect to any income recognized by the Participant upon a disqualifying disposition of Common Stock.

20. WITHHOLDING OF ADDITIONAL INCOME TAXES.

By electing to participate in the Plan, each Participant acknowledges that the Company and its participating Subsidiaries are required to withhold taxes with respect to the amounts deducted from the Participant’s compensation and accumulated for the benefit of the Participant under the Plan and each Participant agrees that the Company and its participating Subsidiaries may deduct additional amounts from the Participant’s compensation, when amounts are added to the Participant’s account, used to purchase Common Stock or refunded, in order to satisfy such withholding obligations.

22. GENERAL.

Whenever the context of this Plan permits, the masculine gender shall include the feminine and neuter genders.

Approved by the Board of Directors: November 19, 1997; June 15, 1998; June 11, 1999; April 17, 2001; June 20, 2005; July 24, 2006

Approved by the Shareholders: December 18, 1997; November 13, 2006