

**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): June 6, 2008**

**Mercury Computer Systems, Inc.**

(Exact Name of Registrant as Specified in Charter)

**Massachusetts**  
(State or Other Jurisdiction  
of Incorporation)

**000-23599**  
(Commission  
File Number)

**04-2741391**  
(IRS Employer  
Identification No.)

**199 Riverneck Road, Chelmsford, Massachusetts**  
(Address of Principal Executive Offices)

**01824**  
(Zip Code)

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

**Not Applicable**

(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 Certain Officers; Compensatory Arrangements of Certain Officers.**

On June 6, 2008, Mark F. Skalabrin notified Mercury Computer Systems, Inc. (the "Company") that he will resign his position as Senior Vice President, Application Acceleration to pursue other business interests. Mr. Skalabrin has agreed to remain with the Company until the completion of a customer-related project for the Company, which is expected to occur in June or July of 2008. Mr. Skalabrin's resignation will be effective seven (7) days following the completion of such project.

---

**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 thereunto duly authorized.

**MERCURY COMPUTER SYSTEMS, INC.**

Dated: June 10, 2008

By: /s/ Alex A. Van Adzin  
Alex A. Van Adzin  
Vice President, General Counsel,  
and Corporation Secretary