

Mail Stop 03-06

May 3, 2005

Robert E. Hult
Senior Vice President and Chief Financial Officer
Mercury Computer Systems, Inc.
199 Riverneck Road
Chelmsford, MA 01824

Re: Mercury Computer Systems, Inc.
Form 10-K for the fiscal year ended June 30, 2004
Filed September 10, 2004
Form 10-Q for the quarter ended December 31, 2004
File No. 0-23599

Dear Mr. Hult:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Martin F. James
Senior Assistant Chief Accountant