



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

Mail Stop 6010

January 30, 2008

Via Facsimile and U.S. Mail

Mr. Randall Gausman
Chief Financial Officer
Rae Systems Inc.
3775 North First Street
San Jose, CA 95134

**Re: Rae Systems Inc.
Form 10-K for the Year Ended December 31, 2006
Form 10-Q for the Quarter Ended September 30, 2007
File No. 001-31783**

Dear Mr. Gausman:

We have reviewed your filings and your response letter dated December 27, 2007 and we have the following comment. We have limited our review of your filing to those items we have addressed in our comment. Where indicated, we think you should revise your documents in future filings in response to this comment. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In our comment, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-Q for the Quarter Ended September 30, 2007

Item I. Financial Information, page 3

Notes to Condensed Consolidated Financial Statements, page 6

Note 15. Discontinued Operations, page 15

1. We note from your response to prior comment 5 that you ceased operations of your mobile DVR business on August 28, 2007 in order to reduce expenses. We further note that you did not file pro forma financial statements on Form 8-K relating to the disposition of this business. Please tell us how you evaluated this disposition for significance under Rule 1-02(w) of Regulation S-X for purposes of filing the financial statements required by Item 9.01(b) of Form 8-K.

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your response to our comment and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin Vaughn
Branch Chief