

Mail Stop 3720

June 15, 2006

Via U.S. Mail and Fax (408.522.2800)

James E. Doyle
Vice President of Finance and Chief Financial Officer
Applied Signal Technology, Inc.
400 West California Avenue
Sunnyvale, CA 94086

RE: **Form 10-K for the fiscal year ended October 31, 2005**
Filed January 17, 2006
Form 10-Q for the quarter ended January 27, 2006
Filed March 7, 2006

Dear Mr. Doyle:

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

Sincerely,

Larry Spigel
Assistant Director