



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

March 9, 2010

**via U.S. mail and facsimile**

Mark O. Eisele, CFO  
Applied Industrial Technologies, Inc.  
1 Applied Plaza  
Cleveland, Ohio 44115

**RE: Applied Industrial Technologies, Inc.  
Form 10-K for the Fiscal Year Ended June 30, 2009  
Filed August 19, 2009  
Form 10-Q for the Fiscal Quarter Ended September 30, 2009 and  
December 31, 2009  
Definitive Proxy Statement on Schedule 14A  
Filed September 4, 2009  
File No. 1-2299**

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

If you have any further questions regarding our review of your filings, please direct them to Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters. For other comments, please contact Chambre Malone, Staff Attorney, at (202) 551-3262, or in her absence, Andrew Schoeffler, Senior Staff Attorney, at (202) 551-3748.

Sincerely,

Terence O'Brien  
Accounting Branch Chief