



DIVISION OF  
CORPORATION FINANCE

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

January 17, 2013

Via E-mail

Thomas T. McEntire  
Geospace Technologies Corporation  
Chief Financial Officer  
7007 Pinemont Drive  
Houston, Texas 77040-6601

**Re: Geospace Technologies Corporation  
Form 10-K for the Fiscal Year Ended September 30, 2012  
Filed December 12, 2012  
File No. 001-13601**

Dear Mr. McEntire:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Brian Cascio

Brian Cascio  
Accounting Branch Chief

cc: James Y'Barbo (via E-mail)