



DIVISION OF  
CORPORATION FINANCE

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

September 27, 2012

Mr. Kevin Purcell  
Chief Financial Officer  
Aerosonic Corporation  
1212 North Hercules Avenue  
Clearwater, Florida 33765

**Re: Aerosonic Corporation**  
**Form 10-K for the year ended January 31, 2012**  
**Filed April 30, 2012**  
**Form 10-K for the year ended January 31, 2011**  
**Filed May 2, 2011**  
**File No. 001-11750**

Dear Mr. Purcell:

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/ David R. Humphrey

David R. Humphrey  
Accounting Branch Chief