



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