



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

Mail Stop 3720

March 19, 2007

Mr. Joseph J. Euteneuer
Executive Vice President and Chief Financial Officer
XM Satellite Radio Holdings, Inc.
1500 Eckington Place, NE
Washington, D.C. 20002-2194

Re: XM Satellite Radio Holdings, Inc.
XM Satellite Radio, Inc.
Form 10-K for Fiscal Year Ended December 31, 2006
Filed March 1, 2007
File Nos. 0-27441 and 333-39178

Dear Mr. Euteneuer:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Please address the following comments in future filings. If you disagree, we will consider your explanation as to why our comment is inapplicable or a future revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Results of Operations, page 40

1. Please see "Adjusted operating loss." We understand that you will only present this non-GAAP measure effective March 31, 2007. Please discuss the usefulness of the measure to investors and, at a minimum, the following:
 - the manner in which management uses adjusted operating loss to conduct or evaluate the business;

- the economic substance behind management's decision to use such a measure;
- the material limitations associated with the use of the non-GAAP measure as compared to the use of the most directly comparable GAAP measure, net income (loss); and
- the manner in which management compensates for these limitations when using the non-GAAP financial measure.

We believe your discussion of the material limitations of the non-GAAP measure you present should address each item excluded from the measure, discuss why management believes it is useful and relevant to exclude those items and explain why excluding each item results in the measure having material limitations. Please provide us with your proposed disclosure.

Gross profit on subscription revenue, page 42

2. Please delete the gross profit discussion since you are excluding costs of satellite and terrestrial, broadcast and operations, programming and content and depreciation and amortization. It appears to us that these costs are directly related to the generation of your subscription revenues.

(2) Accounting Estimates, page F-13

3. Please expand the discussion under the section, "Critical Accounting Estimates," on page 56 to address all items listed here that require significant estimates or tell us why an expanded discussion is not necessary. Further, provide a detailed analysis of your assumptions for specific sensitivity to change, based on other outcomes that are reasonably likely to occur and would have a material effect on financial condition or operating performance and provide quantitative as well as qualitative disclosure. You should address factors such as how you arrived at your estimates, how accurate your estimates/assumptions have been in the past, how much the estimates/assumption have changed in the past, and whether the estimates/assumptions are reasonably likely to change in the future. For example, we note that you place particular emphasis on your forecasted cash flows to value your satellite system assets. If your future cash flow projections were to change based on declines in revenues or increases in certain expenses, you should quantify the related impact on your satellite system assets.

(20) Sale-leaseback Transaction, page F-58

4. Please tell us how you accounted for your sale-leaseback transaction with respect to the transponders on the XM-4. Refer to your basis in the accounting literature.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detail letters greatly facilitate our review. Please submit your cover letter over EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 or Kyle Moffatt, Accountant Branch Chief, at (202) 551-3836 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel
Assistant Director