

Mail Stop 3561

April 2, 2010

Mr. David M. Engert
President and Chief Executive Officer
NightHawk Radiology Holdings, Inc.
4900 N. Scottsdale Road, 6th Floor
Scottsdale, Arizona 85251

**Re: NightHawk Radiology Holdings, Inc.
Form 10-K for Fiscal Year Ended December 31, 2009
Filed February 25, 2010
Form 8-K Filed February 17, 2010
File No. 000-51786**

Dear Mr. Engert:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a 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 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 8-K Filed February 17, 2010
Consolidated Statements of Operations – Reconciliation between GAAP and Adjusted Net Income

1. We note that you have presented an alternative income statement which excludes certain items recorded in your GAAP-basis Statements of Operations. This represents a full non-GAAP income statement which does not appear to be consistent with Regulation G. Please confirm in future Exchange Act filings you will remove such presentation or tell us why you believe it is appropriate. For

additional guidance, refer to Question 102.10 of the Compliance & Disclosure Interpretations regarding Non-GAAP Financial Measures.

2. We note that you have identified “free cash flow” as a non-GAAP measure in your earnings press releases and in your earnings conference calls. However, it does not appear that the presentation of this non-GAAP measure in your Form 8-K is accompanied by a clearly understandable reconciliation to the most directly comparable GAAP measure (i.e. cash flows from operating activities). With a view toward future disclosure, please provide us with a tabular reconciliation of the differences between this non-GAAP measure and the most directly comparable GAAP measure. Refer to Regulation G and Question 102.07 of the Compliance & Disclosure Interpretations regarding Non-GAAP Financial Measures.
3. We note that management has emphasized the importance of certain non-GAAP measures such as “free cash flow” and “adjusted net income.” As management has emphasized the importance of these non-GAAP measures to investors, please tell us why they are not presented in your most recent Form 10-K.

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and 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 filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

David Engert
NightHawk Radiology Holdings, Inc.
April 2, 2010
Page 3

- 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 filing or in response to our comments on your filing.

You may contact Blaise Rhodes, Staff Accountant, at (202) 551-3774 or Ethan Horowitz, at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Tia Jenkins
Senior Assistant Chief Accountant
Office of Beverages, Apparel and
Health Care Services