

Mail Stop 3561

February 4, 2008

Atlas Air Worldwide Holdings, Inc.
Jason Grant- Chief Financial Officer
2000 Westchester Avenue
Purchase, New York 10577

**Re: Atlas Air Worldwide Holdings, Inc.
Form 10-K for the year ended December 31, 2006
Filed March 15, 2007
File No. 001-16545**

Dear Mr. Grant:

We have reviewed your response letter dated January 10, 2008 and have the following comments. Where indicated, we think you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are not applicable or a revision is unnecessary. We also ask you to provide us with supplemental information so we may better understand your disclosure. Please be as detailed as necessary. We look forward to working with you in these respects and welcome any questions you may have about any aspects of our review.

Form 10-K for the fiscal year ended December 31, 2006

Item 8- Financial Statements and Supplementary Data

Consolidated Balance Sheets, page 50

1. We note your response to our prior comment 1. Please quantify for us the balance of prepaid maintenance related to power by the hour maintenance contracts and the balance required under aircraft financing agreements as of December 31, 2006 and 2005. With respect to power by the hour maintenance contracts, you state that the contracts are limited in scope and do not represent a full transfer of risk to the service provider. Please describe for us the general scope of your power by the hour contracts and the limitations in scope to which you refer. In addition, with regard to the lack of full transfer of risk to the service provider, please describe for us the risk that you retain.

Note 6- Debt, page 67

2. We note your response to our prior comment 6. Based on your response, it appears you interpreted our comment as pertaining to the data in the first table in note 6. To clarify our previous comment, we believe you should revise the last table in note 6, which presently discloses scheduled debt maturities of \$19.8 million in 2007 and \$418.6 million for all periods subsequent to December 31, 2006, to reflect scheduled debt maturities gross of discounts. In this regard, the total of the amounts disclosed in the last table in note 6 should equal the total of the amounts disclosed in the "Debt and capital lease obligations" line in the contractual obligations table (\$503.9 million as of December 31, 2006) on page 43 in MD&A. Additionally, it does not appear the table proposed in your last response is required.

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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
- 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.

Jason Grant- Chief Financial Officer
Atlas Air Worldwide Holdings, Inc.
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You may contact Juan Migone at (202) 551-3312 or Lyn Shenk, at (202) 551-3380 if you have questions regarding comments on the financial statements and related matters. Please contact the undersigned at (202) 551-3816 with any other questions.

Sincerely,

Joseph Foti
S.A.C.A.