Mail Stop 3561

December 17, 2007

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 filing and have the following comments. We think you should revise your future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

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

## Item 8- Financial Statements and Supplementary Data

## Consolidated Balance Sheets, page 50

1. Due to the materiality, please revise your filing to include an accounting policy related your prepaid maintenance account. Furthermore, tell us the reasons you maintain such a large prepaid maintenance balance.

## Consolidated Statements of Operations, page 51

2. Please revise to include weighted-average shares used in computing income per share.

# Consolidated Statements of Cash Flows, page 52

- 3. We note that you include accretion of debt discount as a non-cash adjustment to reconcile net income to net cash provided by operating activities. Please tell us whether this accretion is recognized as interested expense in the Statement of Operations and, if so, please confirm to us that upon repayment, such amounts will be similarly included in the determination of net cash provided by operating activities in accordance with paragraph 23(d) of SFAS 95.
- 4. Please revise to include disclosures about amounts of interest and taxes paid as well as all investing and financing activities that affect assets and liabilities, but that do not result in cash payments or receipts. Refer to paragraphs 29 and 32 of SFAS 95.

# Note 3- Summary of Significant Accounting Policies

### Revenue Recognition, page 58

5. We note from the Business section that you recognize ACMI revenue as block hours are operated or according to the minimum revenue guarantee defined in the contract. Please revise your accounting policy on page 58 to reflect your policy with regard to these minimum revenue guarantees. In addition, please quantify for us and disclose in your filing, to the extent it is material to your results of operations, minimum guarantee amounts recognized as revenues for which no service was provided. Jason Grant- Chief Financial Officer Atlas Air Worldwide Holdings, Inc. December 17, 2007 Page 3

### Note 6- Debt, page 67

6. Please revise your table of scheduled debt maturities to reflect balances gross of discounts, as this table is intended to reflect future payments.

### Form 10-Q for the quarterly period ended September 30, 2007

#### Item 1- Condensed Consolidated Financial Statements

#### Note 10- DHL Investment, page 12

7. We note that you recorded a deferred gain of \$151.4 million in connection with your DHL agreement and plan to recognize it upon the commencement date. However, section 5.4.1.3 of your Blocked Space Agreement dated June 28, 2007, stipulates significant liquidated damages in certain circumstances. In this regard, tell us what consideration you gave to the liquidated damages provisions in your Blocked Space Agreement when arriving at the conclusion that the entire \$151.4 million should be recognized as a gain upon the commencement date. In addition, please tell us and disclose how the gain was determined and whether you gave consideration to allocation a portion of the proceeds to the capacity purchase agreement.

\* \* \* \* \*

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.

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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 Juan Migone at (202) 551-3312 or the undersigned at (202) 551-3211 if you have questions regarding our comment on the financial statements or any related matters.

Sincerely,

David R. Humphrey Branch Chief