

Mail Stop 3561

September 14, 2006

Via U.S. Mail

Jeffrey L. Turner
Chief Executive Officer
Spirit AeroSystems Holdings, Inc.
3801 South Oliver
Wichita, KS 67210

**Re: Spirit AeroSystems Holdings, Inc.
Amendment no. 1 to Registration Statement on Form S-1
Filed August 29, 2006
File No. 333-135486**

Dear Mr. Turner,

We have reviewed your filing 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Registration Statement Cover Page

1. We note your response to prior comment 3 of our letter dated July 28, 2006, however, please revise to separately list the shares offered by the selling shareholders in the body of your fee table.

Industry and Market Data, page iv

2. We note your response to prior comment 5 and reissue it, in part. Please tell us whether the Teal Group report to which you refer is publicly available for free or for a nominal cost, quantifying the amount of the cost, if any. If the report is not available for free or for a nominal cost, please either attach a consent from the Teal Group to your next amendment or revise to attribute this information to the company, based on its own research.

Summary, page 1

Overview, page 1

3. We note your response to prior comment 8, however, please provide us with support for your statement that you are the “largest independent non-OEM designer and manufacturer of aerostructures in the world.” Alternatively, revise to state that it is your belief and briefly discuss the basis of your belief.

Summary Risk Factors, page 6

4. While we note that you have added summary risk factors in response to prior comment 6, you should instead balance the disclosure regarding your competitive strengths in the portion of the summary in which you discuss such strengths in order to make it easier for investors to evaluate your business. Please revise accordingly.

Summary Historical and Pro Forma Financial Data, page 9

5. You present EBITDA and Adjusted EBITDA as non-GAAP measures of operating performance because you believe they are useful indicators of your operating performance and because they are frequently used by securities analysts. You state that EBITDA is reflective of changes in pricing decisions, cost controls, and other factors that affect your operating performance, but it appears that operating income is already reflective of these factors. In addition, the fact that a non-GAAP measure is used by or useful to securities analysts cannot be the sole support for presenting the non-GAAP financial measure. See footnote 44 to FR-65. Please tell us, and revise to disclose, the substantive reason specific to you that demonstrates the usefulness to investors of disregarding the recurring costs included in your non-GAAP measures when evaluating your performance, or in the alternative, please revise to remove your presentation of EBITDA and Adjusted EBITDA in the prospectus. See Item 10(e)(1)(i)(C) of Regulation S-K and “Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures” prepared by Staff Members of the Division of Corporation Finance, Answer 8, for guidance. We do not object to you highlighting the amount of non-recurring transitional expense associated with establishing a stand-alone business.

Certain Relationships and Related Party Transactions, page 114

6. Please refer to prior comment 38. Please indicate by footnote or otherwise the amounts listed in the table that are duplicative, as more than one holder could be deemed the beneficial owner of certain shares listed.

Underwriting, page 133

7. We note your response to prior comment 39 that you will identify the selling stockholders in a future amendment and will supplementally advise us of whether any of the selling stockholders are registered broker-dealers or affiliated with a broker-dealer. Please revise here to disclose that the selling stockholders “may be deemed” underwriters.

Notes to the Consolidated Financial Statements, page F-7

Note 2. Summary of Significant Accounting Policies, page F-7

8. We have considered your response to prior comment 43. We continue to believe that you should revise to disclose a description of the factors that you believe contributed to a purchase price that was significantly less than the fair value of net assets acquired for both the Boeing Wichita and BAE Systems Limited acquisitions. We analogize to the information required by paragraph 51 (b) of FAS 141.

Note 3. Inventories, page F-12

9. We note your response to prior comment 45. Please specifically confirm to us that the \$19.9 million of deferred production costs related to new products for which you had not yet had time to become efficient in production. Please also revise your policy to clarify that costs are deferred only to the extent the amount of actual or expected excess-over-average is reasonably expected to be fully offset by lower than average costs in future periods of a contract.

Note 11. Stock Compensation, page F-26

10. We note your response to prior comment 46. You state no major events occurred between your initial capitalization and December 29, 2005 that would significantly increase the value of your stock. However, we cannot concur that your purchase of Boeing Wichita for approximately one-half of its fair value on June 16, 2005, which changed you from a non-operating entity to one with ownership of a business with 75 years of operating history and expertise in the aerostructures industry, was not a major event. We note you assumed the entire 130 percent of appreciation, from \$10 at initial capitalization to \$23 at December 29, 2005, occurred only after August 15, 2005, a date by which you had already issued the bulk of your 2005 equity awards. You state August 15, 2005 was the date on which appreciation began. Aside from August 15, 2005 being chosen arbitrarily because it was the midpoint of the quarter, it is not clear why you would assume appreciation occurred only subsequent to this date. Further, although you assume

your stock value remained constant through August 15, 2005 because you claimed no major events occurred that would drive a new valuation, you do not cite any major events occurring subsequent to August 15, 2005 that would have significantly increased the fair value of your stock during the remainder of the year either. You also say you viewed Boeing's stock price as a benchmark for the fair value of your stock. Although Boeing's stock price appears to decline in the graph you provided to us because you presented the dates in an unusual, reverse chronological order, we note the price actually increased over 6% during the third quarter of 2005. However, we do not believe this increase in Boeing's stock price should be a primary consideration in valuing your equity issuances. And while you cite several factors, such as uncertainties surrounding labor negotiations, production performance, and the ability to generate cost savings, as causing the purchase price for Boeing Wichita to be less than its then fair value, fair value is the appropriate basis for valuing your equity awards. We believe the excess of fair value over cost of net assets acquired resulting from the Boeing acquisition immediately increased the fair value of your equity by a similar amount and provided a floor for valuation of your equity from that date forward. Therefore, we believe you should amend your financial statements to restate your accounting for the fair value of share-based payments accordingly.

11. We note your response to prior comment 48. You state you used a discount factor of 30% to 40% to account for the lack of public market and the limited financial history, size, and lack of customer diversification. Please quantify for us the specific discount factor applicable to each of these factors and supplementally tell us your basis for applying the discounts to the assumed fair value of your stock for purposes of determining compensation expense. Generally, unless justified by the specific circumstances of your business, little or no discount should be applied for, among other things, lack of marketability of the shares.

Schedule II, Valuation and Qualifying Accounts, page II-5

12. Please refer to prior comment 40. Please revise Schedule II to include the valuation allowance for bad debt and warranty.

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As appropriate, please amend the registration statement in response to these comments. 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 supplemental 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 filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Patrick Kuhn at (202) 551-3308 or Lyn Shenk at (202) 551-3380 if you have questions regarding comments on the financial statements and related matters. Please contact Rolaine Bancroft at (202) 551-3313 or me at (202) 551-3454 with any other questions.

Regards,

Sara D. Kalin
Branch Chief - Legal

cc: Mark S. Kingsley, Esq.
Kaye Scholer LLP
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