

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

Mail Stop 3561

October 17, 2017

David W. Thompson Chief Executive Officer Orbital ATK, Inc. 45101 Warp Drive Dulles, Virginia 20166

Re: Orbital ATK, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed October 2, 2017 File No. 001-10582

Dear Mr. Thompson:

We have limited our review of your filing to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Opinion of Financial Advisor, page 43

Discounted Cash Flow Analysis, page 47

1. We note your disclosure that "[f]or purposes of this analysis, the projected cash flows provided by Orbital ATK's management excluded the impact of cash pension reimbursements and contributions and annual cash flows from Orbital ATK's A350 and CRS-2 receivables, which, collectively, [you] refer to as the 'additional cash flow items,' as well as net environmental remediation payments." Please explain why such additional cash flow items were excluded from the projected cash flows for purposes of this analysis.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

David W. Thompson Orbital ATK, Inc. October 17, 2017 Page 2

You may contact Ryan Adams at (202) 551-3191 or me at (202) 551-3584 with any questions.

Sincerely,

/s/ Laura Nicholson

Laura Nicholson Special Counsel Office of Transportation and Leisure

cc: John Beckman

Hogan Lovells US LLP