

May 16, 2023

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Energy & Transportation
100 F. Street NE
Washington, D.C. 20549
Attn: Kevin Dougherty

**Re: Astra Space, Inc.
Post-Effective Amendment No. 2 to Registration Statement on Form S-1 on Form S-3
Filed: May 9, 2023
Registration No. 333-257930**

Ladies and Gentlemen:

On behalf of our client, Astra Space, Inc. (the "Company"), we hereby submit to the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") this letter setting forth the Company's response to the comment contained in the Staff's letter dated May 15, 2023, relating to the above referenced Post-Effective Amendment No. 2 to Registration Statement on Form S-1 on Form S-3 (the "Post-Effective Amendment").

Concurrently with the submission of this letter, the Company is submitting Amendment No. 1 to the Post-Effective Amendment (the "Amendment") via EDGAR to the Commission for review.

The Staff's comment is repeated below in bold and is followed by the Company's response. We have included a reference to page in the Amendment where the language addressing the comment appears. Capitalized terms used but not otherwise defined in this letter have the meanings set forth in the Amendment.

Post-Effective Amendment No. 2 to Form S-1 on Form S-3
Selling Securityholders, page 10

- Please revise to provide the information required by Item 507 of Regulation S-K, including the nature of any position, office, or other material relationship which the selling security holder has had within the past three years with the registrant or any of its predecessors or affiliates. For any entity that is a selling shareholder, please disclose the Item 507 information about any persons who have control over the selling entity and who have had a material relationship with the registrant or any of its predecessors or affiliates. Refer to Question 140.02 of Regulation S-K Compliance & Disclosure Interpretations.**

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The Company respectfully advises the Staff that it has revised footnotes 9 through 14 on page 12 of the Amendment to describe the nature of any position, office, or other material relationship which certain Selling Securityholders have had within the past three years with the Company, including with respect to applicable entities that are Selling Securityholders with persons who have control over such Selling Securityholder and who have had a material relationship with the Company during such period.

If you have any questions, please contact me at kgettman@cozen.com or 612-260-9075.

Very truly yours,

/s/ Kathryn A. Gettman

Kathryn A. Gettman
Attorney