

May 15, 2023

Chris Kemp
Chief Executive Officer and Chairman of the Board
Astra Space, Inc.
1900 Skyhawk Street
Alameda, CA 94501

Re: Astra Space, Inc.
Post-Effective

Amendment No. 2 to Form S-1 on Form S-3

Filed May 9, 2023
File No. 333-257930

Dear Chris Kemp:

We have limited our review of your registration statement 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 this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Post-Effective Amendment No. 2 to Form S-1 on Form S-3

Selling Securityholders, page 10

1. 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.

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

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action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Kevin Dougherty at (202) 551-3271, or Brad Skinner, Office Chief, at (202) 551-3489 with any other questions.

FirstName LastNameChris Kemp

Corporation Finance
Comapany NameAstra Space, Inc.

Transportation
May 15, 2023 Page 2
cc: Katheryn A. Gettman
FirstName LastName

Sincerely,

Division of

Office of Energy &