

**PROSPECTUS SUPPLEMENT NO. 19
(to Prospectus dated July 14, 2022)**

**Filed Pursuant to Rule (424)(b)(3)
Registration No. 333-257930**

ASTRA SPACE, INC.

***Primary Offering Of*
15,333,303 Shares of Class A Common Stock**

***Secondary Offering of*
189,026,575 Shares of Class A Common Stock**

This prospectus supplement amends and supplements the prospectus dated July 14, 2022 (as supplemented or amended from time to time, the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (No. 333-257930). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information contained in our Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 9, 2022 (the “Quarterly Report”). Accordingly, we have attached the Quarterly Report to this prospectus supplement.

The Prospectus and this prospectus supplement also relate to the offer and sale, from time to time, by the selling securityholders named in this prospectus (the “Selling Securityholders”), or any of their permitted transferees, of (i) up to an aggregate of 20,000,000 shares of our Class A common stock that were issued to certain investors (collectively, the “PIPE Investors”) in a private placement in connection with the closing of the Business Combination (as defined herein); (ii) 7,500,000 shares of Class A common stock issued to the Sponsor prior to Holicity’s initial public offering and registered for sale by the Selling Securityholders; (iii) up to an aggregate of 92,277,793 shares of Class A common stock that were issued to certain affiliates of Astra (collectively, the “Astra Affiliates”) pursuant to the Business Combination Agreement (as defined herein); (iv) up to an aggregate 56,239,188 shares of Class A common stock issuable upon conversion (on a one-for-one basis) of shares of our Class B common stock, par value \$0.0001 per share (“Class B Common Stock”) held by certain Selling Securityholders and (v) up to an aggregate of 7,676,261 shares of our Class A common stock issued in connection with our acquisition of Apollo Fusion, Inc. (“Apollo Fusion”), which closed on July 1, 2021 comprised of (x) 2,558,744 shares of our Class A common stock (the “Initial Apollo Shares”) issued to certain of the Selling Securityholders on July 1, 2021, in connection with our merger with Apollo Fusion, Inc. (“Apollo Fusion”) and (y) 5,117,517 additional shares of our Class A common stock (the “Additional Apollo Shares”) which may be issued to certain of the Selling Securityholders assuming (a) the achievement of all remaining performance milestones set forth in the Apollo Fusion Merger Agreement (as defined herein), (b) we elect to pay all future milestone consideration in shares of our Class A common stock as required by the terms the Apollo Fusion Merger Agreement, and (c) the per share price used to calculate the number of shares of our Class A common stock to be issued is \$11.7243, which is the same per share price used to calculate the number of Initial Shares issued to the Selling Securityholders. The Additional Shares have not been earned and are not currently outstanding. The actual number of Additional Shares issued to the selling stockholders could be materially greater or less than 5,117,517 shares of Class A common stock depending whether and to what extent the future performance milestones are met and/or the actual average closing price of our Class A common stock at the time such milestones are achieved. The Prospectus and this prospectus supplement also cover any additional securities that may become issuable by reason of share splits, share dividends or other similar transactions.

Our Class A common stock is listed on Nasdaq under the symbol “ASTR”. On November 8, 2022, the closing price of our Class A common stock was \$0.5850 per share.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

Investing in our securities involves risks that are described in the “Risk Factors” section beginning on page 13 of the Prospectus.

Neither the SEC nor any state securities commission has approved or disapproved of the securities to be issued under the Prospectus or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is November 10, 2022.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2022

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 001-39426

ASTRA SPACE, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)
1900 Skyhawk Street
Alameda, CA
(Address of principal executive offices)

85-1270303
(I.R.S. Employer
Identification No.)
94501
(Zip Code)

Registrant’s telephone number, including area code: (866) 278-7217

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, par value \$0.0001 per share	ASTR	The NASDAQ Global Select Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of November 7, 2022, the registrant had 211,926,952 shares of Class A common stock, \$0.0001 par value per share, outstanding and 55,539,188 shares of Class B common stock, \$0.0001 par value per share, outstanding.

Table of Contents

	Page
PART I.	<u>FINANCIAL INFORMATION</u>
	1
Item 1.	<u>Condensed Consolidated Financial Statements (Unaudited)</u>
	<u>Condensed Consolidated Balance Sheets</u>
	<u>Condensed Consolidated Statements of Operations</u>
	<u>Condensed Consolidated Statements of Stockholders' Equity</u>
	<u>Condensed Consolidated Statements of Cash Flows</u>
	<u>Notes to Unaudited Condensed Consolidated Financial Statements</u>
Item 2.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
Item 3.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
Item 4.	<u>Controls and Procedures</u>
PART II.	<u>OTHER INFORMATION</u>
	50
Item 1.	<u>Legal Proceedings</u>
Item 1A.	<u>Risk Factors</u>
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>
Item 3.	<u>Defaults Upon Senior Securities</u>
Item 4.	<u>Mine Safety Disclosures</u>
Item 5.	<u>Other Information</u>
Item 6.	<u>Exhibits</u>
<u>Signatures</u>	<u>Signatures</u>

PART I—FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (unaudited)

ASTRA SPACE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (In thousands, except share data) (Unaudited)

	As of	
	September 30, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 67,608	\$ 325,007
Marketable securities	82,936	—
Trade accounts receivable	4,923	1,816
Inventories	5,174	7,675
Prepaid and other current assets	7,609	12,238
Total current assets	168,250	346,736
Non-current assets:		
Property, plant and equipment, net	20,048	66,316
Right-of-use asset	14,909	9,079
Goodwill	—	58,251
Intangible assets, net	10,699	17,921
Other non-current assets	1,999	721
Total assets	\$ 215,905	\$ 499,024
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 9,347	\$ 9,122
Operating lease obligation, current portion	3,903	1,704
Contingent consideration, current portion	32,420	—
Accrued expenses and other current liabilities	27,382	29,899
Total current liabilities	73,052	40,725
Non-current liabilities:		
Operating lease obligation, net of current portion	10,974	7,180
Contingent consideration, net of current portion	10,530	13,700
Other non-current liabilities	7,277	899
Total liabilities	101,833	62,504
Commitments and Contingencies (Note 11)		
STOCKHOLDERS' EQUITY		
Founders convertible preferred stock, \$0.0001 par value; 1,000,000 shares authorized; none issued and outstanding as of September 30, 2022 and December 31, 2021	—	—
Class A common stock, \$0.0001 par value; 400,000,000 shares authorized; 211,824,567 and 207,451,107 shares issued and outstanding as of September 30, 2022 and December 31, 2021, respectively	22	22
Class B common stock, \$0.0001 par value; 65,000,000 shares authorized; 55,539,188 and 55,539,189 shares issued and outstanding as of September 30, 2022 and December 31, 2021, respectively	6	6
Additional paid in capital	1,889,759	1,844,875
Accumulated other comprehensive loss	(202)	—
Accumulated deficit	(1,775,513)	(1,408,383)
Total stockholders' equity	114,072	436,520
Total liabilities and stockholders' equity	\$ 215,905	\$ 499,024

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ASTRA SPACE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenues				
Launch services	\$ —	\$ —	\$ 5,899	\$ —
Space products	2,777	—	3,471	—
Total revenues	2,777	—	9,370	—
Cost of revenues				
Launch services	—	—	28,193	—
Space products	1,071	—	1,337	—
Total cost of revenues	1,071	—	29,530	—
Gross income (loss)	1,706	—	(20,160)	—
Operating expenses:				
Research and development	32,821	21,724	111,546	44,159
Sales and marketing	4,052	1,090	13,452	2,229
General and administrative	19,222	19,730	60,816	50,712
Impairment expense	75,116	—	75,116	—
Goodwill impairment	58,251	—	58,251	—
Loss on change in fair value of contingent consideration	11,949	—	29,249	—
Total operating expenses	201,411	42,544	348,430	97,100
Operating loss	(199,705)	(42,544)	(368,590)	(97,100)
Interest income (expense), net	616	18	1,146	(1,194)
Other (expense) income, net	(25)	25,895	314	25,177
Loss on extinguishment of convertible notes	—	—	—	(131,908)
Loss on extinguishment of convertible notes attributable to related parties	—	—	—	(1,875)
Loss before taxes	(199,114)	(16,631)	(367,130)	(206,900)
Income tax (benefit) provision	—	(383)	—	(383)
Net loss	<u>\$ (199,114)</u>	<u>\$ (16,248)</u>	<u>\$ (367,130)</u>	<u>\$ (206,517)</u>
Adjustment to redemption value on Convertible Preferred Stock	—	—	—	(1,011,726)
Net loss attributable to common stockholders	<u>\$ (199,114)</u>	<u>\$ (16,248)</u>	<u>\$ (367,130)</u>	<u>\$ (1,218,243)</u>
Net loss per share:				
Weighted average number of shares of Class A common stock outstanding – basic and diluted	210,788,116	201,080,003	209,317,361	79,784,524
Net loss per share of Class A common stock – basic and diluted	\$ (0.75)	\$ (0.06)	\$ (1.39)	\$ (9.39)
Weighted average number of shares of Class B common stock outstanding – basic and diluted	55,539,188	56,239,188	55,539,188	49,970,071
Net loss per share of Class B common stock – basic and diluted	\$ (0.75)	\$ (0.06)	\$ (1.39)	\$ (9.39)

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ASTRA SPACE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands)
(Unaudited)

	For The Three Months Ended September 30,		For The Nine Months Ended September 30,	
	2022	2021	2022	2021
Net loss	\$ (199,114)	\$ (16,248)	\$ (367,130)	\$ (206,517)
Other comprehensive loss:				
Unrealized gain (loss) on available-for-sale marketable securities	31	—	(202)	—
Total comprehensive loss	<u>\$ (199,083)</u>	<u>\$ (16,248)</u>	<u>\$ (367,332)</u>	<u>\$ (206,517)</u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ASTRA SPACE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Nine Months Ended September 30, 2022
(In thousands, except share data)
(Unaudited)

	Class A Common Stock		Class B Common Stock		Additional	Accumulated	Accumulated	Total
	Shares	Amount	Shares	Amount	Paid in	Other	Deficit	Stockholders'
					Capital	Comprehensive		Equity
						Loss		
Balance as of December 31, 2021	207,451,107	\$ 22	55,539,189	\$ 6	\$ 1,844,875	\$ —	\$ (1,408,383)	\$ 436,520
Stock-based compensation	—	—	(1)	—	17,041	—	—	17,041
Issuance of common stock under equity plans	1,159,383	—	—	—	793	—	—	793
Unrealized gain (loss) on available-for-sale marketable securities	—	—	—	—	—	(155)	—	(155)
Net loss	—	—	—	—	—	—	(85,713)	(85,713)
Balance as of March 31, 2022	208,610,490	\$ 22	55,539,188	\$ 6	\$ 1,862,709	\$ (155)	\$ (1,494,096)	\$ 368,486
Stock-based compensation	—	—	—	—	12,791	—	—	12,791
Issuance of common stock under equity plans	797,935	—	—	—	27	—	—	27
Unrealized loss on available-for-sale marketable securities	—	—	—	—	—	(78)	—	(78)
Net loss	—	—	—	—	—	—	(82,303)	(82,303)
Balance as of June 30, 2022	209,408,425	\$ 22	55,539,188	\$ 6	\$ 1,875,527	\$ (233)	\$ (1,576,399)	\$ 298,923
Stock-based compensation	—	—	—	—	13,748	—	—	13,748
Issuance of common stock under equity plans	2,057,044	—	—	—	484	—	—	484
Issuance of common stock as consideration for the commitment under the Common Stock Purchase agreement (Note 13)	359,098	—	—	—	—	—	—	—
Unrealized gain on available-for-sale marketable securities	—	—	—	—	—	31	—	31
Net loss	—	—	—	—	—	—	(199,114)	(199,114)
Balance as of September 30, 2022	211,824,567	\$ 22	55,539,188	\$ 6	\$ 1,889,759	\$ (202)	\$ (1,775,513)	\$ 114,072

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ASTRA SPACE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF TEMPORARY EQUITY AND STOCKHOLDERS' EQUITY (DEFICIT)
Nine Months Ended September 30, 2021
(In thousands, except share data)
(Unaudited)

	Temporary Equity		Permanent Equity										Total Stockholders' Equity (Deficit)
	Convertible Preferred Stock		Common Stock (Pre-combination Astra)		Class A Common Stock (New Astra)		Class B Common Stock (New Astra)		Founders Preferred Stock		Additional Paid in	Accumulated	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Deficit	
Balance as of December 31, 2020	90,768,286	\$ 108,829	62,961,258	\$ 6	—	\$ —	—	\$ —	12,302,500	\$ 1	\$ 50,282	\$ (190,697)	\$ (140,408)
Cumulative effect adjustment due to adoption of ASU 2020-06	—	—	—	—	—	—	—	—	—	—	(9,719)	691	(9,028)
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	2,177	—	2,177
Exercise of options	—	—	498,807	—	—	—	—	—	—	—	228	—	228
Issuance of Series C Convertible Preferred Stock, net of issuance costs	28,498,141	221,943	—	—	—	—	—	—	—	—	—	—	—
Conversion of Founders Convertible Preferred Stock to Series C Convertible Preferred Stock	5,073,576	—	—	—	—	—	—	—	(5,073,576)	—	8,156	—	8,156
Adjustment to redemption value on Convertible Preferred Stock	—	1,011,726	—	—	—	—	—	—	—	—	(51,131)	(960,595)	(1,011,726)
Net loss	—	—	—	—	—	—	—	—	—	—	—	(158,972)	(158,972)
Balance as of March 31, 2021	124,340,003	\$ 1,342,498	63,460,065	\$ 6	—	\$ —	—	\$ —	7,228,924	\$ 1	\$ (7)	\$ (1,309,573)	\$ (1,309,573)
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	7,444	—	7,444
Exercise of options	—	—	1,812,081	—	—	—	—	—	—	—	1,081	—	1,081
Adjustment to redemption value on Convertible Preferred Stock	—	(1,011,726)	—	—	—	—	—	—	—	—	1,011,726	—	1,011,726
Merger recapitalization-Class A	(124,340,003)	(330,772)	(16,261,881)	(2)	140,601,884	14	—	—	—	—	330,751	—	330,763
Merger recapitalization-Class B	—	—	(49,010,265)	(4)	—	—	56,239,189	6	(7,228,924)	(1)	—	—	1
Private offering and merger financing, net of redemptions and equity issuance costs of \$23,337	—	—	—	—	57,489,019	6	—	—	—	—	406,863	—	406,869
Net loss	—	—	—	—	—	—	—	—	—	—	—	(31,297)	(31,297)
Balance as of June 30, 2021	—	\$ —	—	\$ —	198,090,903	\$ 20	56,239,189	\$ 6	—	\$ —	\$ 1,757,858	\$ (1,340,870)	\$ 417,014
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	2,688	—	2,688
Exercise of options	—	—	—	—	912,760	1	—	—	—	—	469	—	470
Exercise of warrants	—	—	—	—	472,113	—	—	—	—	—	—	—	—
Issuance of common stock upon acquisition of Apollo Fusion, Inc.	—	—	—	—	2,558,744	—	—	—	—	—	33,008	—	33,008
Net loss	—	—	—	—	—	—	—	—	—	—	—	(16,248)	(16,248)
Balance as of September 30, 2021	—	\$ —	—	\$ —	202,034,520	\$ 21	56,239,189	\$ 6	—	\$ —	\$ 1,794,023	\$ (1,357,118)	\$ 436,932

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ASTRA SPACE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2022	2021
Cash flows from operating activities:		
Net loss	\$ (367,130)	\$ (206,517)
Adjustments to reconcile net loss to cash flows used in operating activities		
Stock-based compensation	43,580	20,465
Impairment expense	75,116	—
Goodwill impairment	58,251	—
Depreciation	9,664	2,958
Amortization of intangible assets	2,394	938
Inventory write-downs	18,828	—
Non-cash lease expense	1,370	767
Deferred income taxes	—	(383)
Change in fair value of warrant liabilities	—	(20,447)
Gain on forgiveness of PPP note	—	(4,850)
Accretion (amortization) of marketable securities purchased at a premium (discount)	33	—
Loss on change in fair value of contingent consideration	29,249	—
Loss on extinguishment of convertible notes	—	131,908
Loss on extinguishment of convertible notes attributable to related parties	—	1,875
Amortization of convertible note discounts	—	315
Amortization of convertible note discounts attributable to related parties	—	55
Loss on marketable securities	24	—
Changes in operating assets and liabilities:		
Trade accounts receivable	(3,107)	—
Inventories	(15,466)	(4,246)
Prepaid and other current assets	3,768	(13,935)
Other non-current assets	(1,278)	(101)
Accounts payable	2,990	1,333
Lease liabilities	(1,207)	(861)
Accrued expenses and other current liabilities	(2,125)	11,355
Other non-current liabilities	10,431	(205)
Net cash used in operating activities	\$ (134,615)	\$ (79,576)
Cash flows from investing activities:		
Acquisition of Apollo, net of cash acquired	—	(19,360)
Acquisition of trademark	(850)	(3,200)
Purchases of marketable securities	(136,445)	—
Proceeds from sales of marketable securities	6,000	—
Proceeds from maturities of marketable securities	47,250	—
Purchases of property, plant and equipment	(40,043)	(18,720)
Net cash used in investing activities	\$ (124,088)	\$ (41,280)
Cash flows from financing activities:		
Proceeds from business combination and private offering, net of transaction costs of \$23,337	—	463,648
Borrowings on Pendrell bridge loan	—	10,000
Repayment on Pendrell bridge loan	—	(10,000)
Proceeds from issuance of Series C preferred stock	—	30,000
Issuance cost of Series C preferred stock	—	(94)
Repayments on term loans	—	(2,800)
Repayments on equipment advances	—	(3,636)
Proceeds from stock issued under equity plans	1,304	1,779
Net cash provided by financing activities	\$ 1,304	\$ 488,897
Net increase (decrease) in cash and cash equivalents	\$ (257,399)	\$ 368,041
Cash and cash equivalents at beginning of period	325,007	10,611
Cash and cash equivalents at end of period	\$ 67,608	\$ 378,652
Non-cash investing and financing activities:		
Conversion of Series A, Series B, Series C, and Founders' convertible preferred into common stock	\$ —	\$ 330,764

Assets acquired included in accounts payable, accrued expenses and other current liabilities	2,777	4,903
Public and private placement of warrants acquired as part of business combination	—	56,786
Change in redemption value of Convertible Preferred Stock	—	1,011,726
Issuance of Class A common stock upon acquisition of Apollo Fusion, Inc.	—	33,008
Fair value of contingent consideration provided upon acquisition of Apollo Fusion, Inc.	—	23,000
Supplemental disclosures of cash flow information:		
Cash paid for interest	\$ 15	\$ 691

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements

ASTRA SPACE, INC.
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Description of Business, Basis of Presentation and Significant Accounting Policies

Description of Business

Astra Space, Inc. designs, tests, manufactures and operates the next generation of launch services and space products and services that it expects to enable a new generation of global communications, earth observation, precision weather monitoring, navigation, and surveillance capabilities. Astra Space, Inc.'s mission is to Improve Life on Earth from Space[®] through greater connectivity and more regular observation and to enable a wave of innovation in low Earth orbit by expanding its space platform offerings.

Holcity Inc. ("Holcity") was originally incorporated in Delaware and was established as a special purpose acquisition company, which completed its initial public offering in August 2020. On June 30, 2021 (the "Closing Date"), Holcity consummated a business combination (the "Business Combination") pursuant to the Business Combination Agreement dated as of February 2, 2021 (the "BCA"), by and among Holcity, Holcity Merger Sub Inc., a wholly owned subsidiary of Holcity ("Merger Sub"), and Astra Space Operations, Inc. ("pre-combination Astra"). Immediately upon the consummation of the Business Combination, Merger Sub merged with and into pre-combination Astra with pre-combination Astra surviving the merger as a wholly owned subsidiary of Holcity. Holcity changed its name to "Astra Space, Inc." and pre-combination Astra changed its name to "Astra Space Operations, Inc."

Unless the context otherwise requires, "we", "us", "our", "Astra" and the "Company" refers to Astra Space, Inc., the combined company and its subsidiaries following the Business Combination and Astra Space Operations, Inc. prior to the Business Combination. See Note 3 — Acquisitions for further discussion of the Business Combination. The Company's Class A common stock is listed on the Nasdaq under the symbol "ASTR".

Basis of Presentation and Principles of Consolidation

The accompanying condensed consolidated financial statements include the accounts of Astra and its subsidiaries, and have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") as determined by the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC") for financial reporting. The condensed consolidated financial statements included herein are unaudited, and reflect all adjustments which are, in the opinion of management, of a normal recurring nature and necessary for a fair statement of the results for the periods presented. The December 31, 2021 condensed consolidated balance sheet data were derived from Astra's audited consolidated financial statements included in its Annual Report on Form 10-K for year ended December 31, 2021 as filed with the SEC. All intercompany transactions and balances have been eliminated in consolidation. The operating results for the three and nine months ended September 30, 2022 are not necessarily indicative of the results that may be expected for the year ending December 31, 2022, or for any other future period.

Business Combination

On June 30, 2021, the Business Combination pursuant to the BCA, by and among Holcity, Merger Sub, and pre-combination Astra, was accounted for as a reverse recapitalization as pre-combination Astra was determined to be the accounting acquirer under ASC 805. The determination is primarily based on the evaluation of the following facts and circumstances:

- the equity holders of pre-combination Astra hold the majority of voting rights in the Company;
- the board of directors of pre-combination Astra represent a majority of the members of the board of directors of the Company;
- the senior management of pre-combination Astra became the senior management of the Company; and
- the operations of pre-combination Astra comprise the ongoing operations of the Company.

In connection with the Business Combination, outstanding common stock and preferred convertible stock of the pre-combination Astra was converted into common stock of the Company, par value of \$0.0001 per share, representing a recapitalization, and the net assets of the Company were acquired and recorded at historical cost, with no goodwill or intangible assets recorded. Pre-combination Astra was deemed to be the predecessor and the condensed consolidated assets and liabilities and results of operations prior to the Closing Date are those of pre-combination Astra. Reported shares and earnings per share available to common stockholders, prior to the Business Combination, have been retroactively restated as shares reflecting the exchange ratio established in the BCA. The number of shares of preferred stock was also retroactively restated based on the exchange ratio. See Note 3 — Acquisitions for additional information.

Liquidity

The accompanying unaudited condensed consolidated interim financial statements have been prepared assuming the Company will continue as a going concern. The going concern basis of presentation assumes that the Company will continue in operation one year after the date these unaudited condensed consolidated interim financial statements are issued and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

Pursuant to the requirements of the Financial Accounting Standards Board's Accounting Standards Codification ("ASC") Topic 205-40, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern, management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year from the date these unaudited condensed consolidated interim financial statements are issued. This evaluation does not take into consideration the potential mitigating effect of management's plans that have not been fully implemented or are not within control of the Company as of the date the unaudited condensed consolidated interim financial statements are issued. When substantial doubt exists, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the unaudited condensed consolidated interim financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the unaudited condensed consolidated interim financial statements are issued.

The Company evaluated whether there are any conditions and events, considered in the aggregate, that raise substantial doubt about its ability to continue as a going concern over the next twelve months through November 2023. Since inception, the Company has incurred significant operating losses and has an accumulated deficit of approximately \$1,775.5 million. As of September 30, 2022, the Company's existing sources of liquidity included cash and cash equivalents of \$67.6 million and marketable securities of \$82.9 million. The Company believes that its current level of cash and cash equivalents and marketable securities are not sufficient to fund commercial scale production and sale of its services and products. These conditions raise substantial doubt regarding its ability to continue as a going concern for a period of at least one year from the date of issuance of these unaudited condensed consolidated financial statements.

In order to proceed with the Company's business plan, the Company will need to raise substantial additional funds through the issuance of additional debt, equity or both. Until such time, if ever, the Company can generate revenue sufficient to achieve profitability, the Company expects to finance its operations through equity or debt financings, which may not be available to the Company on the timing needed or on terms that the Company deems to be favorable. To the extent that the Company raises additional capital through the sale of equity or convertible debt securities, the ownership interest of its stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of common stockholders. Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting the Company's ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If the Company is unable to obtain sufficient financial resources, its business, financial condition and results of operations will be materially and adversely affected. The Company may be required to delay, limit, reduce or terminate its product development activities or future commercialization efforts. There can be no assurance that the Company will be able to obtain the needed financing on acceptable terms or at all.

In an effort to alleviate these conditions, management continues to seek and evaluate opportunities to raise additional capital through the issuance of equity or debt securities. As an example, on August 2, 2022, the Company entered into a Common Stock Purchase Agreement with B. Riley Principal Capital II LLC ("B. Riley"), which would allow the Company to sell newly issued shares of its Class A Common Stock to B. Riley in aggregate amount not to exceed \$100.0 million or 19.99% of the aggregate outstanding Class A and Class B Common Stock of the Company as of August 2, 2022. See *Note 13 – Stockholders' Equity* for additional information about this financing arrangement. However, actual sales of shares under the Purchase Agreement will depend on a variety of factors including, among other things, market conditions and the trading price of the Class A Common Stock, and the full amount of capital may not be fully realized. As we seek additional sources of financing, there can be no assurance that such financing would be available to us on favorable terms or at all. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our industry.

As a result of these uncertainties, and notwithstanding management's plans and efforts to date, there is substantial doubt about the Company's ability to continue as a going concern. If we are unable to raise substantial additional capital in the near term, our operations and production plans will be scaled back or curtailed. If the funds raised are insufficient to provide a bridge to full commercial production at a profit, our operations could be severely curtailed or cease entirely and we may not realize any significant value from our assets.

We have, however, prepared these condensed consolidated financial statements on a going concern basis, assuming that our financial resources will be sufficient to meet our capital needs over the next twelve months. Accordingly, our financial statements do not include adjustments relating to the recoverability and realization of assets and classification of liabilities that might be necessary should we be unable to continue in operation.

Impairment of long-lived assets, indefinite-lived intangibles and goodwill

The Company performs an annual impairment review of goodwill and indefinite-lived intangible assets during the fourth fiscal quarter of each year, and more frequently if the Company believes that indicators of impairment exist. Long-lived assets are tested for recoverability when events or changes in circumstances indicate that their carrying amounts may not be recoverable. As of the third quarter of fiscal year 2022, the Company determined that impairment indicators were present based on the existence of substantial doubt about the Company's ability to continue as a going concern, a sustained decrease in the Company's share price and macroeconomic factors. Accordingly, the Company proceeded with the quantitative impairment tests.

For indefinite-lived intangible assets, the Company compared the carrying amount of the asset to its fair value, resulting in a non-cash impairment charge, as described further in Note 5 – Goodwill and Intangible Assets.

For the long-lived assets, the Company compared the sum of the undiscounted future cash flows attributable to the Launch Services and Space Products asset groups (the lowest level for which identifiable cash flows are available) to their respective carrying amounts and concluded that the Space Products asset group was recoverable. The Launch Services asset group was not recoverable, and the Company proceeded with the comparison of the asset group's carrying amount to its fair value, resulting in a non-cash impairment charge, as described further in Note 4 – Supplemental Financial Information.

For goodwill, the Company compared the carrying amount of the reporting unit to its fair value. During the third quarter of fiscal year 2022, the Company took steps to realign management and internal reporting, resulting in two operating and reportable segments, as described further in Note 16 – Segment Information. In accordance with the accounting guidance under ASC 350, the reorganization triggered a goodwill impairment test based on the reporting structure immediately before the reorganization, as a single reporting unit, resulting in a non-cash impairment charge writing off the entire goodwill balance, as described further in Note 5 – Goodwill and Intangible Assets.

Fair values of the Company's reporting units were determined using the discounted cash flow model and fair value of the tradename was determined using the relief-from-royalty method. Significant inputs include discount rates, growth rates, and cash flow projections, and for the tradename, the royalty rate. These valuation inputs are considered Level 3 inputs as defined by ASC 820 *Fair Value Measurement*.

Impact of the COVID-19 Pandemic

The Company has been actively monitoring the ongoing COVID-19 pandemic situation and its impact on the Company's business while keeping abreast of the latest developments, particularly the variants of the virus, to ensure preparedness for Astra's employees and its business. The COVID-19 pandemic had disrupted everyday life and markets worldwide, leading to significant business and supply-chain disruption, as well as broad-based changes in supply and demand. The Company has been diligent in testing and monitoring its employees, and there have been disruptions in productivity, although these disruptions have not resulted in suspension of its manufacturing facilities. However, there has been a trend in many parts of the world of increasing availability and administration of vaccines against COVID-19, as well as an easing of restrictions on social, business, travel and government activities and functions. On the other hand, infection rates and regulations continue to fluctuate in various regions and there are ongoing global impacts resulting from the pandemic, including challenges and increases in costs for logistics and supply chains, such as increased intermittent supplier delays and a shortfall of semiconductor supply. Ultimately, the Company cannot predict the duration of the COVID-19 pandemic. The Company will continue to monitor macroeconomic conditions to remain flexible and to optimize and evolve its business as appropriate and deploy its production, workforce and other resources accordingly.

Use of Estimates and Judgements

The preparation of the condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities in the condensed consolidated financial statements and accompanying notes. The Company bases these estimates on historical experience and on various other assumptions that it believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amounts of assets and liabilities that are not readily apparent from other sources. Actual results could differ significantly from those estimates. Significant items subject to such estimates and assumptions include the valuation of goodwill and long-lived assets, inventory valuation and reserves, stock-based compensation, pre-combination Astra common stock, useful lives of intangible assets and property, plant and equipment, deferred tax assets, income tax uncertainties, contingent consideration, and other contingencies.

Significant Accounting Policies

Other than those described below, there have been no changes to the Company's significant accounting policies described in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, that have had a material impact on its unaudited condensed consolidated financial statements and related notes.

Segment reporting. Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker ("CODM") in making decisions regarding resource allocation and assessing performance. Prior to the third quarter of fiscal year 2022, the Company operated as one operating and reportable segment, as the CODM reviewed financial information presented on a consolidated basis for purposes of making operating decisions, allocating resources and evaluating financial performance.

During the third quarter of fiscal year 2022, the Company took steps to realign management and internal reporting, resulting in two operating and reportable segments: Launch Services and Space Products. The segment reporting for prior periods has been reclassified to conform to the current period presentation. Refer to Note 16 – Segment Information for more information.

Marketable securities. Marketable securities consist of U.S. Treasury securities, corporate debt securities, commercial paper, and asset backed securities. The Company classifies marketable securities as available-for-sale at the time of purchase and reevaluates such classification as of each balance sheet date. Interest receivable on these securities is presented in other current assets on the condensed consolidated balance sheets. All marketable securities are recorded at their estimated fair values. When the fair value of a marketable security declines below its amortized cost basis, the carrying value of the security will be reduced to its fair value if it is more likely than not that management is required to sell the impaired security before recovery of its amortized basis, or management has the intention to sell the security. If neither of these conditions are met, the Company determines whether any portion of the decline is due to credit losses. Any portion of that decline attributable to credit losses, to the extent expected to be nonrecoverable before the sale of the security, is recognized in the Company's condensed consolidated statement of operations. When the fair value of the security declines below its amortized cost basis due to changes in interest rates, such amounts are recorded in accumulated other comprehensive income (loss) and are recognized in the Company's condensed consolidated statement of operations only if the Company sells or intends to sell the security before recovery of its cost basis. Realized gains and losses are determined based on the specific identification method and are reported in other income (expense), net in the Company's condensed consolidated statements of operations.

Note 2 — Revenues

The Company recognizes revenue to reflect the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Through its current offerings, the Company expects to generate revenue by providing the following goods or services:

Launch Services — To provide rapid, global, and affordable launch services to satellite operators and governments in partnership with third-party spaceport providers globally. The launch services include services tied directly to launch along with complementary services that are not part of the Company's fixed pricing for which we charge a separate fee. The Company operated its launches from Pacific Spaceport Complex in Kodiak, Alaska and Cape Canaveral Space Force Station in Cape Canaveral, Florida. The Company is in discussions with SaxaVord UK Spaceport regarding an opportunity to launch from the United Kingdom.

Space Products — To design and provide space products based on the customers' needs for a successful satellite launch and other products that the Company may sell in the future. Currently the Company offers two in-space electric propulsion systems.

As of September 30, 2022, the Company has entered into contracts for launch services and space products. The Company's contracts may provide customers with termination for convenience clauses, which may or may not include termination penalties. In some contracts, the size of the contractual termination penalty increases closer to the scheduled launch date. At each balance sheet date, the Company evaluates each contract's termination provisions and the impact on the accounting contract term, i.e., the period in which the Company has enforceable rights and obligations. This includes evaluating whether there are termination penalties and if so, whether they are considered substantive. The Company applies judgment in determining whether the termination penalties are substantive. In July 2022, the Company decided to focus on the development and production of the next version of its launch system. As a result, the Company has discontinued the production of launch vehicles supported by its current launch system and does not plan to conduct any further commercial launches in 2022. The Company has begun discussions with customers for whom it agreed to launch payloads on launch vehicles supported by its old launch system and the shift of those flights to launch vehicles supported by our new launch vehicle. If a customer terminates its contract with the Company due to the shifting of the flights, the customer may not be obligated to pay the termination for convenience penalties. As of September 30, 2022, the Company has not incurred any termination penalties in launch services as a result of the shifting of flights.

Recognition of Revenue

The work performed by the Company in fulfilling launch services and space products performance obligations is not expected to create an asset to the customer since the launch vehicle that is built to deliver the customer's payload into orbit will not be owned by the customer or the propulsion systems that are built to thrust the customers' satellite into orbit will not be owned by the customer until they are delivered to the customer. The Company recognizes revenue at a point in time upon satisfaction of the performance obligations under its launch services and space products agreements. The following table presents revenue disaggregated by type of revenue for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Launch services	\$ —	\$ —	\$ 5,899	\$ —
Space products	2,777	—	3,471	—
Total revenues	\$ 2,777	\$ —	\$ 9,370	\$ —

Contracts with governmental entities involving research and development milestone activities do not represent contracts with customers under ASC 606 and as such, amounts received are recorded in other income (expense), net in the condensed consolidated statements of operations. No such income was recorded for the three months ended September 30, 2022. The Company recorded \$0.4 million in other income for the nine months ended September 30, 2022. No such income was recorded for the three and nine months ended September 30, 2021.

Contract Balances and Remaining Performance Obligations

Contract balances. Contract assets and liabilities represent the differences in the timing of revenue recognition from the receipt of cash from the Company's customers and billings. Contract assets reflect revenue recognized and performance obligations satisfied in advance of customer billing. Contract liabilities relate to payments received in advance of the satisfaction of performance under the contract. Receivables represent rights to consideration that are unconditional. Such rights are considered unconditional if only the passage of time is required before payment of that consideration is due. The Company had no contract assets as of September 30, 2022 and December 31, 2021. The Company had contract liabilities of \$18.0 million and \$10.4 million as of September 30, 2022 and December 31, 2021, respectively. The Company recognized revenue of \$0.3 million and \$5.2 million during the three and nine months ended September 30, 2022, respectively, that was included in the contract liabilities balance at the beginning of the period. No revenue was recognized for the three and nine months ended September 30, 2021.

Remaining performance obligations. Revenue allocated to remaining performance obligations represents the transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied. It includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods and does not include contracts where the customer is not committed. Customers are not considered committed when they are able to terminate their contractual obligations to us without payment of a substantive penalty under the contract. Many of the Company's contracts allow the customer to terminate the contract prior to launch or delivery without a substantive penalty, and therefore the enforceable contract is for a period less than the stated contractual term. Further, the Company has elected not to disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less. The Company had unsatisfied performance obligations of \$40.6 million as of September 30, 2022.

Note 3 — Acquisitions

Acquisition of Apollo Fusion, Inc.

On July 1, 2021, or the Apollo Acquisition Date, the Company, through its wholly owned indirect subsidiary, merged with Apollo Fusion, Inc. ("Apollo"). The results of Apollo's operations have been included in the unaudited condensed consolidated financial statements since that date. Apollo designs, tests, manufactures and operates propulsion modules to enable satellites to orbit in space.

The fair value of the consideration paid as of July 1, 2021, was \$70.8 million, net of cash acquired (the "Apollo Merger"), which consisted of the following:

Purchase Consideration (in thousands)

Cash paid for outstanding Apollo common stock and options	\$	19,926
Fair value of Astra Class A common stock issued		33,008
Fair value of contingent consideration		18,400
Total purchase consideration		71,334
Less: cash acquired		566
Total purchase consideration, net of cash acquired	\$	70,768

The fair value of the shares of Class A common stock issued in the Apollo Merger was determined based on the closing market price of the Company's Class A common stock on the Apollo Acquisition Date.

The vesting of all unvested stock options of Apollo granted prior to the Apollo Acquisition Date were accelerated prior to the acquisition and were then cancelled in exchange for a right of each option-holder to cash, equity and contingent consideration based on their pro-rata percentage, assuming all stock options of Apollo had been exercised.

The contingent consideration requires the Company to pay up to \$75.0 million of additional consideration to Apollo's former shareholders and option-holders, if Apollo meets certain customer revenue related milestones over a two and half year period ending on December 31, 2023. The contingent consideration is earned, which is a combination of total contract value and relevant payout ratio, if the contract with the customer is entered into after the acquisition date and 25% of revenue under the contract is recognized by December 31, 2023 under ASC 606. Contingent consideration is payable on a quarterly basis based on the milestones achieved. The fair value of the contingent consideration arrangement at the acquisition date was \$18.4 million. The Company estimated the fair value of the contingent consideration using a Monte Carlo simulation model. This fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined in ASC 820. As of September 30, 2022, the contingent consideration recognized increased to \$43.0 million as a result of changes in forecasted revenues subject to milestone payments and the passage of time. The Company has recognized \$24.6 million in cumulative net losses on changes in fair value of contingent consideration from the Apollo Acquisition Date, of which \$12.0 million and \$29.2 million in loss was recognized in the condensed consolidated statement of operations for the three and nine months ended September 30, 2022, respectively.

An additional \$10.0 million of cash ("Cash Earnout") will be paid to employees of Apollo that joined Astra, subject to certain vesting conditions, as amended. The Cash Earnout is accounted for as compensation expense over the requisite service period in the post-acquisition period as the payment is subject to the employee's continued employment with the Company. The Company has recognized \$8.4 million in compensation cost from the Apollo Acquisition Date, of which \$2.6 million in compensation cost was recognized in research and development expense in the condensed consolidated statement of operations for the nine months ended September 30, 2022. During the third quarter of 2022, the agreement was amended to remove the performance conditions and the Company paid \$1.7 million to fulfill the Company's remaining obligation under the Cash Earnout as of September 30, 2022. The remaining accrued liability of \$1.9 million was written off as of September 30, 2022, since the total eligible compensation under the Cash Earnout was fully paid.

In addition, the Company awarded 1,047,115 Performance Stock Units ("PSUs") to employees of Apollo that joined Astra, subject to certain performance-based milestones, as amended, and other vesting provisions. The PSUs are accounted for as compensation expense over the requisite service period in the post-acquisition period as the vesting of PSUs is subject to time-based and performance-based vesting conditions. During the third quarter of 2022, the performance stock award agreements were amended to remove the performance-based milestone as a vesting condition. The PSUs now are only subject to vesting based on the applicable employees' years of service. See Note 14 — Stock-Based Compensation for additional information.

The Company allocated the fair value of the purchase consideration to the tangible assets, liabilities and intangible assets acquired, based on the fair values as of the acquisition date. We have completed the valuation as of March 31, 2022. The excess purchase price over those fair values is recorded as goodwill. The valuation assumptions of acquired assets and assumed liabilities require significant estimates, especially with respect to intangible assets. The final purchase consideration allocation is presented in the following table.

<i>(in thousands)</i>	Fair Value
Inventory	\$ 131
Prepaid and other current assets	796
Property, plant and equipment	996
Right of use assets	163
Goodwill	58,251
Intangible assets	15,350
Other non-current assets	75
Total assets acquired	75,762
Accounts payable	(950)
Accrued expenses and other current liabilities	(1,939)
Operating lease obligation	(163)
Other non-current liabilities	(1,942)
Total liabilities assumed	(4,994)
Fair value of net assets acquired	\$ 70,768

Goodwill is primarily attributable to the assembled workforce and anticipated synergies expected from the integration of the Apollo business. The synergies include operating efficiencies, and other strategic benefits projected to be achieved as a result of the Apollo Merger. Goodwill is not deductible for tax purposes.

There were \$2.8 million and \$3.5 million of revenues recorded during the three and nine months ended September 30, 2022, respectively, related to Apollo. It was impracticable to determine the effect on net income attributable to Apollo as the Company had integrated a substantial portion of Apollo into its ongoing operations during the year.

Intangible Assets

	Fair Value	Weighted-Average Amortization Periods
	(in thousands)	(in years)
Developed technology	\$ 12,100	6
Customer contracts and related relationships	2,900	3
Order backlog	200	1
Tradename	150	2
Total identified intangible assets	\$ 15,350	

Developed technology relates to propulsion modules. The Company valued the developed technology using the relief-from-royalty method under the income approach. This method is based on the application of a royalty rate to forecasted revenue that are expected to be generated by developed technology. The economic useful life was determined based on the technology cycle related to the developed technology, as well as the cash flows over the forecast period.

Customer contracts and related relationships represent the fair value of future projected revenue that will be derived from sales of products to existing customers of Apollo. Customer contracts and related relationships were valued using the multi-period excess earnings method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the customer contracts and related relationships less charges representing the contribution of other assets to those cash flows. The economic useful life was determined based on historical customer turnover rates.

Order backlog represents business under existing contractual obligations. The fair value of backlog was determined using the multi-period excess earnings method under the income approach based on expected operating cash flows from future contractual revenue. The economic useful life was determined based on the expected life of the backlog and the cash flows over the forecast period.

Trade name relates to the “Apollo” trade name. The fair value was determined by applying the relief-from-royalty method under the income approach. This method is based on the application of a royalty rate to forecasted revenue under the trade name. The economic useful life was determined based on the expected life of the trade name and the cash flows anticipated over the forecast period.

The Company believes the amounts of purchased intangible assets recorded above represent the fair values of, and approximate the amounts a market participant would pay for, these intangible assets as of the Apollo Acquisition Date.

Unaudited Pro Forma Information

The following unaudited pro forma financial information presents combined results of operations for each of the periods presented, as if Apollo had been acquired as of the beginning of fiscal year 2020. The unaudited pro forma results include certain pro forma adjustments to revenue and net loss that were directly attributable to the acquisition including transaction costs and amortization of intangible assets. Transaction costs of approximately \$4.4 million are assumed to have occurred on January 1, 2020 and are recognized as if incurred in the first quarter of 2020. Of these transaction costs, \$0.4 million are incurred by Apollo and \$4.0 million are incurred by the Company. Intangible assets are assumed to be recognized at their assigned fair values as of the pro forma close date of January 1, 2020 and are amortized over their estimated useful lives. The amortization expenses were \$0.8 million and \$2.5 million for the three and nine months ended September 30, 2021, respectively. The unaudited pro forma information presented below is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the acquisition actually occurred at the beginning of fiscal year 2020 or of the results of our future operations of the combined business.

<i>in thousands</i>	For the Three Months Ended September 30, 2021		For The Nine Months Ended September 30, 2021	
Pro forma net revenues	\$	—	\$	400
Pro forma net loss and net loss attributable to common stockholders	\$	(13,038)	\$	(207,789)

Reverse Recapitalization

On June 30, 2021, pre-combination Astra Space, Inc. and Holicity Inc. consummated the Business Combination contemplated by the BCA, with pre-combination Astra surviving the merger as a wholly owned subsidiary of Holicity. Upon consummation of the Business Combination, Holicity changed its name to Astra Space, Inc., and pre-combination Astra changed its name to Astra Space Operations, Inc.

Immediately following the Business Combination, there were 198,090,903 shares of Class A common stock and 56,239,189 shares of Class B common stock issued and outstanding with a par value of \$0.0001. Additionally, there were outstanding options to purchase an aggregate of 5,993,412 shares of Class A common stock and outstanding warrants to purchase 15,813,829 shares of Class A common stock.

The Business Combination was accounted for as a reverse recapitalization in accordance with GAAP as pre-combination Astra has been determined to be the accounting acquirer. Under this method of accounting, while Holicity was the legal acquirer, it has been treated as the “acquired” company for financial reporting purposes. Accordingly, the Business Combination was treated as the equivalent of pre-combination Astra issuing stock for the net assets of Holicity, accompanied by a recapitalization. The net assets of Holicity were stated at historical cost, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination are those of pre-combination Astra. Reported shares and earnings per share available to holders of the Company’s common stock, prior to the Business Combination, have been retroactively restated as shares reflecting the exchange ratio established in the BCA (approximately one pre-combination Astra share to 0.665 of the Company’s shares).

The most significant change in the post-combination Company’s reported financial position and results was an increase in cash, net of transactions costs, of \$463.6 million, including \$200.0 million in gross proceeds from the private placements (the “PIPE”). In connection with the Business Combination, \$25.2 million of transaction costs were paid on the Closing Date. Additionally, on the Closing Date, the Company repaid the short-term promissory notes with Pendrell (the “Bridge Loan”) of \$10.4 million, which included principal of \$10.0 million and end of term fee of \$0.4 million as of June 30, 2021. The Company also repaid the outstanding principal and interest of \$4.6 million for the term loan and equipment advances with Silicon Valley Bank. Refer to Note 6 – Long-term Debt.

The Company incurred \$25.5 million in transaction costs relating to the merger with Holicity, of which \$23.3 million has been recorded against additional paid-in capital in the Condensed Consolidated Balance Sheets and the remaining amount of \$2.2 million was recognized as general and administrative expenses on the Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2021. On the date of the Business Combination, the Company recorded a liability related to the Public and Private Placement Warrants of \$56.8 million, with an offsetting entry to additional paid-in capital. In relation to the Public and Private Placement Warrants, the Company recognized a portion of pre-combination Astra’s capitalizable transaction costs relating to the merger with Holicity, using the relative fair value method, as general and administrative expenses in the Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2021.

Upon closing of the Business Combination, the shareholders of Holicity, including Holicity founders, were issued 37,489,019 shares of Class A common stock. In connection with the Closing, holders of 10,981 shares of common stock of Holicity were redeemed at a price per share of \$10.00. In connection with the Closing 20,000,000 shares were issued to PIPE investors at a price per share of \$10.00.

The number of shares of Class A common stock issued immediately following the consummation of the Business Combination were:

Common stock of Holicity	29,989,019
Holicity founder shares	7,500,000
Shares issued in PIPE	20,000,000
Business Combination and PIPE shares	57,489,019
Pre-combination Astra shares	140,601,884
Total shares of Class A common stock immediately after Business Combination	198,090,903

In addition, in connection with the consummation of the Business Combination, 56,239,189 shares of Class B common stock were issued to two executive officers and founders of the Company: Chris Kemp and Adam London in exchange for an aggregate 73,699,647 shares of common stock and an aggregate 10,870,562 shares of Founders Preferred Stock of pre-combination Astra.

Note 4 — Supplemental Financial Information

Inventories

<i>in thousands</i>	As of September 30, 2022	As of December 31, 2021
Raw materials	\$ 1,015	\$ 5,775
Work in progress	4,159	941
Finished goods	—	959
Inventories	<u>\$ 5,174</u>	<u>\$ 7,675</u>

There were no inventory write-downs recorded during the three months ended September 30, 2022. There were \$18.8 million of inventory write-downs recorded within cost of revenues during the nine months ended September 30, 2022, of which \$10.2 million related to the discontinuance of production of the current version of its launch vehicle as the Company focuses on developing the new version of its launch system. There were no inventory write-downs recorded during the three and nine months ended September 30, 2021.

Property, Plant and Equipment, net

Presented in the table below are the major classes of property, plant and equipment:

<i>in thousands</i>	As of September 30, 2022	As of December 31, 2021
Construction in progress	\$ 6,381	\$ 39,246
Computer and software	6,501	3,092
Leasehold improvements	58,255	14,177
Research equipment	14,478	8,935
Production equipment	23,439	10,442
Furniture and fixtures	1,523	1,001
Total property, plant and equipment	110,577	76,893
Less: accumulated depreciation	(20,241)	(10,577)
Less: accumulated impairment charges	(70,288)	—
Property, plant and equipment, net	<u>\$ 20,048</u>	<u>\$ 66,316</u>

Depreciation expense amounted to \$3.7 million and \$0.8 million for the three months ended September 30, 2022 and 2021, respectively. Depreciation expense amounted to \$9.7 million and \$3.0 million for the nine months ended September 30, 2022 and 2021, respectively.

The Company recorded a non-cash impairment charge of \$70.3 million primarily related to leasehold improvements, production equipment and research equipment of Launch Services in the condensed consolidated statements of operations for the three and nine months ended September 30, 2022. No impairment charges were recorded for the three and nine months ended September 30, 2021. See Note 1 – Description of Business, Basis of Presentation and Significant Accounting Policies, for discussion of triggers for impairment as of September 30, 2022.

Accrued Expenses and Other Current Liabilities

<i>in thousands</i>	As of September 30, 2022	As of December 31, 2021
Employee compensation and benefits	\$ 5,882	\$ 9,927
Contract liabilities, current portion	12,028	10,162
Construction in progress related accruals	1,072	3,726
Accrued expenses	5,280	3,464
Other (miscellaneous)	3,120	2,620
Accrued expenses and other current liabilities	<u>\$ 27,382</u>	<u>\$ 29,899</u>

Other Non-Current Liabilities

<i>in thousands</i>	As of September 30, 2022	As of December 31, 2021
Contract liabilities, net of current portion	6,013	149
Other (miscellaneous)	1,264	750
Other non-current liabilities	<u>\$ 7,277</u>	<u>\$ 899</u>

Other (Expense) Income, Net

<i>in thousands</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Change in fair value of warrant liabilities	\$ —	\$ 20,447	\$ —	\$ 20,447
Gain on forgiveness of PPP note	—	4,850	—	4,850
Other (miscellaneous)	(25)	598	314	(120)
Other (expense) income, net	<u>\$ (25)</u>	<u>\$ 25,895</u>	<u>\$ 314</u>	<u>\$ 25,177</u>

Note 5 — Goodwill and Intangible Assets

Goodwill

The following table summarizes the changes in the carrying amount of goodwill:

<i>(in thousands)</i>	Carrying Amount	Accumulated Impairment Charge	Net Book Value
Goodwill	\$ 58,251	\$ (58,251)	\$ —

The Company recorded a pre-tax impairment charge of \$58.3 million for the three and nine months ended September 30, 2022, respectively, fully impairing its goodwill balance. There was no impairment charge for the three and nine months ended September 30, 2021. See Note 1 – Description of Business, Basis of Presentation and Significant Accounting Policies for discussion of events triggering the goodwill impairment test.

Intangible Assets

<i>in thousands</i>	Gross Carrying Amount	Accumulated Impairment Charge	Accumulated Amortization	Net Book Value
As of September 30, 2022:				
Definite-lived intangible assets				
Developed technology	\$ 12,100	\$ (2,191)	\$ (2,521)	\$ 7,388
Customer contracts and related relationship	2,900	(517)	(1,208)	1,175
Order backlog	200	—	(200)	—
Trade names	150	(27)	(94)	29
Intangible assets subject to amortization	15,350	(2,734)	(4,023)	8,593
Indefinite-lived intangible assets				
Trademarks	4,200	(2,094)	—	2,106
Total	<u>\$ 19,550</u>	<u>\$ (4,828)</u>	<u>\$ (4,023)</u>	<u>\$ 10,699</u>

The Company recorded a pre-tax impairment charge of \$4.8 million for the three and nine months ended September 30, 2022, respectively. There was no impairment charge for the three and nine months ended September 30, 2021. See Note 1 – Description of Business, Basis of Presentation and Significant Accounting Policies for discussion of events triggering the impairment assessment of definite-lived and indefinite-lived intangible assets.

<i>in thousands</i>	Gross Carrying Amount	Accumulated Amortization	Net Book Value
As of December 31, 2021:			
Definite-lived intangible assets			
Developed technology	\$ 12,100	\$ (1,008)	\$ 11,092
Customer contracts and related relationship	2,900	(483)	2,417
Order backlog	200	(100)	100
Trade names	150	(38)	112
Intangible assets subject to amortization	15,350	(1,629)	13,721
Indefinite-lived intangible assets			
Trademarks	4,200	—	4,200
Total	<u>\$ 19,550</u>	<u>\$ (1,629)</u>	<u>\$ 17,921</u>

Based on the amount of intangible assets as of September 30, 2022, the expected amortization expense for each of the next five years and thereafter is as follows:

<i>in thousands</i>	Expected Amortization Expense
2022 (remainder)	\$ 567
2023	2,247
2024	1,891
2025	1,555
2026	1,555
Thereafter	778
Total Intangible assets subject to amortization	<u>\$ 8,593</u>

Note 6 — Long-Term Debt

There is no short-term and long-term debt outstanding as of September 30, 2022 and December 31, 2021, respectively. In connection with the Business Combination, all outstanding debt with the exception of the Paycheck Protection Program note was paid on June 30, 2021. Refer to Note – 3 Acquisitions. In August 2021, the Company's application for forgiveness of the Paycheck Protection Program note was approved in the full amount of the outstanding principal balance and accrued interest.

Term Loan and Equipment Advances

On December 25, 2018, the Company entered into a loan agreement (the “2018 Loan Agreement”) with Silicon Valley Bank (“SVB”). Pursuant to the 2018 Loan Agreement, the Company could borrow up to a total of \$3.0 million term loans (“2018 Term Loans”) and \$7.0 million equipment loans (“2018 Equipment Advances”) with access period ended on April 30, 2020 for 2018 Term Loans and June 30, 2019 for 2018 Equipment Advances. Amounts borrowed under the 2018 Loan Agreement were repaid prior to or on June 30, 2021.

In connection with the execution of the 2018 Loan Agreement, the Company entered into a 2018 warrant agreement which granted certain warrants to SVB (the “Warrants”). The Warrants were issued in one initial tranche on December 25, 2018 and three subsequent tranches in 2019 each time the Company made an additional debt draw under the 2018 Loan Agreement. Pursuant to the warrant agreement, SVB had the option to purchase an aggregate of 480,520 shares of Class A common stock. The warrants had a weighted average exercise price of \$0.24 per share and were exercisable for a period of 10 years. The Company accounted for all the Warrants issued as equity instruments since the Warrants were indexed to the Company’s common shares and met the criteria for classification in stockholders’ equity. In July 2021, SVB exercised all the outstanding Warrants and the Company issued 472,113 shares of Company’s Class A Common Stock, net of exercise price.

Paycheck Protection Program Note (“PPP Note”)

On April 20, 2020, the Company received loan proceeds of approximately \$4.9 million under the Paycheck Protection Program (“PPP”), offered by the U.S. Small Business Administration (the “SBA”) pursuant to Title 1 of the Coronavirus Aid, Relief and Economic Security Act (the “CARES Act”). The PPP Note proceeds were available to be used to pay for payroll costs, including salaries, commissions, and similar compensation, group health care benefits, and paid leaves, rent and utilities, and mortgage interest payments. The PPP Note was subject to forgiveness to the extent proceeds were used for payroll costs, including payments required to continue group health care benefits, and certain rent, utility, and mortgage interest expenses (collectively, “Qualifying Expenses”), pursuant to the terms and limitations of the PPP Note.

The Company used the PPP Note amount intended for Qualifying Expenses. During the three months ended March 31, 2021, the Company submitted a forgiveness application to its lender seeking full forgiveness of the PPP Note. On August 24, 2021, the Company received notice from the lender that the Small Business Administration has approved the application for forgiveness of the PPP Note in the full amount.

Convertible Notes

Issuance of Convertible Notes

From June 2019 through July 2019, the Company issued \$14.8 million of convertible promissory notes (the “June 2019 Convertible Notes”) to certain investors. The June 2019 Convertible Notes matured on June 10, 2021 and accrued interest at 2.37% or 2.13%, compounded annually on basis of 360-days year of twelve 30-day months. Principal and any accrued but unpaid interest were due and payable at maturity.

From October 2019 through December 2020, the Company issued \$45.0 million of convertible promissory notes (the “October 2019 Convertible Notes” and collectively with the June 2019 Convertible Notes, the “Convertible Notes”) to certain investors. The October 2019 Convertible Notes matured on October 1, 2021 and accrued interest at 1.69%, 1.59% or 1.85%, compounded annually on basis of 360-days year of twelve 30-day months. Principal and any accrued but unpaid interest were due and payable at maturity.

Settlement of Convertible Notes

On January 28, 2021, the Company entered a stock purchase agreement with certain investors to close the issuance of Series C convertible preferred stock at a cash purchase price of \$6.62 per share and settle all outstanding Convertible Notes through Series C convertible preferred stock at a conversion price of \$1.33 or \$1.71 per share (“Series C Financing”). The Company issued 38,323,292 shares of Series C Convertible Preferred Shares (pre-combination) for conversion of outstanding Convertible Notes of \$61.0 million.

The June 2019 Convertible Notes were settled pursuant to the contractual conversion upon the Next Equity Financing feature with such financing yielding at least \$20.0 million in a single transaction. The Company credited the net carrying amount of the June 2019 Convertible Notes of \$14.5 million, including any unamortized debt discount, to Series C convertible preferred stock with no gain or loss recognized.

The October 2019 Convertible Notes were settled based on negotiated terms between the Company and the note holders as the Series C Financing did not meet the definition of Next Equity Financing for the October 2019 Convertible Notes. The Company assessed the economics of the settlement of the October 2019 Convertible Notes and concluded that it should be treated as a privately negotiated

debt redemption/settlement transaction where debt extinguishment accounting should be applied. Therefore, the Company derecognized the net carrying amount, including any unamortized debt discount, of the October 2019 Convertible Notes of \$42.6 million and recognized the Series C convertible preferred stock issued specifically to settle the October 2019 Convertible Notes at fair value as the reacquisition consideration. Accrued and unpaid interest of \$0.6 million was settled and not paid in cash and therefore it was included in calculating the extinguishment loss. The difference between the net carrying amount of the October 2019 Convertible Notes, plus accrued and unpaid interest, and the reacquisition consideration was recorded as a loss on extinguishment in the condensed consolidated statement of operations for the nine months ended September 30, 2021.

The Company issued in aggregate 26,727,308 shares of Series C convertible preferred stock (pre-combination) to settle the October 2019 Convertible Notes. The fair value of the Series C convertible preferred stock was determined to be \$176.9 million using the cash purchase price of \$6.62 per share on January 28, 2021. These October 2019 Convertible Notes had a carrying amount plus accrued and unpaid interest of \$43.2 million upon settlement. The difference of \$133.8 million was recognized as a loss on extinguishment on the Company's condensed consolidated statement of operations for the nine months ended September 30, 2021.

Bridge Loan

On May 20, 2021, the Company entered into a short-term promissory note (the "Bridge Loan") with Pendrell as the lender, pursuant to which Pendrell agreed to make available to the Company up to \$20.6 million in borrowings. Pendrell is the parent of X-icity Holdings Corporation, the sponsor of Holicity. The interest rate on the Bridge Loan borrowings was a fixed rate of 5.00% per annum. However, if repaid in full in connection with the closing of the Business Combination, then no interest will be due and payable. The Company was required to pay an upfront fee in the amount of 1.00% of the principal amount and an end of term fee in the amount of 2.00% of the principal amount. The funds drawn on the Bridge Loan may be prepaid by the Company at any time. The Bridge Loan matures upon the earliest of (a) the closing of the Business Combination, (b) 60 days following the abandonment of the Business Combination and (c) the date when the commitment amount is otherwise paid in full or accelerated pursuant to the terms of the Bridge Loan. Under the terms of the Bridge Loan, the Company borrowed \$10.0 million in June 2021, and subsequently paid off the outstanding principal and end of term fee totaling \$10.4 million on June 30, 2021. Refer to Note – 3 Acquisitions.

Note 7 — Warrant Liabilities

As part of Holicity's initial public offering ("IPO") in 2020, Holicity issued 9,999,976 warrants to third party investors, and each whole warrant entitled the holder to purchase one share of the Company's Class A common stock at an exercise price of \$11.50 per share (the "Public Warrants"). Simultaneously with the closing of the IPO, Holicity completed the private sale of 5,333,333 warrants to Holicity's sponsor ("Private Placement Warrants") and each Private Placement Warrant allowed the sponsor to purchase one share of the Company's Class A common stock at \$11.50 per share.

The Private Placement Warrants and the shares of common stock issuable upon the exercise of the Private Placement Warrants were not transferable, assignable or salable until after the completion of a Business Combination, subject to certain limited exceptions. Additionally, the Private Placement Warrants were exercisable for cash or on a cashless basis, at the holder's option, and were non-redeemable so long as they were held by the initial purchasers or their permitted transferees. If the Private Placement Warrants were held by someone other than the initial purchasers or their permitted transferees, the Private Placement Warrants will be redeemable by the Company and exercisable by such holders on the same basis as the Public Warrant.

The Company accounted for Public Warrants and Private Placement Warrants as liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in FASB ASC 480, Distinguishing Liabilities from Equity ("ASC 480") and ASC 815, Derivatives and Hedging ("ASC 815"). Specifically, the exercise of the Public and Private Placement Warrants may be settled in cash upon the occurrence of a tender offer or exchange that involves 50% or more of the Company's Class A shareholders. Because not all of the Company's shareholders needed to participate in such tender offer or exchange to trigger the potential cash settlement and the Company did not control the occurrence of such an event, the Company concluded that the Public Warrants and Private Placement Warrants did not meet the conditions to be classified in equity. Since the Public and Private Placement Warrants met the definition of a derivative under ASC 815, the Company recorded these warrants as liabilities on the balance sheet at fair value upon the closing of the Business Combination, with subsequent changes in their respective fair values recognized in the consolidated statement of operations at each reporting date.

On November 26, 2021, the Company issued a notice of redemption to redeem all of its Public Warrants and Private Placement Warrants ("Redeemable Warrants") outstanding as of December 27, 2021. Under the Warrant Agreement, the Company was entitled to redeem not less than all of the outstanding Redeemable Warrants at a Redemption Price of \$0.10 per Redeemable Warrant, provided that the last reported sales price of the Class A common stock had been at least \$10.00 per share on the trading day prior to the date on which notice of redemption is given, and further provided that there is an effective registration statement covering the shares of Class A common stock issuable upon exercise of the Redeemable Warrants and a current prospectus relating thereto, available through the Redemption Date.

Under the notice of redemption, Company required holders of the Redeemable Warrants to exercise their Warrants on a cashless basis, (the “Cashless Exercise Option”) and holders were not permitted to exercise Redeemable Warrants by paying the \$11.50 per share exercise price in cash. Pursuant to the Cashless Exercise Option, an exercising holder of the Redeemable Warrants received a number of shares of Class A common stock (the “Exercise Shares”) equal to the quotient obtained by dividing the product of the number of shares of Class A common stock underlying the Redeemable Warrants, multiplied by the excess of the fair market value of the Class A common stock over the exercise price of the Redeemable Warrants by the fair market value. Since the fair market value was less than the exercise price of the Redeemable Warrants, no Exercise Shares would have been issued if a holder would have elected to exercise its Redeemable Warrant pursuant to the Cashless Exercise Option. Alternatively, holders of the Redeemable Warrants were entitled to elect to receive, in lieu of the redemption price or exercising their Redeemable Warrants pursuant to the Cashless Exercise Option, 0.2560374 shares of Class A common stock for each Redeemable Warrants.

In connection with the redemption, the holders of 9,413,895 Public Warrants and 5,333,333 Private Placement Warrants elected to receive, in lieu of the redemption price, an aggregate 3,775,709 shares of Class A common stock at 0.2560374 shares of Class A Common Stock per Warrant. A total of 586,075 Public Warrants remained unexercised as of December 27, 2021 and the Company redeemed the Public Warrants for a redemption price of \$0.10 per Redeemable Warrant on December 27, 2021.

Note 8 — Income Taxes

The Company computes its provision for income taxes by applying the estimated annual effective tax rate to year-to-date income from recurring operations and adjust the provision for discrete tax items recorded in the period.

There has historically been no federal or state provision for income taxes because the Company has incurred operating losses and maintains a full valuation allowance against its net deferred tax assets. For the three and nine months ended September 30, 2022, the Company recognized no provision for income taxes consistent with the losses incurred and the valuation allowance against the deferred tax assets. For the three and nine months ended September 30, 2021, the Company recognized a tax benefit of \$0.4 million primarily due to the change in the realizability of certain U.S. deferred tax assets as a result of the Apollo Fusion Inc. acquisition.

Utilization of net operating loss carryforwards, tax credits and other attributes may be subject to future annual limitations due to the ownership change limitations provided by Section 382 of the Internal Revenue Code and similar state provisions.

The Company files income tax returns in the U.S. federal jurisdiction and various states. The Company is not currently under examination by income tax authorities in federal, state or other jurisdictions. All tax returns will remain open for examination by the federal and state authorities for three and four years, respectively, from the date of utilization of any net operating loss or credits.

On August 16, 2022, the U.S. enacted the Inflation Reduction Act of 2022, which, among other things, implements a 15% minimum tax on book income of certain large corporations, a 1% excise tax on net stock repurchases and several tax incentives to promote clean energy. Based on our current analysis of the provisions, we do not believe this legislation will have a material impact on our consolidated financial statements. The Company will continue to monitor for additional guidance related to the Act.

Note 9 — Leases

The Company has operating leases for warehouse, production, and office facilities and equipment. Lease contracts have remaining lease terms of less than one year to seven years, some of which include options to extend the term by up to 5 years. The Company included renewal options that are reasonably certain to be exercised as part of the lease term. Additionally, some lease contracts include termination options. The Company does not expect to exercise the majority of termination options and generally excludes such options when determining the term of leases.

The operating lease costs were \$1.0 million and \$0.5 million for the three months ended September 30, 2022 and 2021, respectively. The operating lease costs were \$1.9 million and \$1.2 million for the nine months ended September 30, 2022 and 2021, respectively. For the three and nine months ended September 30, 2022 and 2021, the Company did not have material short-term leases.

The weighted average remaining lease term was 4.93 years and 6.68 years as of September 30, 2022 and December 31, 2021, respectively. The weighted average discount rate was 8.21% as of September 30, 2022 and 7.34% as of December 31, 2021.

Cash flows arising from lease transactions for the three and nine months ended September 30, 2022 and 2021 were as follows (in thousands):

	For the Three Months Ended September 30,		Nine Months Ended September 30,	
<i>in thousands</i>	2022	2021	2022	2021
Cash paid for amounts included in the measurements of lease liabilities — operating cash flows	\$ (893)	\$ (484)	\$ (1,834)	\$ (1,254)
Right-of-use assets obtained in exchange for operating leases liabilities	\$ 6,949	\$ —	\$ 7,200	\$ —

Future minimum lease payments under non-cancellable leases in effect as of September 30, 2022 are as follows (in thousands):

	Operating Leases
2022 (remainder)	\$ 1,010
2023	4,069
2024	3,941
2025	3,233
2026	2,075
Thereafter	3,705
Total future undiscounted minimum lease payments	\$ 18,033
Less: imputed interest	3,156
Total reported lease liability	\$ 14,877

Note 10 — Fair Value Measurements

The Company measures its financial assets and liabilities at fair value each reporting period using a fair value hierarchy that prioritizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. A financial instrument's classification within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs may be used to measure fair value, as follows:

- Level 1 Observable inputs, such as quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3 Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The Company uses the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.

The carrying amounts of Company's financial instruments, which include cash equivalents, accounts receivable, prepaid expenses, other current assets, accounts payable, accrued liabilities and certain other current liabilities approximate fair value because of their short-term maturities.

The following table presents information about the Company's assets and liabilities that are measured at fair value on a recurring basis (in thousands):

Description	As of September 30, 2022			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
Money market account	\$ 17,349	\$ —	\$ —	\$ 17,349
Marketable securities				
US Treasury securities	15,746	—	—	15,746
Corporate debt securities	—	14,406	—	14,406
Commercial paper	—	48,253	—	48,253
Asset backed securities	—	4,531	—	4,531
Total financial assets	<u>\$ 33,095</u>	<u>\$ 67,190</u>	<u>\$ —</u>	<u>\$ 100,285</u>
Liabilities:				
Contingent consideration	\$ —	\$ —	\$ 42,950	\$ 42,950
Total financial liabilities	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 42,950</u>	<u>\$ 42,950</u>

Description	As of December 31, 2021			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
Money market account	\$ 100,000	\$ —	\$ —	\$ 100,000
Total financial assets	<u>\$ 100,000</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 100,000</u>
Liabilities:				
Contingent consideration	\$ —	\$ —	\$ 13,700	\$ 13,700
Total financial liabilities	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 13,700</u>	<u>\$ 13,700</u>

The following table presents a summary of the changes in fair value of the Company's Level 3 financial instruments:

<i>in thousands</i>	Contingent Consideration
Fair value as of December 31, 2021	\$ 13,700
Loss on change in fair value of contingent consideration included in other income (expense), net	29,249
Fair value as of September 30, 2022	<u>\$ 42,949</u>

The fair value of the contingent consideration related to the Apollo acquisition is classified as Level 3 financial instruments. To determine the fair value of the contingent consideration, the Company used a Monte Carlo simulation model. The Monte Carlo simulation considered assumptions including revenue volatilities, risk free rates, discount rates and additional revenue discount rate. Additionally, other key assumptions included forecasted revenues from new customers and probability of achieving it. The following table sets forth the range of inputs for the significant assumptions utilized to determine the fair value of contingent consideration as of September 30, 2022 and December 31, 2021:

	As of September 30, 2022	As of December 31, 2021
Risk-free interest rate	4.08 %	0.56 %
Expected revenue volatility	19.0 %	20.0 %
Revenue discount rate	9.00 %	5.50 %
Discount rate	4.80 %	3.25 %

The Company began investing in available-for-sale marketable securities in the first quarter of 2022. These marketable securities are classified as short term investments on the condensed consolidated balance sheets. The following is a summary of available-for-sale marketable securities as of September 30, 2022 (in thousands):

	As of September 30, 2022		
Description	Amortized Cost	Gross Unrealized Loss	Fair Value
U.S. Treasury securities	\$ 15,798	\$ (52)	\$ 15,746
Corporate debt securities	14,528	(122)	14,406
Commercial paper	48,253	-	48,253
Asset backed securities	4,559	(28)	4,531
Total available-for-sale marketable securities	<u>\$ 83,138</u>	<u>\$ (202)</u>	<u>\$ 82,936</u>

The following table presents the breakdown of the available-for-sale marketable securities in an unrealized loss position as of September 30, 2022 (in thousands).

	September 30, 2022	
	Fair Value	Gross Unrealized Loss
U.S. Treasury securities		
Less than 12 months	\$ 15,746	\$ 52
Total	<u>\$ 15,746</u>	<u>\$ 52</u>
Corporate debt securities		
Less than 12 months	\$ 14,406	\$ 122
Total	<u>\$ 14,406</u>	<u>\$ 122</u>
Commercial paper		
Less than 12 months	\$ 48,253	\$ -
Total	<u>\$ 48,253</u>	<u>\$ -</u>
Asset backed securities		
Less than 12 months	\$ 4,531	\$ 28
Total	<u>\$ 4,531</u>	<u>\$ 28</u>

The Company does not believe these available-for-sale marketable securities to be other-than-temporarily impaired as of September 30, 2022. There was a realized loss of \$0 and \$0.1 million on available-for-sale marketable securities during the three and nine months ended September 30, 2022.

	As of September 30, 2022	
<i>in thousands</i>	Amortized Cost	Fair Value
Due in 1 year or less	\$ 83,138	\$ 82,936

Note 11 — Commitments and Contingencies

Legal Proceedings

The Company is party to ordinary and routine litigation incidental to its business. On a case-by-case basis, the Company engages inside and outside counsel to assess the probability of potential liability resulting from such litigation. After making such assessments, the Company makes an accrual for the estimated loss only when the loss is probable, and an amount can be reasonably estimated.

On February 9, 2022, a putative class action was filed in the United States District Court for the Eastern District of New York styled *Artery v. Astra Space, Inc. et al.*, Case No. 1:22-cv-00737 (E.D.N.Y.) (the “Artery Action”). The complaint alleges that the Company and certain of its current and former officers violated provisions of the Securities Exchange Act of 1934 with respect to certain statements concerning the Company's capabilities and business prospects. The complaint seeks unspecified damages on behalf of a purported class of purchasers of the Company's securities between February 2, 2021 and December 29, 2021. On March 23, 2022, a second putative class action was filed in the United States District Court for the Eastern District of New York styled *Riley v. Astra Space, Inc., et al.*, Case No. 1:22-cv-01591 (E.D.N.Y.) (the “Riley Action,” with the Artery Action, the “Securities Actions”). The Riley Action alleges the same claims, based upon similar facts, against the same defendants, and seeks the same damages. The Company expects that the two cases will be consolidated into a single action. Defendants intend to move to dismiss once an amended complaint is filed. The co-lead plaintiffs have requested an extension to file their amended complaint for which the Court has not yet issued a decision. The Company believes that the Securities Actions are without merit and intends to defend them vigorously. Due to the early stage of the cases, neither the likelihood that a loss, if any, will be realized, nor an estimate of the possible loss or range of loss, if any, can be determined.

On March 8, 2022, a stockholder derivative suit was filed in the United States District Court for the State of Delaware styled *Meyer, et al., v. Kemp, et al.*, Case No. 22-cv-00308 (D. Del.). The complaint asserts claims against the current members of the Company's board of directors and certain of its current and former officers, for breach of their fiduciary duty, waste, unjust enrichment, and contribution under the Securities Exchange Act of 1934, based upon the conduct alleged in the Artery Action. The plaintiffs seek monetary damages in favor of the Company in an unstated amount, reformation of the Company's corporate governance and internal procedures, restitution including a disgorgement of any compensation, profits or other benefits achieved, and reimbursement of the plaintiffs' reasonable fees and costs, including attorney's fees. The Company believes that the case is without merit and intends to defend it vigorously. Due to the early stage of the case, neither the likelihood that a loss, if any, will be realized, nor an estimate of the possible loss or range of loss, if any, can be determined. On July 8, 2022, the plaintiffs voluntarily dismissed this suit. The dismissal was without prejudice to plaintiffs' right to re-file the lawsuit in the Court of Chancery of the State of Delaware.

On April 27, 2022, a stockholder derivative suit was filed in the United States District Court for the Eastern District of New York styled *Gonzalez v. Kemp, et al.*, Case No. 22-cv-02401 (E.D.N.Y.). The complaint asserts claims against the current members of the Company's board of directors and certain of its current and former officers for alleged breaches of their fiduciary duties, unjust enrichment, abuse of control, mismanagement, and waste of corporate assets, alleged violations of Section 14(a) of the Securities Exchange Act of 1934 (the “Exchange Act”), and for contribution under Section 10(b) and 21D of the Exchange Act based upon the conduct alleged in the Artery Action described above. The plaintiff seeks monetary damages in favor of the Company in an unstated amount, reforms to the Company's corporate governance and internal procedures, restitution including disgorgement of any compensation, profits or other benefits received, and reimbursement of the plaintiff's reasonable fees and costs, including attorney's fees. The Company believes that the case is without merit and intends to defend it vigorously. Due to the early stage of the case, neither the likelihood that a loss, if any, will be realized, nor an estimate of the possible loss or range of loss, if any, can be determined.

The Company has tendered defense of each of the three foregoing claims under its Directors' and Officers' policy. The retention under this policy is \$20.0 million.

Indemnification Obligations to former Company Board Members

On May 20, 2022, a putative class action was filed in the Court of Chancery of the State of Delaware styled *Newbold v. McCaw et. al.*, Case No. 2022-0439 (the “Newbold Action”). The complaint alleges that Pendrell Corporation, X-icity Holdings Corporation f/k/a Pendrell Holicity Holdings and certain former officers, directors or controlling stockholders of Holicity, Inc. n/k/a Astra Space, Inc., breached their fiduciary duties to the Company in closing on the Business Combination. The complaint seeks unspecified damages on behalf of a purported class of stockholders of the Company's securities from June 28, 2021 through June 30, 2021.

Neither the Company nor any of its board members are parties in this action. The Company's former board member, Mr. McCaw, is a defendant in this action, but the allegations relate to periods prior to the Business Combination. Astra is obligated to indemnify certain of the defendants in the Newbold Action. The Company has tendered defense of this action under its Directors' and Officers' Policy. The Company tendered defense of this claim under the tail policy it was required to purchase in connection with the Business Combination. The retention under that policy is \$1.5 million. Due to the early stage of this case, neither the likelihood that a loss, if any, will be realized, nor an estimate of the possible loss or range of loss, if any, can be determined.

Purchase Commitments

In order to reduce manufacturing lead times and to have access to an adequate supply of components, the Company enters into agreements with certain suppliers to procure component inventory based on the Company's production needs. A significant portion of the Company's purchase commitments arising from these agreements consist of firm and non-cancelable commitments. As of September 30, 2022, we had purchase commitments aggregating \$39.0 million for which the Company was or will become obligated to make payments within 12 months to 60 months from the execution date of the agreements. Of these, there are agreements containing an aggregate of \$32.1 million in early termination penalties. For example, one of the supply agreement penalties includes payment of 50% of the remaining purchase commitment at any point during the contract term. In another agreement, the Company may terminate the supply agreement by paying the balance on the remaining purchase commitment only after the first anniversary of the commencement date. If the agreement is terminated before the first anniversary, the Company has to pay the entire contract amount of \$9.6 million.

Note 12 — Convertible Preferred Stock

Convertible Preferred Stock

From pre-combination Astra's inception until the consummation of the Business Combination, approximately \$100.2 million of cash capital contributions was raised, net of issuance costs, through the issuance of three rounds of convertible preferred equity.

The three classes of convertible preferred stock of pre-combination Astra were: Series A convertible preferred stock, Series B convertible preferred stock and Series C convertible preferred stock (collectively, the "Convertible Preferred Stock"). Immediately before the consummation of the Business Combination, the Convertible Preferred Stock of pre-combination Astra consisted of:

Series	Shares Outstanding (pre-combination Astra)	Liquidation Price Per Share	Conversion Price Per Share	Annual Noncumulative Dividend Rights Per Share
A	65,780,540	\$ 0.243233	\$ 0.243233	\$ 0.019459
B	70,713,123	1.333008	1.333008	0.106640
C	50,483,785	6.620970	6.620970	0.529680
Total	186,977,448			

Upon the consummation of the Business Combination in June 2021, 186,977,448 shares of Convertible Preferred Stock (pre-combination Astra) converted into 124,340,003 shares of Class A common stock of the Company. The Company no longer had Convertible Preferred Stock authorized, issued or outstanding subsequent to the close of Business Combination in June 2021.

On January 28, 2021, concurrent with Series C Financing, the Company amended its certificate of incorporation to add a merger with a special purpose acquisition company ("SPAC Transaction") as one of the defined Deemed Liquidation events. In addition, upon triggering of the Deemed Liquidation events, the holders of the Convertible Preferred Stock were entitled to receive the greater of their liquidation preference per share and the as converted value per share. As of March 31, 2021, the Company assessed the probability of a SPAC Transaction to be probable and therefore, the Convertible Preferred Stock were considered probable of becoming redeemable.

Subsequent measurement of Convertible Preferred Stock was then required for the three months ended March 31, 2021. The Company elected to apply the current redemption value method to measure the redeemable Convertible Preferred Stock. Under the method, changes in the redemption value were recognized immediately as they occurred and the carrying value of the Convertible Preferred Stock was adjusted to the redemption value at the end of each reporting date. In the absence of retained earnings, adjustments to redemption value were recorded against additional paid-in capital, if any, and then to accumulated deficit. As of March 31, 2021, adjustments to the carrying amount of the Convertible Preferred Stock of \$1.1 billion, reflecting the estimated redemption value of \$7.18 per share as of March 31, 2021, were treated as deemed dividends and were recognized against additional paid-in capital and accumulated deficit on the consolidated balance sheet.

On the Closing Date of the Business Combination, all outstanding Convertible Preferred Stock converted into Class A common stock of the Company, therefore, the Company applied conversion accounting to derecognize the existing carrying amount of the Convertible Preferred Stock and increased additional paid-in capital as of June 30, 2021.

Note 13 — Stockholders' Equity*Common and Preferred Stock*

As of September 30, 2022, the Company had authorized a total of 466,000,000 shares of stock, consisting of (i) 400,000,000 shares of Class A common stock, par value \$0.0001 per share ("Class A common stock"), (ii) 65,000,000 shares of Class B common stock, par value \$0.0001 per share ("Class B common stock"), and (iii) 1,000,000 shares of preferred stock, par value \$0.0001 per share ("Preferred Stock"). As of September 30, 2022, the Company had 211,824,567 and 55,539,188 shares of Class A and Class B common stock issued and outstanding, respectively. There were no shares of preferred stock outstanding as of September 30, 2022.

Holders of the Class A and Class B common stock have identical distribution rights, except that holders of the Class A common stock are entitled to one vote per share and holders of the Class B common stock are entitled to ten votes per share. Each share of Class B common stock can be converted into one share of Class A common stock at any time at the option of the stockholder and automatically convert upon sale or transfer, except for certain transfers specified in the Company's amended and restated certificate of incorporation.

In connection with the Business Combination, the Company's executive officers and founders, Chris Kemp and Adam London, converted an aggregate 10,870,562 shares of Founders Preferred Stock and an aggregate 3,599,647 shares of Class A common stock of pre-combination Astra, which were entitled to one vote per share, into 9,622,689 shares of Class B common stock of the Company, which are entitled to ten votes per share.

Founders Convertible Preferred Stock

The Company issued 18,500,000 shares of pre-combination Astra's Founders Convertible Preferred Stock in 2016. Upon vesting, the compensation expense associated with the Founders Convertible Preferred Stock was recorded as stock-based compensation based on the fair value of the Founders Convertible Preferred Stock on the grant date fair value. Immediately before the closing of the Business Combination, 10,870,562 shares of pre-combination Astra's Founders Convertible Preferred Stock were outstanding. Upon closing of the Business Combination, the shares of Founders Convertible Preferred Stock were converted into shares of Class B common stock of the Company, which are entitled to ten votes per share. Refer to Note 3 – Acquisitions.

Common Stock Purchase Agreement

On August 2, 2022, the Company entered into a Common Stock Purchase Agreement and a Registration Rights Agreement (the "Registration Rights Agreement") with B. Riley. Pursuant to the Purchase Agreement, the Company will have the right to sell to B. Riley up to the lesser of (i) \$100,000,000 of newly issued shares (the "Shares") of the Class A Common Stock, and (ii) 53,059,650 Shares of Class A Common Stock, which number of shares is equal to 19.99% of the sum of Class A Common Stock and Class B common stock issued and outstanding immediately prior to the execution of the Purchase Agreement (subject to certain conditions and limitations), from time to time during the term of the Purchase Agreement. However, the Purchase Agreement prohibits the Company from issuing or selling any shares of Class A Common Stock to B. Riley if such a sale, when aggregated with all other shares of Class A Common Stock then beneficially owned by B. Riley and its affiliates, would result in B. Riley beneficially owning more than 4.99% of the outstanding shares of Class A Common Stock.

Sales of the Shares pursuant to the Purchase Agreement, and the timing of any sales, are solely at the option of the Company over the 24-month period from the date of initial satisfaction of the conditions to B. Riley set forth in the Purchase Agreement, including that a registration statement registering the resale by B. Riley of the Class A Common Stock under the Securities Act that may be sold to B. Riley by the Company under the Purchase Agreement is declared effective by the Securities and Exchange Commission (the "SEC") and a final prospectus relating thereto is filed with the SEC. Actual sales of Shares to B. Riley under the Purchase Agreement will depend on a variety of factors to be determined by the Company including, among other things, market conditions, the trading price of the Class A Common Stock and determinations by the Company as to the appropriate sources of funding for the Company and its operations.

The purchase price of the Class A Common Stock that the Company may sell to B. Riley pursuant to the Purchase Agreement will be 97% of the average of the volume weighted average price of the Company's Class A Common Stock as calculated per the terms set forth in the Purchase Agreement. The net proceeds from sales, if any, under the Purchase Agreement, will depend on the frequency and prices at which the Company sells the Shares of Class A Common Stock. To the extent the Company sells the Shares of Class A Common Stock under the Purchase Agreement, the Company currently plans to use any proceeds for working capital and general corporate purposes.

The right to sell Shares under the Common Stock Purchase Agreement is classified as a financial instrument and is measured at fair value. The fair value of the financial instrument at execution date and as of September 30, 2022 was not significant. Upon execution of the Purchase Agreement, the Company issued 359,098 shares of Class A Common Stock to B. Riley as consideration for its irrevocable commitment to purchase shares of our Class A Common Stock from time to time.

For the three and nine months ended September 30, 2022, no shares were sold to B. Riley. The Company recognized \$0.6 million of issuance costs related to the Purchase Agreement within “General and administrative” expenses.

As of September 30, 2022, the Company is in compliance with the terms and conditions of the Purchase Agreement and the remaining availability under the Purchase Agreement was \$100 million, subject to certain limitations described above.

Note 14 — Stock-based Compensation

Stock-based incentive awards are provided to employees under the terms of various Astra equity incentive plans.

2021 Omnibus Incentive Plan

In June 2021, the Board of Directors approved the 2021 Omnibus Incentive Plan (the “2021 Plan”), which reserved 36.8 million shares of Class A common stock for issuance for awards in accordance with the terms of the 2021 Plan. On January 1, 2022, pursuant to the terms of the 2021 Plan, the number of shares of Class A common stock available for issuance under the 2021 Plan increased by 13.1 million. Similarly, the share reserve increases on January 1 of each year from 2023 to 2031 by the lesser of (i) 5% of the sum of number of shares of (x) Class A common stock and (y) Class B common stock outstanding as of the close of business on the immediately preceding December 31 and (ii) the number of shares of Class A common stock as determined by the Board. On June 1, 2022, the shareholders of the Company approved the amendment of 2021 Plan to increase the Class A common stock available for issuance under the 2021 plan by 6 million. The purpose of the 2021 Plan is to advance the Company’s interests by providing for the grant to employees, directors, consultants and advisors of stock and stock-based awards. As of September 30, 2022, 16.8 million shares remain available for issuance under the plan.

2021 Employee Stock Purchase Plan

In June 2021, the Board of Directors approved the 2021 Employee Stock Purchase Plan (the “2021 ESPP”) to reserve 5.0 million shares of Class A common stock for issuance for awards in accordance with the terms of the ESPP. On January 1, 2022, pursuant to the terms of the 2021 ESPP, the number of shares of Class A common stock available for issuance under the 2021 ESPP increased by 2.6 million. Similarly, the number of shares of Class A common stock reserved for issuance under the 2021 ESPP will ultimately increase on January 1 of each year from 2023 to 2031 by the lesser of (i) 1% of the sum of number of shares of Class A common stock and Class B common stock outstanding as of the close of business on the immediately preceding December 31 and (ii) the number of shares of Class A common stock as determined by the Board. The purpose of the 2021 ESPP is to enable eligible employees to use payroll deductions to purchase shares of Class A common stock and thereby acquire an interest in the company. Eligible employees are offered shares through a 24-month offering period, which consists of four consecutive 6-month purchase periods. Employees may purchase a limited amount of shares of the Company's stock at a discount of up to 15% of the lesser of the fair market value at the beginning of the offering period or the end of each 6-month purchase period. 0.5 million shares were issued under the Employee Stock Purchase Plan during the nine months ended September 30, 2022. As of September 30, 2022, 7.2 million shares remain available for issuance under the 2021 ESPP. As of September 30, 2022, the Company had \$1.1 million of unrecognized stock-based compensation expense related to the 2021 ESPP. This cost is expected to be recognized over a weighted-average period of 0.93 years.

2016 Equity Incentive Plan

In 2016, pre-combination Astra adopted the 2016 Equity Incentive Plan (the “2016 Plan”). Under this Plan, the Board of Directors or a committee appointed by the Board of Directors is authorized to provide stock-based compensation in the form of stock options, stock appreciation rights, restricted stock, and other performance or value-based awards within parameters set forth in the Plan to employees, directors, and non-employee consultants.

In connection with the Business Combination, the Company assumed the 2016 Plan upon closing. Each outstanding and unexercised option (“Astra Option”) was converted, at the exchange ratio established in the BCA, into an option (“New Astra Option”) to acquire shares of the Company’s Class A common stock with the same terms and conditions as applicable to the Astra Option immediately prior to the Business Combination. As of September 30, 2022, there were no shares available for issuance under the plan.

The following table summarizes stock-based compensation expense that the Company recorded in the condensed consolidated statements of operations for the three and nine months ended September 30, 2022 and 2021, respectively:

<i>in thousands</i>	For the Three Months Ended September 30,		For The Nine Months Ended September 30,	
	2022	2021	2022	2021
Cost of revenues	\$ 109	\$ —	\$ 806	\$ —
Research and development	5,565	1,334	17,133	4,638
Sales and marketing	1,562	15	4,559	70
General and administrative	6,512	1,339	21,082	15,757
Stock-based compensation expense	<u>\$ 13,748</u>	<u>\$ 2,688</u>	<u>\$ 43,580</u>	<u>\$ 20,465</u>

On November 22, 2021, under the 2021 Plan, the Company's compensation committee issued 1,047,115 PSUs to the employees of Apollo who joined Astra. PSUs are subject to certain performance-based and service-based vesting conditions and would vest over four years with 25% of awards vesting on July 1, 2022, and the remaining 75% vesting quarterly over the remaining 12 quarters beginning on November 15, 2022, only for the portion of PSUs that is eligible to become vested which will be determined based upon timely satisfaction of performance conditions. The number of PSUs vested is determined by multiplying the total number of PSUs granted by the percentage of milestones achieved and by the percentage of PSUs that satisfy the time-based vesting condition on such time-vesting date.

Certain performance conditions for PSUs are subjective and the number of PSUs related to these performance conditions did not meet the criteria for the grant date. Accordingly, 523,557 PSUs and 52,355 PSUs related to the performance conditions that are not subjective were considered granted as of November 22, 2021 and January 21, 2022, respectively.

In July 2022, the PSU agreements were amended to remove the performance-based vesting conditions and only retain the time-based vesting condition. Therefore, the Company recognized \$0.3 million and \$1.5 million compensation costs related to PSUs for the three and nine months ended September 30, 2022, respectively, to reflect the PSUs that satisfied the time-based vesting condition on the time-vesting dates.

On September 20, 2021, under the 2021 Plan, the Company's compensation committee granted 3,972,185 restricted stock units ("RSUs"), 3,426,094 time-based stock options and 13,016,178 performance stock options ("PSOs") to its executive officers. RSUs and time-based stock options granted have service-based vesting conditions only. The service conditions vary for each executive officer and is based on their continued service to the Company. Option holders have a 10-year period to exercise their options before options expire. Forfeitures are recognized in the period of occurrence and stock-based compensation costs are recognized based on grant-date fair value as RSUs and time-based stock options vest.

PSOs, only eligible to the executive officers of the Company, are subject to performance conditions as follows, and the milestones do not need to be achieved in any specific order or sequence:

Milestone A: The Company has had a successful orbital delivery.

Milestone B: The Company has had six orbital launches during a six consecutive month period.

Milestone C: The Company has completed a prototype for a spacecraft that has achieved an orbital launch.

Milestone D: The Company has conducted twenty-six orbital launches during a six consecutive month period.

Milestone E: The Company has achieved an orbital launch for an aggregate of 100 spacecraft.

These PSOs also require the volume weighted average share price for a period of thirty trading days meet share price thresholds of \$15.00, \$20.00, \$30.00, \$40.00 and \$50.00 following the achievement of the first milestone, second milestone, third milestone, fourth milestone and fifth milestone, respectively, before a milestone will be deemed achieved. After each milestone is achieved, 20% of the PSOs will vest on the vesting date immediately following the date at which the price thresholds are met. For this purpose, a "vesting date" is February 15, May 15, August 15 and November 15 of any applicable year. The milestones must be achieved over a period of approximately five years, with the earliest vesting date of November 15, 2022, and the last vesting date no later than November 15, 2026, if all vesting conditions are met. No unvested portion of the PSOs shall vest after November 15, 2026. As of September 30, 2022, the Company assessed the probability of success for the five milestones mentioned above and determined that it is probable that the Company will achieve Milestone A and Milestone B within the requisite period. Therefore, the Company recognized \$5.2 million and \$14.2 million compensation costs related to PSOs for the three and nine months ended September 30, 2022, respectively. As of September 30, 2022, we had unrecognized stock-based compensation expense of \$32.8 million for the milestones that were not considered probable of achievement.

In April 2021, the Board of Directors approved the acceleration of the vesting of 1,900,000 pre-combination Astra stock options issued to two executive officers: Kelyn Brannon and Martin Attiq, on December 27, 2020. The Company recognized the remaining

stock-based compensation expense of \$7.2 million on its Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2021.

In February 2021, the Board of Directors approved the acceleration in vesting of 206,250 pre-combination Astra stock options that were issued to one employee on May 15, 2020. The remaining unvested options were fully vested upon acceleration. The Company recorded a \$1.4 million stock-based compensation expense related to the modification for the three months ended March 31, 2021.

As of September 30, 2022, the Company had \$103.9 million of unrecognized stock-based compensation expense related to all of the Company's stock-based awards. This cost is expected to be recognized over a weighted-average period of 3.0 years.

Secondary Sales

In April 2021, four executive officers, Chris Kemp, CEO, Adam London, CTO, Kelyn Brannon, Chief Financial Officer (“CFO”), and Martin Attiq, Chief Business Officer (“CBO”), entered into stock purchase agreements with new investors to sell 2,534,793, 865,560, 1,500,000 and 400,000 shares, respectively, of Class A common stock of pre-combination Astra, at a purchase price per share of \$5.66 (“April 2021 Secondary Sales”). No additional stock-based compensation expense was recognized for the three and nine months ended September 30, 2021 as the purchase price was below fair market value of Class A common stock of pre-combination Astra at the time of the sales.

In January 2021, concurrent with Series C Financing, two executive officers, Chris Kemp, founder and Chief Executive Officer (“CEO”), and Adam London, founder and Chief Technology Officer (“CTO”), entered into stock purchase agreements with certain investors including ACME SPV AS, LLC to sell 3,775,879 and 2,265,529 shares, respectively, of Founders Convertible Preferred Stock at purchase prices in excess of the estimated fair value at the time of the transactions (“January 2021 Secondary Sales”) to certain investors. Upon the sale, the Founders Convertible Preferred Stock automatically converted into Series C Convertible Preferred Stock. The Company’s board member, Scott Stanford, is a member of ACME SPV AS, LLC and the Company facilitated the January 2021 Secondary Sales. As a result, for the three months ended March 31, 2021, the Company recorded a total of \$8.2 million in stock-based compensation expense for the difference between the price paid by these investors and the estimated fair value of the Founders Convertible Preferred Stock on the date of the transaction.

Stock Options Awards

The following is a summary of stock option activity for the nine months ended September 30, 2022:

	No. of Options	Weighted- Average Exercise Price	Weighted- Average Remaining Term (in Years)	Aggregate Intrinsic Value
Outstanding – December 31, 2021	20,326,384	\$ 7.52	9.4	\$ 22,782,654
Granted	1,242,027	4.85		
Exercised	(620,145)	0.45		
Forfeited	(267,189)	1.18		
Expired	(5,067)	6.75		
Outstanding – September 30, 2022	20,676,010	\$ 7.61	8.7	\$ 414,014
Unvested – September 30, 2022	520,648	\$ 8.37	8.86	\$ 124,254
Exercisable – September 30, 2022	20,155,362	\$ 3.83	7.6	\$ 289,760

The Company uses the Black-Scholes option pricing-model to calculate the grant date fair value of time-based options. The following table summarizes the assumptions used in estimating the fair value of options granted in the nine months ended September 30, 2022:

Time Based Stock Options	
Expected terms (years) ⁽¹⁾	5.81
Expected volatility ⁽²⁾	68.9 %
Risk-free interest rate ⁽³⁾	1.70 %
Expected dividend rate ⁽⁴⁾	-
Grant-date fair value	\$ 3.20

- (1) The expected term is the length of time the grant is expected to be outstanding before it is exercised or terminated. This number is calculated as the midpoint between the vesting term and the original contractual term (contractual period to exercise). If the option contains graded vesting, then the vesting term would be based on the vesting pattern.
- (2) Expected volatility, or the standard deviation of annualized returns, was calculated based on comparable companies' reported volatilities.
- (3) Risk-free interest was obtained from US treasury notes for the expected terms noted as of the valuation date.
- (4) The Company has assumed a dividend yield of zero as it has no plans to declare dividends in the foreseeable future.

Restricted Stock Units Awards

The following is a summary of restricted stock units for the nine months ended September 30, 2022:

	Number of RSUs Outstanding	Weighted- Average Grant Date Fair Value Per Share
Outstanding – December 31, 2021	10,678,818	\$ 9.20
Granted	13,760,707	2.51
Vested	(2,737,757)	8.40
Forfeited	(2,941,954)	7.18
Outstanding – September 30, 2022	18,759,814	\$ 4.73

Total fair value as of the respective vesting dates of restricted stock units vested for the nine months ended September 30, 2022 was approximately \$6.5 million. As of September 30, 2022, the aggregate intrinsic value of unvested restricted stock units was \$11.7 million.

Note 15 — Loss per Share

Founders Convertible Preferred Stock and Convertible Preferred Stock were participating securities in periods of income, as the Founders Convertible Preferred Stock and Convertible Preferred Stock participated in undistributed earnings on an as-if-converted or as-vested basis. However, the Founders Convertible Preferred Stock and Convertible Preferred Stock, did not share in losses.

The Company computes earnings per share of Common Stock using the two-class method required for participating securities and does not apply the two-class method in periods of net loss. Basic and diluted earnings per share were the same for the periods presented as the inclusion of all potential Common Stock outstanding would have been anti-dilutive. Earnings per share calculations for all periods prior to the Business Combination have been retrospectively restated to the equivalent number of shares reflecting the exchange ratio established in the BCA. Subsequent to the Business Combination, earnings per share was calculated based on weighted average number of shares of common stock then outstanding.

The following tables set forth the computation of basic and diluted loss for the three months ended September 30, 2022 and 2021, and the nine months ended September 30, 2022 and 2021:

	For The Three Months Ended September 30,			
	2022		2021	
(in thousands, except share and per share amounts)	Class A Common	Class B Common	Class A Common	Class B Common
Net loss attributed to common stockholders	\$ (157,592)	\$ (41,522)	\$ (12,697)	\$ (3,551)
Basic weighted average common shares outstanding	210,788,116	55,539,188	201,080,003	56,239,188
Dilutive weighted average common shares outstanding	210,788,116	55,539,188	201,080,003	56,239,188
Loss per share attributable to common stockholders:				
Basic and Diluted loss per share	\$ (0.75)	\$ (0.75)	\$ (0.06)	\$ (0.06)

For The Nine Months Ended September 30,				
	2022		2021	
(in thousands, except share and per share amounts)	Class A Common	Class B Common	Class A Common	Class B Common
Net loss attributed to common stockholders	\$ (290,145)	\$ (76,985)	\$ (126,985)	\$ (79,532)
Adjustment to redemption value on Convertible Preferred Stock	—	—	(622,098)	(389,628)
Net loss attributed to common stockholders	\$ (290,145)	\$ (76,985)	\$ (749,083)	\$ (469,160)
Basic weighted average common shares outstanding	209,317,361	55,539,188	79,784,524	49,970,071
Dilutive weighted average common shares outstanding	209,317,361	55,539,188	79,784,524	49,970,071
Loss per share attributable to common stockholders:				
Basic and Diluted loss per share	\$ (1.39)	\$ (1.39)	\$ (9.39)	\$ (9.39)

There were no preferred dividends declared or accumulated as of September 30, 2022. The following Class A securities were not included in the computation of diluted shares outstanding because the effect would be anti-dilutive:

As of September 30,		
	2022	2021
	Class A Common	Class A Common
Stock options	7,139,177	20,752,943
RSUs	18,759,814	9,352,100
Convertible Preferred Stock	—	—
Warrants	—	15,333,309
Total	25,898,991	45,438,352

The Class A securities excluded in the computation of diluted shares outstanding were the same for the three and nine months ending September 30, 2022 and September 30, 2021. There were no Class B securities that were excluded in the computation of diluted shares outstanding for the three and nine months ending September 30, 2022 and September 30, 2021.

Note 16 — Segment Information

The Company reports segment information based on a “management” approach to reflect the operating segments for which the Company’s Chief Executive Officer, as the Chief Operating Decision Maker (“CODM”), makes decisions and assesses performance. Prior to the current reporting period, the Company had a single operating and reportable segment. Following commencement of revenue-generating activities for Space Products (as defined below) during the third quarter of fiscal year 2022, the Company restructured the management, operations, and periodic management and internal reporting packages to address the shift in strategy. As a result of these changes, the Company determined that its reportable segments had changed and that beginning in the current reporting period the Company has two operating and reportable segments: Launch Services and Space Products. The Company recast prior period information related to the change in segments, however, there were no revenues or cost of revenues associated to these segments in the prior year.

Launch services segment provides launch services to satellite operators and governments in partnership with third-party spaceport providers globally, including complementary services that are not part of the Company's fixed pricing.

Space Products consist of designing and providing space products based on the customers' needs for a successful satellite launch and other products that the Company may sell in the future.

The accounting policies of the various segments are the same as those described in Note 2.

The following table shows revenue by reportable segment for the three and nine months ended September 30, 2022 and 2021:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenues:				
Launch services	\$ —	\$ —	\$ 5,899	\$ —
Space products	2,777	—	3,471	—
Total revenues:	\$ 2,777	\$ —	\$ 9,370	\$ —
Cost of revenues:				
Launch services	—	—	28,193	—
Space products	1,071	—	1,337	—
Total cost of revenues:	\$ 1,071	\$ —	\$ 29,530	\$ —
Gross profit (loss):				
Launch services	-	—	(22,294)	—
Space products	1,706	—	2,134	—
Total gross profit (loss):	\$ 1,706	\$ —	\$ (20,160)	\$ —

The Company evaluates the performance of its reportable segments based on segment gross profit. Segment gross profit is segment revenue less segment cost of revenue. Unallocated expenses include operating expenses related to research and development, selling and marketing and general and administrative expenses as they are not considered when management evaluates segment performance.

The following table reconciles segment gross profit to loss before income taxes for the three and nine months ended September 30, 2022 and 2021:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Gross profit (loss)	\$ 1,706	\$ —	\$ (20,160)	\$ —
Research and development	32,821	21,724	111,546	44,159
Selling and marketing	4,052	1,090	13,452	2,229
General and administrative	19,222	19,730	60,816	50,712
Impairment expense	75,116	—	75,116	—
Goodwill impairment	58,251	—	58,251	—
Loss on change in fair value of contingent consideration	11,949	—	29,249	—
Interest (income) expense, net	(616)	(18)	(1,146)	1,194
Other expense (income), net	25	(25,895)	(314)	(25,177)
Loss on extinguishment of convertible notes	—	—	—	131,908
Loss on extinguishment of convertible notes attributable to related parties	—	—	—	1,875
Loss before taxes	\$ (199,114)	\$ (16,631)	\$ (367,130)	\$ (206,900)

The Company does not evaluate performance or allocate resources based on reporting segment's total assets or operating expenses, and therefore such information is not presented.

All of the Company's long-lived assets are located in the United States. The Company is subject to International Traffic in Arms Regulations ("ITAR") and generates all of its revenue in the United States.

For the three and nine months ended September 30, 2022, one customer accounted for 100% and 37% of the Company's total revenues, which pertained to the revenues within the Space Products segment. In addition, a second customer accounted for 59% of the Company's total revenues for the nine months ended September 30, 2022, which pertained to the revenues within the Launch Services segment. The Company did not generate revenue in the three and nine months ended September 30, 2021.

Note 17 — Related Party Transactions

Cue Health, Inc.

In August 2021, the Company entered into a six-month subscription arrangement with Cue Health Inc. for the purchase of COVID-19 test readers and the related test cartridges. Under Cue Health Inc.'s standard subscription arrangement, the Company receives a twenty percent (20%) discount on each Cue Reader and fourteen percent (14%) discount on each test cartridge. Mr. Stanford, a member of the Board and the Company's Lead Director, serves on the board of directors of Cue Health Inc. Funds affiliated with ACME Capital collectively beneficially own 10.4% of the outstanding common stock of Cue Health Inc. Mr. Stanford was not involved in the negotiation of the Company's arrangement with Cue Health Inc. The Company conducted its independent evaluation of Cue's services and determined in its sole judgment Cue's product and services were the best option for the Company to ensure it could maintain a safe and productive work environment. The Company made purchases of \$0.2 million and \$0.8 million during the three and nine months ended September 30, 2022. In September 2022, the Company and Cue Health Inc. entered an amendment to the purchase agreement for a last time buy of test cartridges, with the agreement expected to be terminated in the fourth quarter of 2022. No such purchases were made during the three and nine months ended September 30, 2021.

Convertible Promissory Notes

In June 2019, the Company issued promissory convertible notes to A/NPC Holdings LLC and Sherpa Ventures Fund, II LP for gross proceeds of \$10.0 million and \$0.6 million, respectively. In November 2020, the Company issued promissory convertible notes to Sherpa Ventures Fund II, LP and Eagle Creek Capital LLC, for gross proceeds of \$0.2 million and \$0.5 million, respectively. Some of the Company's board members at that time were or are related parties of these entities. Nomi Bergman, who was serving as the Company's director when the promissory convertible notes were issued, is a principal of A/NPC Holdings LLC and Scott Stanford, who serves as the Company's director, is a principal of Sherpa Ventures Fund II, LP and a member of Eagle Creek Capital, LLC. In all instances the terms of these transactions were the same as third-party investors.

On January 28, 2021, the Company settled the promissory convertible notes through the issuance of Series C convertible preferred stock. 7,819,887 and 469,193 shares of Series C convertible preferred stock were issued to A/NPC Holdings LLC and Sherpa Ventures Fund II, LP at a per share price of \$1.33 to settle \$10.4 million and \$0.6 million outstanding principal and accrued interest, respectively. Additionally, 264,928 and 115,771 shares of Series C convertible preferred stock were issued to Eagle Creek Capital, LLC and Sherpa Ventures Fund II, LP at a per share price of \$1.71 to settle \$0.5 million and \$0.2 million outstanding principal and accrued interest, respectively. See Note 6 — Long-Term Debt for mechanism of settlement.

Note 18 — Subsequent Events

NASDAQ Deficiency Notice

On October 6, 2022, the Company received a deficiency notice from NASDAQ that it was not in compliance with Rule 5450(a)(1) of the listing requirements because its per share closing bid price has been below \$1.00 for the last thirty consecutive business days. This notice has no immediate effect on the listing of the Company's Class A common stock. NASDAQ's notice stated that if, at any time before April 4, 2023, the per share closing bid price of the Company's Class A common stock is at least \$1.00 for a minimum of ten consecutive business days, NASDAQ's staff will provide the Company written notice that it complies with the Minimum Bid Price Requirement.

The Company intends to monitor the per share closing bid price of its Class A common stock and consider available options if its Class A common stock does not trade at a level likely to result in the Company regaining compliance with Minimum Bid Price Requirement by April 4, 2023.

If the Company does not regain compliance with the Minimum Bid Price Requirement by April 4, 2023, Astra may be eligible for an additional 180 calendar day compliance period. To qualify, the Company would need to, among other things, meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for NASDAQ, with the exception of the Minimum Bid Price Requirement, and provide written notice to NASDAQ that it intends to cure the deficiency during the second compliance period.

If NASDAQ concludes that the Company will not be able to cure the deficiency during the second compliance period, or the Company does not make the required representations, then NASDAQ will give notice that the Company's Class A common stock is subject to delisting and the Company will be able to appeal that delisting before a NASDAQ hearings panel.

Headcount Reduction

On November 8, 2022, the Company announced a reduction in force affecting approximately 16% of its existing employees, with such employees' last day being November 9, 2022. Affected employees were paid (i) salary and benefits continuation through January 8, 2023, and (ii) were also offered an additional one month of base salary and the employer portion of benefits premium, along with outplacement services, as severance benefits, in exchange for a release of claims. The Company expects to see savings from this reduction in existing headcount during the first quarter of 2023.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of the financial condition and results of operations of Astra Space, Inc. should be read together with our audited consolidated financial statements as of and for the years ended December 31, 2021 and 2020 and unaudited interim condensed consolidated financial statements as of and for the three and nine months ended September 30, 2022 and 2021, together with related notes thereto. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those projected in these forward-looking statements as a result of various factors, including those set forth in the risk factors previously disclosed in our annual report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 31, 2022, as updated by factors disclosed in the section titled "Risk Factors" in this Quarterly Report on Form 10-Q and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, filed with the SEC on August 4, 2022 and in this Quarterly Report on Form 10-Q. Certain amounts may not foot due to rounding. Unless the context otherwise requires, all references in this section to "the Company" "Astra," "us," "our" or "we" refer to Astra Space, Inc. after the closing of the Business Combination on June 30, 2021, and Astra Space Operations, Inc., formerly known as Astra Space, Inc., prior to the Business Combination.

Overview

Our mission is to launch a new generation of launch services and space products to Improve Life on Earth from Space®. These services and products are enabled by new constellations of small satellites in Low Earth Orbit ("LEO"), which have rapidly become smaller, cheaper, and many times more numerous than legacy satellites. Launch vehicles, however, have not evolved in the same way — most rockets remain focused on serving legacy satellites and human spaceflight missions and we aim to provide the world's first mass-produced orbital launch system. We manage our business and report our financial results in two segments: Launch Services and Space Products.

Launch Services

In July 2022, we decided to focus on the development and production of the next version of our launch system, which we unveiled at our inaugural SpaceTech Day on May 12, 2022. As a result, we have discontinued the production of launch vehicles supported by our current launch system and do not plan to conduct any further commercial launches in 2022. As part of the development cycle for our new launch system, we expect to conduct test launches of our new launch system in the later part of 2023, and at this time, do not expect that we will be able to conduct paid commercial launches until 2024 using this new launch system. Whether and when we will be able to conduct paid commercial launches in 2024 will depend in part upon the success of these test launches.

Our new launch system is intended to support launch vehicles that will serve a market focused on populating mega constellations. We have designed this launch system to support more payload capacity, greater reliability, and a more frequent launch cadence, which we believe will allow us to offer our customers more dependable services. We have begun discussions with customers for whom we agreed to launch payloads on our Rocket 3 series launch vehicles (aka launch system 1.0) and the shift of those flights to our Rocket 4 series (aka Launch System 2).

Space Products

We have also been focusing on the growth of our space products business with sales of our Astra Spacecraft Engine™. The Astra Spacecraft Engine is a propulsion engine that assists satellites in achieving and maintaining targeted orbits. Including 14 units in Apollo Fusion's backlog on July 1, 2021, we have received cumulative committed orders for 214 Astra Spacecraft Engines™ as of September 30, 2022, an increase of 107.8% compared to June 30, 2022, and 237 Astra Spacecraft Engines™ as of November 2, 2022, an increase of 130% compared to June 30, 2022. We have also completed the delivery of two full programs of our Astra Spacecraft Engines™.

Segments

As discussed in Note 16 – Segments Information to our consolidated financial statements included in Part I, Item 1 of this form 10-Q, our reportable segments changed during the three and nine months ended September 30, 2022. The segment reporting for prior periods has been reclassified to conform to the current period presentation; however, there were no revenues or cost of revenues associated to these segments in the prior period.

We identify our reporting segments based on the organizational units used by management to monitor performance and make operating decisions. The Company previously had one operating and reportable segment. Following the realignment, the Company now has the following two operating and reportable segments: (i) Launch Services and (ii) Space Products. In conjunction with the realignment of our management and internal reporting in the third quarter of 2022, the Company reclassified assets and liabilities, as well as goodwill, to the reporting units.

COVID-19 Impact

On March 11, 2020, the World Health Organization declared the novel strain of coronavirus (“COVID-19”) a global pandemic and recommended containment and mitigation measures worldwide. The extent of the impact of the coronavirus pandemic on Astra’s operational and financial performance will depend on various future developments, including variants of the disease, the duration and spread of the outbreak and impact on its customers, suppliers, and employees, all of which is uncertain at this time. Astra believes the COVID-19 pandemic may adversely impact future revenue and results of operations, but Astra is unable to predict at this time the size and duration of this adverse impact. Astra has seen some signs of positive effects for its long-term business prospects and partnerships as a result of the pandemic. The COVID-19 pandemic has created an even greater need for broadband internet access, and businesses are thinking differently about how their workforce can stay connected. There have also been recent government and commercial announcements about continuous investments in this area and we believe this will continue to support the growth of the small satellite market for the foreseeable future.

Key Factors Affecting Our Results and Prospects

We believe that our performance and future success depend on a number of factors that present significant opportunities for us but also pose risks and challenges, including competition from better known and well-capitalized companies, the risk of actual or perceived safety issues and their consequences for our reputation, the potential delisting of our Class A common stock from the NASDAQ Global Select Market, our ability to operate as a going concern and the other factors discussed under “Risk Factors” in our Annual Report on Form 10-K for the period ended December 31, 2021, filed with the SEC on March 31, 2022, as updated by factors disclosed in the section titled “Risk Factors” in this Quarterly Report on Form 10-Q and in our Quarterly Report for the quarter ended June 30, 2022, filed with the SEC on August 4, 2022. We believe the factors discussed below are key to our success.

Commencing and Expanding Commercial Operations

We commenced paid commercial launch services in 2022, with our launch on February 10, 2022, of launch vehicle LV0008. We have made substantial progress towards demonstrating a monthly launch production capability during the first three quarters of 2022, with a goal of reaching an even more frequent launch production capability in the future with our new Launch System 2. As a result, we have decided to focus on the development of our new launch system and thus, have discontinued the production of launch vehicles supported by our current launch system. When we refer to a “commercial launch,” we mean a launch conducted under an FAA commercial launch license.

We also commenced delivery of space products during the second quarter of 2022. We expect the volume of delivery of our space products would increase in the future as we continue to fulfill our obligations under existing space products contracts and enter into contracts with potential new customers. In late July 2022, the Company entered into a lease agreement for approximately 60,000 square feet of manufacturing facility in Sunnyvale, California having a lease term of 36 months. This new lease facility will enable expansion of our space products production and development capacity, thermal testing capacity.

Lowering Manufacturing Costs and Increasing Payloads

We aim to be a cost-efficient dedicated orbital launch system provider. We plan to increase the maximum payload capacity of our launch vehicle to meet customer needs and demands through a process of iterative development and improvement. We have made significant investment in our manufacturing facility located in Alameda, California. Please see risk factors previously disclosed in our Annual Report on Form 10-K for the period ended December 31, 2021, filed with the SEC on March 31, 2022, as updated by factors disclosed in the section titled “Risk Factors” in this Quarterly Report on Form 10-Q and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, filed with the SEC on August 4, 2022, for factors that could affect our ability to realize benefits from the investment in our manufacturing facility.

Leveraging Core Technologies

We plan to develop, license or acquire core space technologies that we expect to commercialize and incorporate into our launch vehicles, spacecrafts and other infrastructure that we will use to deliver our product and space service offerings. These core technologies including, among other things, electric propulsion and solar power. For example, we acquired propulsion technology through our merger with Apollo Fusion, which we announced on June 2, 2021, and closed on July 1, 2021.

Expand Our Space Services Offerings

As of September 30, 2022, we were in the preliminary stages of developing our space services offering, but have since decided to put these development efforts on hold as we focus on our primary objectives of developing our new Launch System 2 and the production and delivery of our Astra Spacecraft Engines™. As a result, we do not expect to generate any revenue and are planning to reduce our investments in our space services offerings for the remainder of 2022 and in 2023. We continue to explore opportunities to develop or

partner in the development of our space services offering as it remains a significant part of our long-term business strategy. Once developed, we would expect our space services offering to include providing modular configurable satellite buses for customers, leveraging both in-house and partner-provided subsystem components and in-house design and integration services, as well as operational support of satellites on orbit, to turn-key provision of entire constellations, offering "concept to constellation" in months instead of years. Specifically, we would expect our space services to encompass all aspects of hosted satellite and constellation services, including hosting customer payloads onto our satellites, and delivering services, such as communication services. These services are expected to allow customers to focus on developing innovative payloads rather than having to design or develop complete satellite buses or satellites or constellations, which we will provide, along with ancillary services that are likely to include telemetry, tracking and control ("TT&C"), communications, processing, as well as software development and maintenance.

Impairment of long-lived assets, indefinite-lived intangible assets and goodwill

As of the third quarter of fiscal year 2022, the Company determined that impairment indicators were present based on the existence of substantial doubt about the Company's ability to continue as a going concern, a sustained decrease in the Company's share price and macroeconomic factors. As a result, we performed quantitative impairment testing and recorded a total impairment charge of \$133.4 million for the three and nine months ended September 30, 2022. The total impairment charge reflects a \$58.3 million charge in goodwill, \$2.1 million charge in indefinite-lived intangible assets and \$73 million in long-lived assets of Launch Services related to property, plant and equipment. For further information, refer to Note 1 - Description of Business, Basis of Presentation and Significant Accounting Policies, Note 4 – Supplemental Financial Information, and Note 5 – Goodwill and Intangible Assets to our condensed consolidated financial statements included in Part I, Item 1 of this form 10-Q.

Key Components of Results of Operations

We are an early-stage company and our historical results may not be indicative of our future results for reasons that may be difficult to anticipate. Accordingly, the drivers of our future financial results, as well as the components of such results, may not be comparable to our historical or future results of operations.

Revenues

We commenced our first paid commercial launch, which occurred in February 2022, followed by subsequent paid commercial launches which occurred in March 2022 and June 2022. These launches represent the start of our paid commercial launch operations. As discussed earlier, we have discontinued the production of launch vehicles supported by our current launch system and do not plan to conduct any further commercial launches in 2022. See "Overview" for more information about our decision to stop producing launch vehicles supported by our current launch system.

We also commenced delivery of space products to our customers during the three and nine months ended September 30, 2022. As we are in the very early stages of developing our space services offering and have decided to put these development activities on hold for the near future, we do not expect to generate revenues by delivering space services to our customers at this time.

Cost of Revenues

Cost of revenues consist primarily of direct material, direct labor, manufacturing overhead, other personnel-related expenses, which include salaries, bonuses, benefits and stock-based compensation expense and depreciation expense. Cost of revenues also includes inventory write-downs to reduce the carrying value of inventory related to launch services when the carrying value exceeds its estimated net realizable value. We anticipate recording write-downs to our inventory over the foreseeable future as we continue to ramp production of launch vehicles supported by our new launch system. We expect our cost of revenues to increase in future periods as we sell more launch services and space products. As we grow into our current capacity and execute on cost-reduction initiatives, we expect our gross margins to improve over time.

Operating Expenses

Research and Development Expense

Our research and development expenses consist primarily of internal and external expenses incurred in connection with our research activities and development programs. These expenses include, but are not limited to, development supplies, testing materials, personnel and personnel-related costs (including salaries, bonuses, benefits, and stock-based compensation expense), depreciation expense, amortization of intangible assets, overhead allocation (consisting of various support and facility costs) and consulting fees. Research and development costs are expensed as incurred.

We allocate research and development costs by function rather than by project, as a significant majority of our historical research and development spending was related to the initial development and testing of our underlying technology, including preparation for multiple test launches.

Our current primary research and development objectives focus on the development and finalization of our offerings. The successful development of these offerings involves many uncertainties, including:

- timing in finalizing launch and space systems design and specifications;
- successful completion of analyses and ground test programs to validate that new or changed designs perform as expected;
- successful completion of flight test programs, including flight safety tests;
- our ability to obtain additional applicable approvals, licenses or certifications from regulatory agencies, if required, and maintaining current approvals, licenses or certifications;
- performance of our manufacturing facilities despite risks that disrupt productions, such as natural disasters and hazardous materials;
- performance of a limited number of suppliers for certain raw materials and components;
- performance of our third-party contractors that support our research and development activities;
- our ability to maintain rights from third parties for intellectual properties critical to research and development activities; and
- our ability to continue funding and maintaining our current research and development activities.

A change in the outcome of any of these variables could delay the development of our launch systems and space products, which in turn could impact the timing of commercialization of our offerings.

As we are developing and building our launch services, we have expensed all research and development costs associated with developing and building our launch services offering. We expect that our research and development expenses will increase in the short-term as we invest in improving and further reducing the costs of our launch system.

Sales and Marketing Expense

Sales and marketing expenses consist of personnel and personnel-related expenses (including stock-based compensation expense) for our business development team as well as advertising and marketing expenses. We expect to increase our sales and marketing activities in order to grow our customer base and increase market share in the future.

General and Administrative Expense

General and administrative expenses consist primarily of personnel and personnel-related costs (including salaries, bonuses, benefits, and stock-based compensation expense) for personnel in executive, finance, accounting, corporate development and other administrative functions. General and administrative expenses also include legal fees, professional fees paid for accounting, auditing, consulting, tax, and investor relations services, insurance costs, and facility costs not otherwise included in research and development expenses and costs associated with compliance with the rules and regulations of the SEC and the stock exchange.

Income Tax (Benefit) Expense

Our income tax provision consists of an estimate for U.S. federal and state income taxes based on enacted rates, as adjusted for allowable credits, deductions, uncertain tax positions, changes in deferred tax assets and liabilities, and changes in the tax law. We maintain a valuation allowance against the full value of our U.S. and state net deferred tax assets because we believe the recoverability of the tax assets is not more likely than not.

Other Income (Expense), Net

Other income (expense), net primarily consists of income from government research and development contracts.

Critical Accounting Estimates

Our financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. Preparation of the financial statements requires our management to make a number of judgments, estimates and assumptions relating to the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements

and the reported amounts of revenue and expenses during the reporting period. We consider an accounting judgment, estimate or assumption to be critical when (1) the estimate or assumption is complex in nature or requires a high degree of judgment and (2) the use of different judgments, estimates and assumptions could have a material impact on our consolidated financial statements. Our significant accounting policies are described in Note 2 in our Annual Report on Form 10-K for the year ended December 31, 2021, as updated as applicable in Note 1 to the condensed consolidated financial statements herein.

Except as outlined below, there were no significant changes in our critical accounting estimates during the three and nine months ended September 30, 2022 compared to those previously disclosed in “Critical Accounting Estimates” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in the 2021 Annual Report on Form 10-K.

Goodwill and indefinite-lived intangible assets

Goodwill and indefinite-lived intangible assets are not subject to amortization. We perform an annual impairment review of goodwill and indefinite-lived intangible assets during the fourth fiscal quarter of each year, and more frequently if we believe that indicators of impairment exist. We compare the fair value of our reporting unit to the respective carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value.

We believe that estimating for goodwill and indefinite-lived intangible assets requires significant judgments that are based on several factors including operating results and market conditions. We estimate fair value through various valuation methods, including the use of discounted expected future cash flows of each reporting unit, as well as the use of the relief-from-royalty method to estimate the fair value of our indefinite-lived intangible asset. During the third quarter of fiscal year 2022, we reorganized our reporting structure and determined to perform an interim quantitative impairment test. As a result, for the nine months ended September 30, 2022, we recognized impairment losses related to goodwill and indefinite-lived intangible assets of \$58.3 million and \$2.1 million, respectively.

Long-lived assets

Long-lived assets are primarily comprised of property, plant, and equipment and definite-lived intangible assets. We evaluate long-lived assets for impairment when events or changes in circumstances indicate, in management’s judgement, that the carrying amount of such assets may not be recoverable. Long-lived asset recoverability is measured by comparing the carrying amount of the asset group with its estimated future undiscounted pre-tax cash flows over the remaining life of the primary long-lived asset of the asset group. If the carrying amount exceeds the estimated future undiscounted cash flows as part of the recoverability assessment, an impairment charge is recognized equal to the difference between the carrying amount and fair value of the asset group. The impairment charge is allocated to the underlying long-lived assets in the asset group on a relative carrying amount basis; however, carrying amount after allocated impairment is subject to a floor of fair value on an individual asset basis.

We believe the accounting estimates used in the long-lived asset impairment assessment are critical accounting estimates because of the judgment required in identifying indicators of impairment, determining asset groups, assessing future undiscounted cash flows of the asset groups, and as applicable, evaluating the fair value of the determined asset groups as well as the underlying long-lived assets, once indicators of impairment have been identified. As a result of the reorganization, together with a sustained decrease in the Company’s share price, existence of substantial doubt about the Company’s ability to continue as a going concern, and macroeconomic factors we determined that triggers were present indicating long lived assets may not be recoverable. For the nine months ended September 30, 2022, we concluded that indicators of impairment were present and recorded a non-cash impairment charge on long-lived assets of \$70.3 million related to property, plant, and equipment and \$2.7 million related to definite-lived intangible assets.

Results of Operations

Comparison of the Three and Nine months ended September 30, 2022 and 2021

	For The Three Months Ended September 30,		Period over period change		For The Nine Months Ended September 30,		Period over period change	
(in thousands, except percentages)	2022	2021	(\$)	(%)	2022	2021	(\$)	(%)
Revenues:								
Launch services	\$ —	\$ —	—	n.m.	\$ 5,899	\$ —	\$ 5,899	n.m.
Space products	2,777	—	2,777	n.m.	3,471	—	3,471	n.m.
Total revenues	2,777	—	2,777	—	9,370	—	9,370	—
Cost of revenues:								
Launch services	—	—	—	n.m.	28,193	—	28,193	n.m.
Space products	1,071	—	1,071	n.m.	1,337	—	1,337	n.m.
Total cost of revenues	1,071	—	1,071	—	29,530	—	29,530	—
Gross profit (loss):								
Launch services	—	—	—	n.m.	(22,294)	—	(22,294)	n.m.
Space products	1,706	—	1,706	n.m.	2,134	—	2,134	n.m.
Total gross profit (loss)	1,706	—	1,706	—	(20,160)	—	(20,160)	—

n.m. = not meaningful.

Revenues

Revenues were \$2.7 million for the three months ended September 30, 2022. All of which was related to space products. We commenced delivery of space products to our customers during the three months ended September 30, 2022. No revenues were recognized during the three months ended September 30, 2021.

Revenues were \$9.4 million for the nine months ended September 30, 2022 of which \$5.9 million related to launch services and \$3.4 million related to space products. We commenced paid commercial launch services and delivery of space products during the nine months ended September 30, 2022. We launched launch vehicles LV0008, LV0009 and LV0010 on February 10, 2022, March 15, 2022 and June 12, 2022, respectively, all of which were paid launches. The orbital launch of LV0009 conducted on March 15, 2022, represents our first paid delivery of customer payloads into Earth orbit. No revenues were recognized for the nine months ended September 30, 2021. We do not anticipate any revenues related to our launch services business in 2023 as we work to develop and test the next version of our launch system: Launch System 2.

Cost of Revenues

Cost of revenues were \$1.1 million for the three months ended September 30, 2022 which was driven by the cost of space products. The cost of space products does not reflect the actual gross margins as certain inventory values were recorded at net realizable value. No cost of revenues were recognized for the three months ended September 30, 2021.

Cost of revenues were \$29.5 million for the nine months ended September 30, 2022 which was primarily driven by recording of \$18.8 million of inventory write-downs and \$6.9 million of cost of launch services and space products. The \$18.8 million of inventory write-downs was driven by \$10.2 million related to the discontinuance of launch vehicles supported by our current launch system, \$5.5 million related to the net realizable value write-downs and \$3.1 million of other write-downs. The cost of launch services does not reflect the actual gross margins as certain inventory values were recorded at net realizable value. In the first nine months of 2022, we conducted our first paid commercial launch and have not yet achieved economies of scale in our manufacturing processes. We also decided to stop paid commercial launches for the remainder of 2022 so that we can focus on developing our new launch system. As a result, we will continue to incur negative gross margins for the remainder of 2022. No cost of revenues were recognized for the nine months ended September 30, 2021.

	For The Three Months Ended September 30,		Period over period change		For The Nine Months Ended September 30,		Period over period change	
(in thousands, except percentages)	2022	2021	(\$)	(%)	2022	2021	(\$)	(%)
Operating expenses:								
Research and development	32,821	21,724	11,097	1	111,546	44,159	67,387	2
Sales and marketing	4,052	1,090	2,962	272	13,452	2,229	11,223	503
General and administrative	19,222	19,730	(508)	(3)	60,816	50,712	10,104	20
Impairment expense	75,116	—	75,116	n.m.	75,116	—	75,116	n.m.
Goodwill impairment	58,251	—	58,251	n.m.	58,251	—	58,251	n.m.
Loss on change in fair value of contingent consideration	11,949	—	11,949	n.m.	29,249	—	29,249	n.m.
Total operating expenses	201,411	42,544	158,867	373	348,430	97,100	251,330	259
Operating loss	(199,705)	(42,544)	(157,161)	(373)	(368,590)	(97,100)	(271,490)	280
Interest (expense) income, net	616	18	598	3,322	1,146	(1,194)	2,340	(196)
Other income (expense), net	(25)	25,895	(25,920)	(100)	314	25,177	(24,863)	(99)
Loss on extinguishment of convertible notes	—	—	—	n.m.	—	(131,908)	131,908	n.m.
Loss on extinguishment of convertible notes attributable to related parties	—	—	—	n.m.	—	(1,875)	1,875	n.m.
Loss before taxes	(199,114)	(16,631)	(182,483)	1,097	(367,130)	(206,900)	(160,230)	77
Income tax (benefit) expense	-	(383)	383	n.m.	-	(383)	383	n.m.
Net loss	\$ (199,114)	\$ (16,248)	\$ (182,866)	1,125	\$ (367,130)	\$ (206,517)	(160,613)	78
Adjustment to redemption value on Convertible Preferred Stock	—	—	—	n.m.	—	(1,011,726)	1,011,726	n.m.
Net loss attributable to common stockholders	\$ (199,114)	\$ (16,248)	\$ (182,866)	1125 %	\$ (367,130)	\$ (1,218,243)	\$ 851,113	(70)

n.m. = not meaningful.

Research and Development

Research and development costs were \$32.8 million for the three months ended September 30, 2022, compared to \$21.7 million for the three months ended September 30, 2021. The \$11.1 million increase mainly reflected a \$4.3 million increase in stock-based compensation expense, a \$2.3 million increase in depreciation and amortization expense, a \$2.3 million increase in third party consulting and recruitment costs offset by a \$1.2 million decrease in technology licensed and software subscription licenses related expenses with the remainder due to changes in other research and development expenses. These increases were to support our product roadmap and launch services.

Research and development costs were \$111.5 million for the nine months ended September 30, 2022, compared to \$44.2 million for the nine months ended September 30, 2021. The \$67.4 million increase mainly reflected a \$24.5 million increase in personnel-related costs due to headcount increases in research and development departments, a \$9.7 million increase in research and development materials expense, a \$13.3 million increase in stock-based compensation expense, a \$7.8 million increase in third party consulting and recruitment costs, a \$6.7 million increase in depreciation and amortization expense and a \$0.7 million increase in technology licensed and software subscription licenses related expenses with the remainder due to changes in other research and development expenses. These increases were to support our product roadmap and launch services.

Sales and Marketing

Sales and marketing expenses were \$4.1 million for the three months ended September 30, 2022, compared to \$1.1 million for the three months ended September 30, 2021. The \$3.0 million increase mainly reflected a \$1.5 million in stock-based compensation expense, \$1.3 million increase in personnel-related costs, with the remainder due to changes in other sales and marketing expenses. These increases were to support business development and marketing activities.

Sales and marketing expenses were \$13.5 million for the nine months ended September 30, 2022, compared to \$2.2 million for the nine months ended September 30, 2021. The \$11.2 million increase mainly reflected a \$4.7 million increase in personnel-related costs, a \$4.5 million in stock-based compensation expense and a \$0.8 million increase in depreciation expense with the remainder due to changes in other sales and marketing expenses. These increases were to support business development and marketing activities.

General and Administrative

General and administrative expenses were \$19.2 million for the three months ended September 30, 2022, compared to \$19.7 million for the three months ended September 30, 2021. The \$0.5 million decrease was primarily due to a \$5.7 million decrease in insurance related expenses, \$4.3 million decrease from transaction costs incurred and expensed by the Company in relation to the Business Combination, offset by a \$5.1 million decrease in stock-based compensation expense, a \$1.6 million increase in third party consulting and recruitment costs, \$0.7 million increase in employee costs due to increased headcount, \$0.3 million increase in accounting, audit and legal related fees which is partially with the remainder due to changes in facilities costs, IT equipment fees, and other services.

General and administrative expenses were \$60.8 million for the nine months ended September 30, 2022, compared to \$50.7 million for the nine months ended September 30, 2021. The \$10.1 million increase was primarily due to a \$11.1 million increase in employee costs due to increased headcount, a \$5.3 million increase in stock-based compensation expense, a \$4.0 million increase in accounting, audit and legal related fees, a \$1.6 million increase in third party consulting and recruitment costs offset by \$8.0 million decrease from transaction costs incurred and expensed by the Company in relation to the Business Combination, \$2.0 million decrease in insurance related expenses with the remainder due to changes in facilities costs, IT equipment fees, and other services.

Impairment Expense

Impairment expense was \$75.1 million for the three and nine months ended September 30, 2022 and was triggered by the existence of substantial doubt about the Company's ability to continue as a going concern, a sustained decrease in the Company's share price and macroeconomic factors. The impairment expense reflects charges of \$70.3 million in property, plant and equipment, \$2.7 million in definite-lived intangible assets, and \$2.1 million in indefinite-lived intangible assets. No impairment charges were recorded for the three and nine months ended September 30, 2021.

Goodwill Impairment

Goodwill impairment was \$58.3 million for the three and nine months ended September 30, 2022 and was triggered by the existence of substantial doubt about the Company's ability to continue as a going concern, a sustained decrease in the Company's share price and other macroeconomic factors. The expense reflects the full impairment of the Company's goodwill balance. No goodwill impairment was recorded for the three and nine months ended September 30, 2021.

Loss on Change in Fair Value of Contingent Consideration

Loss on change in fair value of contingent consideration of \$11.9 million and \$29.2 million for the three and nine months ended September 30, 2022, respectively, was due to higher revenues forecasted in estimating the fair value of contingent consideration. No loss on change in fair value of contingent consideration was recorded for the three and nine months ended September 30, 2021.

Interest (Expense) Income, Net

Interest income was \$0.6 million for the three months ended September 30, 2022, compared to interest expense of less than \$0.1 million for the three months ended September 30, 2021. The \$0.6 million increase in interest (expense) income, net was primarily due to the settlement of outstanding debt during the year ended December 31, 2021. Therefore, we did not incur any interest expense during the period and an increase of \$0.4 million in interest income related during the three months ended September 30, 2022.

Interest income was \$1.1 million for the nine months ended September 30, 2022, compared to interest expense of \$1.2 million for the nine months ended September 30, 2021. The \$1.7 million increase in interest (expense) income, net was primarily due to the settlement of outstanding debt during the year ended December 31, 2021. Therefore, we did not incur any interest expense during the period and an increase of \$0.8 million in interest income related to investment in marketable securities during the nine months ended September 30, 2022.

Other Income (Expense), Net

Other expense, net was less than \$0.1 million for the three months ended September 30, 2022, compared to other income, net of \$25.9 million for the three months ended September 30, 2021. The \$26.0 million decrease in other income was primarily due to \$20.4 million in income from change in fair value of warrant liability, \$4.9 million in income from a gain on forgiveness of PPP Note and \$0.6 million in income from government research and development contracts for the three months ended September 30, 2021.

Other income, net was \$0.3 million for the nine months ended September 30, 2022, compared to other income, net of \$25.2 million for the three months ended September 30, 2021. The \$24.9 million decrease in other income was primarily due to \$20.4 million in income from change in fair value of warrant liability, \$4.9 million in income from a gain on forgiveness of PPP Note and \$0.6 million in income from government research and development contracts for the nine months ended September 30, 2021 offset by \$0.8 million due to a nonrecurring payment to one of our investors for the nine months ended September 30, 2021.

Loss on Extinguishment of Convertible Notes

No loss on extinguishment of convertible notes was recorded for the three months ended September 30, 2022 and 2021.

No loss on extinguishment of convertible notes was recorded for the nine months ended September 30, 2022. Loss on extinguishment of convertible notes of \$131.9 million was recorded for the nine months ended September 30, 2021 due to the settlement of convertible notes on January 28, 2021.

Loss on Extinguishment of Convertible Notes Attributable to Related Parties

No loss on extinguishment of convertible notes attributable to related parties was recorded for the three months ended September 30, 2022 and 2021.

No loss on extinguishment of convertible notes attributable to related parties was recorded for the nine months ended September 30, 2022. Loss on extinguishment of convertible notes attributable to related parties of \$1.9 million was recorded for the nine months ended September 30, 2021 due to the settlement of convertible notes attributable to related parties on January 28, 2021.

Income Tax (Benefit) Expense

We did not incur income tax expense for the three and nine months ended September 30, 2022.

We recorded an income tax benefit of \$0.4 million as the result of Apollo acquisition for the three months and nine months ended September 30, 2021.

Adjustment to redemption value on Convertible Preferred Stock

No adjustment to redemption value on convertible preferred stock was recorded for the three months ended September 30, 2022.

No adjustment to redemption value on convertible preferred stock was recorded for the nine months ended September 30, 2022. Adjustment to redemption value on Convertible Preferred Stock of \$1,011.7 million for the nine months ended September 30, 2021 was recorded due to the re-measurement of Convertible Preferred Stock to its redemption value due to the likelihood of a redemption event becoming probable.

Liquidity and Capital Resources

The following section discusses our principal liquidity and capital resources as well as our primary liquidity requirements and uses of cash. Our cash and cash equivalents are maintained in highly liquid investments with remaining maturities of 90 days or less at the time of purchase. We believe our cash equivalents are liquid and accessible.

We measure liquidity in terms of our ability to fund the cash requirements of our research and development activities and our current business operations, including our capital expenditure needs, contractual obligations and other commitments. Our current liquidity needs relate to business operations, research and development activities, mainly in connection with the ongoing development of our technology, lease obligations and capital expenditures, which primarily relate to the development of our manufacturing facility.

Given our current liquidity position and historical operating losses, we believe there is substantial doubt that we can continue as a going concern. Substantial doubt about an entity's ability to continue as a going concern exists when conditions and events, considered in the aggregate, indicate that it is probable that the entity will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued. See Part II, Item 1A "Risk Factors" for information about the risks related to our ability to continue operating as a going concern.

We have, however, prepared the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q on a going concern basis, assuming that our financial resources will be sufficient to meet our capital needs over the next twelve months. Accordingly, our financial statements do not include adjustments relating to the recoverability and realization of assets and classification of liabilities that might be necessary should we be unable to continue in operation.

As of September 30, 2022, our existing sources of liquidity included cash and cash equivalents of \$67.6 million and marketable securities of \$82.9 million. We have a limited history of operations and have incurred negative cash flows from operating activities and loss from operations in the past as reflected in the accumulated deficit of \$1,775.5 million as of September 30, 2022. We expect to continue to incur operating losses due to the investments we intend to make in its business, including the development of our products and services, although we expect those losses to be offset by revenues recognized through the delivery of our space products in 2023. Management remains focused on managing its cash expenditures, including but not limited to, reducing its capital expenditures, consulting services and re-focusing its hiring efforts. In addition, Management continues to evaluate opportunities to strengthen our financial position, including through the issuance of additional equity securities or by entering into new financing arrangements, as appropriate. The Company believes that it has limited cash resources at the current level to fund commercial scale production and sale of its services and products. However, if we are able to obtain additional financing and assuming our plans to manage capital expenditures are effective, including savings expected to be realized from our approximately 16% reduction in existing headcount implemented on November 8, 2022 (of which there can be no assurance), we would expect that our existing sources of liquidity will be sufficient to fund operating and capital expenditure requirements through at least 12 months from the date of filing this Quarterly Report on Form 10-Q. The Company's current liquidity may not be sufficient to meet the required long-term liquidity needs associated with continued use of cash from operating activities at historical levels, in addition to its other liquidity needs associated with its capital expenditures, and other investing requirements and the Company is actively evaluating other sources of liquidity to further support its long-term business operations. For additional information regarding our cash requirements from contractual obligations and lease obligations, see Note 11 — Commitments and Contingencies and Note 9 — Leases in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Committed Equity Purchases

On August 2, 2022, we entered into an \$100 million Class A common stock purchase agreement with B. Riley to support working capital and other general corporate needs. Under the terms of this agreement, we have the right, without obligation, to sell and issue up to \$100 million of our Class A common stock over a period of 24 months to B. Riley at the Company's sole discretion, subject to certain limitations and conditions. See Note 13 — Stockholders' Equity in Part I, Item 1 of this Quarterly Report on Form 10-Q for more details.

Summary Statement of Cash Flows for the Nine Months Ended September 30, 2022 and 2021

The following table sets forth the primary sources and uses of cash and cash equivalents for the periods presented below:

(in thousands)	For The Nine Months Ended September 30,		Period over period change	
	2022	2021	\$	%
Net cash used in operating activities	\$ (134,615)	\$ (79,576)	\$ (55,039)	69%
Net cash used in investing activities	(124,088)	(41,280)	(82,808)	201
Net cash provided by financing activities	1,304	488,897	(487,593)	(100)
Net increase (decrease) in cash and cash equivalents	\$ (257,399)	\$ 368,041	\$ (625,440)	(170)%

Cash Flows used in Operating Activities

Our cash flows from operating activities are significantly affected by our cash expenditures to support the growth of our business in areas such as research and development and general and administrative and working capital. Our operating cash inflows include cash from milestone billing under certain space products and launch services contracts. These cash inflows are offset by our payments to suppliers for production materials and parts used in our manufacturing process as we ramp up our production for space products, payments to our employees and other operating expenses.

For the nine months ended September 30, 2022, net cash used in operating activities was \$134.6 million. The primary factors affecting the Company's operating cash flows during the period were a net loss of \$367.1 million. This is offset by non-cash charges including stock-based compensation expense of \$43.6 million, inventory reserves including write-offs and net realizable value write-downs of \$18.8 million, loss on change in fair value of contingent consideration of \$29.2 million, depreciation and amortization expense of \$12.1 million and non-cash lease expense of \$1.4 million. Changes in operating working capital items is mainly due to decrease in inventories of \$15.5 million, trade accounts receivable of \$3.1 million, accrued expense and other current liabilities of \$2.1 million, other non-current assets of \$1.3 million, and lease liabilities of \$1.2 million. Changes in operating working capital items was partially

offset by an increase in other non-current liabilities of \$10.4 million, prepaid and other current assets of \$3.8 million and accounts payable of \$3.0 million.

For the nine months ended September 30, 2021, net cash used in operating activities was \$79.6 million. The primary factors affecting the Company's operating cash flows during this period were net loss of \$206.5 million and a non-cash gain of \$20.4 million due to change in fair value of warrant liability and \$4.9 million due to a gain on forgiveness of PPP Note, offset by non-cash charges including a non-cash loss on extinguishment of convertible notes of \$133.8 million, stock-based compensation expense of \$20.5 million, depreciation and amortization expense of \$3.9 million, and amortization of convertible note debt discounts of \$0.4 million. Changes in operating working capital items primarily reflect the increase in inventories of \$4.2 million, prepaid and other current assets of \$13.9 million, accounts payable of \$1.3 million, accrued expenses and other current liabilities of \$11.3 million and decrease in other non-current liabilities of \$0.2 million.

Cash Flows used in Investing Activities

For the nine months ended September 30, 2022, net cash used in investing activities was \$124.1 million, which was comprised mainly of purchases of marketable securities of \$136.4 million, purchases of property, plant and equipment of \$40.0 million mainly related to the construction of our manufacturing facility at our corporate headquarters in Alameda, California, and acquisition of an indefinite-lived intangible trademark asset of \$0.9 million. This was partially offset by maturities of marketable securities of \$47.3 million and proceeds from sales of marketable securities of \$6.0 million.

For the nine months ended September 30, 2021, net cash used in investing activities was \$41.3 million, which was comprised mainly of cash paid as purchase price consideration in the acquisition of Apollo Fusion, Inc., net of cash acquired of \$19.4 million, acquisition of an indefinite-lived intangible trademark asset of \$3.2 million and purchases of property, plant and equipment of \$18.7 million.

Cash Flows from Financing Activities

For the nine months ended September 30, 2022, net cash provided by financing activities amounted to \$1.3 million and consisted primarily of \$1.3 million of proceeds from the sale of shares of the Company's Class A common stock and issuance of shares of Class A common stock under equity plans.

For the nine months ended September 30, 2021, net cash provided by financing activities amounted to \$488.9 million and consisted primarily of proceeds from the Business Combination and private offering, net of transaction costs, of \$463.6 million, proceeds from the issuance of Series C of \$30.0 million and borrowings of \$10.0 million, proceeds from the issuance of stock under equity plans of \$1.8 million, offset by repayments on borrowings of \$16.4 million.

Commitments and Contractual Obligations

We are a party to operating leases primarily for land and buildings (e.g., office buildings, manufacturing and testing facilities and spaceport) and certain equipment (e.g., copiers) under non-cancellable operating leases. The following table summarizes our lease commitments as of September 30, 2022:

	Minimum Lease Commitment
	(in thousands)
2022 (remainder)	\$ 1,010
2023	4,069
2024	3,941
2025	3,233
2026	2,075
Thereafter	3,705
Total future undiscounted minimum lease payments	\$ 18,033
Less: Imputed Interest	3,156
Total reported lease liability	\$ 14,877

On July 28, 2022, the Company entered into a lease agreement for approximately 60,000 square feet of manufacturing facility in Sunnyvale, California having a lease term of 36 months with an option to extend for a period of an additional 36 months. The undiscounted base rent payments for the first year of this lease is approximately \$1.8 million with a 4% increase in base rent for each subsequent year. In addition to base rent, the Company will be responsible for the management fee of 5% of the base rent. In lieu of a cash security deposit, the Company is required to provide the landlord an irrevocable letter of credit in the amount of \$0.3 million. This

new lease facility is expected to enable expansion of space product production and development capacity, thermal testing capacity. The Company is finalizing the build-out of this facility and is targeting the completion of that building during the first quarter of 2023.

In order to reduce manufacturing lead times and to have access to an adequate supply of components, we enter into agreements with certain suppliers to procure component inventory based on our production needs. A significant portion of our purchase commitments arising from these agreements consist of firm and non-cancelable commitments. As of September 30, 2022, we had purchase commitments aggregating \$39.0 million for which we were or will become obligated to make payments within 12 months to 60 months from the execution date of the agreements. Of these, there are agreements containing an aggregate of \$32.1 million in early termination penalties. For example, one of the supply agreement penalties includes payment of 50% of the remaining purchase commitment at any point during the contract term. In another agreement, we may terminate the supply agreement by paying the balance on the remaining purchase commitment only after the first anniversary of the commencement date. If this agreement is terminated before the first anniversary of the commencement date, we have to pay the entire contract amount of \$9.6 million.

Apart from the aforementioned leases and purchase commitments, we do not have any other material contractual obligations, commitments or contingent obligations.

Compliance with the Continued Listing Standards of the NASDAQ Global Select Market (“NASDAQ”)

On October 6, 2022, the Company received a deficiency notice from NASDAQ that it was not in compliance with Rule 5450(a)(1) of the listing requirements because its per share closing bid price has been below \$1.00 for the last thirty consecutive business days. This notice has no immediate effect on the listing of the Company’s Class A common stock. Pursuant to Rule 5810(c)(3)(A), the Company has 180 calendar days, or until April 4, 2023, to regain compliance with the minimum bid price requirement set forth in Rule 5450(a)(1) (the “Minimum Bid Price Requirement”).

Nasdaq’s notice stated that if, at any time before April 4, 2023, the per share closing bid price of Astra’s Class A common stock is at least \$1.00 for a minimum of ten consecutive business days, NASDAQ’s staff will provide the Company written notice that it complies with the Minimum Bid Price Requirement.

The Company intends to monitor the per share closing bid price of its Class A common stock and consider available options if its Class A common stock does not trade at a level likely to result in the Company regaining compliance with Minimum Bid Price Requirement by April 4, 2023.

If the Company does not regain compliance with the Minimum Bid Price Requirement by April 4, 2023, the Company may be eligible for an additional 180 calendar day compliance period. To qualify, Astra would need to, among other things, meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for NASDAQ, with the exception of the Minimum Bid Price Requirement, and provide written notice to Nasdaq that it intends to cure the deficiency during the second compliance period.

If Nasdaq concludes that the Company will not be able to cure the deficiency during the second compliance period, or the Company does not make the required representations, then NASDAQ will give notice that the Company’s Class A common stock is subject to delisting and the Company will be able to appeal that delisting before a NASDAQ hearings panel.

There can be no assurance that the Company will regain compliance with the Minimum Bid Price Requirement or that it will otherwise remain in compliance with the other listing requirements for NASDAQ. The Company had previously failed to comply with Nasdaq’s requirement that its quarterly and annual reports be timely filed when its annual report on Form 10-K for the year ended December 31, 2022, was filed late as a result of the change in the Company’s filer status. The Company promptly notified Nasdaq when it became aware that its filer status had changed and its Form 10-K would be late. Please also see Risk Factors in Part II, Item 1A of this quarterly report on Form 10-Q for more information about risks associated with the Company’s failure to remain in compliance with the continuing listing standards of NASDAQ.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We have not, to date, been exposed to material market risks given our early stage of operations. As we expand our commercial operations, we expect to be exposed to foreign currency exchange rate and commodity price risks, particularly related to rocket propellants, helium, and aluminum, among others, and potentially other market risks, including those related to interest rates or valuation of financial instruments, among others.

Interest Rate Risk

As of September 30, 2022, we had \$17.3 million of cash equivalents invested in money market funds and \$82.9 million invested in marketable securities, which consisted of U.S. Treasury securities, corporate debt securities, commercial paper and asset backed securities. Our cash and cash equivalents are held for working capital purposes. We do not enter into investments for trading or speculative purposes. There was no material interest rate risk for the nine months ended September 30, 2022 and year ended December 31, 2021.

Inflation Risk

We are exposed to inflation risk. Inflationary factors, such as increases in raw material and overhead costs, could impair our operating results. Although there has been a significant increase in inflation recently, it has not had a substantial impact on our results of operations for the three and nine months ended September 30, 2022, respectively. However, a higher rate of inflation in the future may have an adverse effect on our ability to recover increasing costs and we might not be able to pass along cost increases to our customers.

Foreign Currency Risk

There was no material foreign currency risk for the three and nine months ended September 30, 2022 and year ended December 31, 2021. Our activities to date have been limited and were conducted in the United States.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures (as that term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer, who serves as our principal executive officer, and Chief Financial Officer, who serves as our principal financial officer, as appropriate, to allow for timely decisions regarding required disclosures. In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints, and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Our management, with the participation of our principal executive officer and principal financial officer, evaluated, as of the end of the period covered by this quarterly report on Form 10-Q, the effectiveness of our disclosure controls and procedures (as that term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were not effective as of September 30, 2022, due to the material weaknesses in our internal control over financial reporting described below.

Material Weaknesses and Remediation Plan

As previously disclosed, we have identified material weaknesses in our internal control over financial reporting and these material weaknesses continued to exist as of September 30, 2022. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Specifically, material weaknesses identified are:

Control Environment

We did not maintain an effective control environment to enable the identification and mitigation of risks of material accounting errors based on the following control deficiencies:

- We did not design and maintain effective controls over segregation of duties and related conflicts with respect to our information technology systems, including administrative access to our financially relevant information technology systems.
- We did not design and maintain effective controls over formalizing our accounting policies and procedures.
- We did not design and maintain effective controls over preparing and recording journal entries within our accounting systems related thereto.
- We did not design and maintain effective controls over accounting for complex transactions and instruments, including, the inaccurate accounting for Public and Private Placement Warrants and the inaccurate application of conversion accounting related to our convertible instruments in connection with the restatement of our financial statements for the period ended June 30, 2021 as set forth in our Form 10-Q/A (Amendment No. 1) filed with the SEC on October 22, 2021.

Risk Assessment

We did not design and maintain controls over an effective risk assessment, including: (i) identifying, assessing, and communicating appropriate objectives, (ii) identifying and analyzing risks to achieve these objectives, and (iii) identifying and assessing changes in the business that could impact our system of internal controls.

Control Activities

We did not design and maintain effective control activities as the control activities did not adequately (i) address relevant risks, (ii) provide evidence of performance, (iii) provide appropriate segregation of duties, or (iv) operate at a level of precision to identify all potentially material errors.

Information and Communication

We did not design and implement controls over information and communication relating to communicating accurate information internally and externally, including providing information pursuant to objectives, responsibilities, and functions of internal control.

Monitoring Activities

We did not design and implement effective monitoring controls to ascertain whether the components of internal control are present and functioning.

These material weaknesses resulted in a restatement to Additional paid-in-capital, Accumulated deficit and Adjustment to redemption value on Convertible Preferred Stock as well as audit adjustments to substantially all of our accounts and disclosures, which were recorded as of and for the year ended December 31, 2021. Additionally, these material weaknesses could result in a misstatement of substantially all of our account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Our management, including our Chief Executive Officer and Chief Financial Officer continue to work to design and implement both a short-term and a long-term remediation plan to correct the material weaknesses in our disclosure controls and procedures and our internal control over financial reporting as updated below. We are focused on, designing and implementing effective internal control measures to improve our internal control over financial reporting and remediate the material weaknesses. These remediation measures include, but are not limited to:

- We continue to take actions to improve our IT general controls by implementing:
 - o Program change management controls to ensure that IT program and data changes affecting financial IT applications and underlying accounting records are identified, tested, authorized and implemented appropriately,

- o Segregation of duties controls, including key functions within our business processes, where appropriate and resolving segregation of duties conflicts at the administrative level
 - o Period-end financial reporting controls, and journal entry controls including the deployment of a new ERP system implementation for finance and procurement processes.
- We are in the process of formally documenting accounting policies and procedures complying with applicable financial reporting standards.
- We are implementing comprehensive controls over the preparation and review of journal entries, establishing additional controls to verify transactions are properly classified in the financial statements.
- We are enhancing our processes to identify and appropriately apply applicable accounting requirements to better evaluate and understand the nuances of the complex accounting standards for complex transactions and instruments as well as the hiring of additional experienced internal resources. We plan to provide enhanced access to accounting literature, research materials, and documents as well as increased communication with third party consultants and specialists with whom we consult regarding the application of accounting standards over complex transactions and instruments to supplement our internal resources.
- We are in the process of enhancing our implementation of all of the components of the “Internal Control—Integrated Framework (2013)” issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) that includes the enhancement of our Sarbanes-Oxley program, an overall Company-wide risk assessment process and selecting and developing control activities to contribute to the mitigation of risks and support achievement of objectives facilitated by Internal Audit. In addition, the Company is in the process of evaluating the assignment of responsibilities, internal and external, associated with the performance of internal controls over financial reporting and will consider hiring additional resources, contracting external resources, or providing additional training to existing resources as appropriate.

As we continue our evaluation and assess the effectiveness of our internal control over financial reporting going forward, management may modify the actions described above or identify and take additional measures to address control deficiencies. While we prioritize achieving the effectiveness of our internal control over financial reporting and disclosure controls, until our remediation efforts, including any additional measures management identifies as necessary, are completed, validated and tested over a sustained period, the material weaknesses described above will continue to exist and management will not be able to conclude that it is remediated. We are committed to continuous improvement and will continue to diligently review our internal control over financial reporting.

Changes in Internal Control over Financial Reporting

In the third quarter of 2022, we completed deployment of a new ERP system implementation for finance and procurement processes. As a result of the ERP system implementation, in the third quarter of 2022 certain internal controls over financial reporting have been automated, modified, or implemented to address the new control environment associated with the ERP system. While management believes that this new system will enhance its internal control over financial reporting, there are inherent risks in implementing any new system, and we will continue to evaluate and monitor these control changes as part of our assessment of the control design and effectiveness throughout 2022.

There have been no other changes in our internal control over financial reporting (as that term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended September 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

Discussion of legal matters is incorporated by reference from Part I, Item 1, Note 11 - Commitments and Contingencies, of this Quarterly Report on Form 10-Q, and should be considered an integral part of Part II, Item 1, “Legal Proceedings.”

Item 1A. Risk Factors

Except for the risk factors set forth below, there have been no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the period ended December 31, 2021, filed with the SEC on March 31, 2022, and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, filed with the SEC on August 4, 2022, and investors are encouraged to review these risk factors prior to making an investment in the Company and in conjunction with their review of this Quarterly Report on Form 10-Q.

Summary of Risk Factors

A summary of the material risks affecting our business, operations and financial results that have been included in this Quarterly Report on Form 10-Q include the following:

- Our losses from operations and liquidity condition raise substantial doubt about our ability to continue as a going concern. As a result, there is significant risk in the investment in shares of our Class A common stock and you may lose all or part of your investment.
- Our failure to meet the continued listing requirements of Nasdaq Global Select Market could result in a delisting of our Class A common stock and, if our Class A common stock is delisted, it could have a negative effect on the price of our Class A common stock and would likely impair your ability to sell or purchase our Class A common stock.
- We are highly dependent on our senior management team and other highly skilled personnel, and if we are not successful in attracting or retaining highly qualified personnel or are unable to find and integrate appropriate replacements for employees who choose to leave the Company (including in our finance function where we have had significant recent turnover), we may not be able to successfully implement our business strategy and our results of operation and ability to execute on our growth strategy will be materially affected.
- We use social media as part of our marketing strategy and to provide information to our investors and the general public about our products and services, including the stages of development of our rocket and launch system. If we do not appropriately manage the content, timing and delivery of our communications through these social media channels and the content that others, including our employees, post regarding our business, products and services, our reputation could be damaged or we could be subject to regulatory or other violations, all of which could have a material adverse effect on our business operations.

Risks Related to our Business Operations

Our losses from operations and liquidity condition raise substantial doubt about our ability to continue as a going concern. As a result, there is significant risk in the investment in shares of our Class A common stock and you may lose all or part of your investment.

As of September 30, 2022, we had cash and cash equivalents of \$67.6 million and marketable securities of \$82.9 million, and have not generated sufficient revenues to enable us to finance our business operations internally. We have incurred significant losses since our inception and had an accumulated deficit of \$1,776 million as of September 30, 2022 and we expect to continue to incur net losses into the future. These conditions raise substantial doubt about our ability to continue as a going concern during the next twelve months. Our ability to continue as a going concern is dependent on our ability to generate cash flows from operations and find additional sources of funding through either equity offerings, debt financings, or a combination of any such transactions.

To extend our financial runway, we continue to seek and evaluate opportunities to raise additional capital through the issuance of equity or debt securities. As an example, on August 2, 2022, the Company entered into a Common Stock Purchase Agreement with B. Riley Principal Capital II LLC ("B. Riley"), which would allow the Company to sell newly issued shares of its Class A Common Stock to B. Riley in aggregate amount not to exceed \$100.0 million or 19.99% of the aggregate outstanding Class A and Class B Common Stock of the Company as of August 2, 2022. In addition, on November 8, 2022, we implemented a reduction of approximately 16% of our existing headcount. We are exploring other plans to mitigate an expected shortfall of capital to support future operations including raising additional funds through borrowings or additional sales of securities or other sources, and managing our working capital. However, there is no assurance that savings we expect as a result of our headcount reduction will be

realized or additional financing will be available when needed or that we will be able to obtain financing on terms acceptable to us or whether or when we will become profitable and generate positive operating cash flow. If we are unable to raise substantial additional capital, our operations and production plans may be scaled back or curtailed. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, there is substantial doubt that we will be able to continue as a going concern. If the foregoing plans are unsuccessful and we are unable to continue as a going concern, you could lose all or part of your investment in us.

We currently fail to satisfy certain continued listing requirements of the NASDAQ Global Select Market, have failed to satisfy certain of these requirements in the past and could fail to satisfy those requirements again in the future, which could negatively affect the market price of our Class A common stock, our liquidity and our ability to raise capital. Our failure to meet the continued listing requirements of Nasdaq Global Select Market could result in a delisting of our Class A common stock.

Currently, our common stock trades on the NASDAQ Global Select Market. On October 6, 2022, we received a deficiency notice from NASDAQ that we were not in compliance with Rule 5450(a)(1) of the listing requirements (the “Minimum Bid Price Requirement”) because our per share closing bid price has been below \$1.00 for the last thirty consecutive business days. As of the date of this quarterly report, our per share closing bid price remains below \$1.00. While this notice had no immediate effect on the listing of the Company’s Class A common stock, if we are unable to regain compliance with the Minimum Bid Price Requirement or otherwise maintain compliance with the other listing standards for NASDAQ, it could result in the delisting of our Class A common stock from Nasdaq, which could have a material impact on your ability to sell shares of our Class A common stock.

Pursuant to Rule 5810(c)(3)(A), we have 180 calendar days, or until April 4, 2023, to regain compliance with the Minimum Bid Price Requirement. NASDAQ’s notice stated that if, at any time before April 4, 2023, the per share closing bid price of Astra’s Class A common stock is at least \$1.00 for a minimum of ten consecutive business days, Nasdaq’s staff will provide us written notice that it complies with the Minimum Bid Price Requirement.

While we intend to monitor the per share closing bid price of our Class A common stock and consider available options, including a reverse stock split, if our Class A common stock does not trade at a level likely to result in us regaining compliance with Minimum Bid Price Requirement by April 4, 2023, we cannot be certain that those available options, including a reverse stock split, would be sufficient to increase the closing per share price of our Class A common stock to more than \$1.00 or prevent it from dropping below \$1.00 at some point in the future.

If we do not regain compliance with the Minimum Bid Price Requirement by April 4, 2023, we may be eligible for an additional 180 calendar day compliance period. To qualify, we would need to, among other things, meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for NASDAQ, with the exception of the Minimum Bid Price Requirement, and provide written notice to NASDAQ that it intends to cure the deficiency during the second compliance period. There is no guarantee that we will regain compliance with the Minimum Bid Price Requirement, that we will maintain compliance with other NASDAQ listing standards, or that we will be eligible for a second compliance period. We have previously failed to comply with listing standards as a result of our late filing of our annual report on Form 10-K for the year ended December 31, 2021 and there can be no assurance that we will not violate other NASDAQ listing standards in the future.

If Nasdaq concludes that we will not be able to cure the deficiency during the second compliance period, or we do not make the required representations, then NASDAQ will give notice that our Class A common stock is subject to delisting and we will be able to appeal that delisting before a NASDAQ hearings panel. Such a delisting would likely have a negative effect on the price of our Class A common stock and would impair your ability to sell or purchase our Class A common stock when you wish to do so. In the event of a delisting, we would expect to take actions to restore our compliance with NASDAQ’s listing requirements, but we can provide no assurance that any such action taken by us would allow our Class A common stock to become listed again or improve the liquidity of our Class A common stock.

If we are delisted from Nasdaq, but obtain a substitute listing for our Class A common stock, it will likely be on a market with less liquidity, and therefore experience potentially more price volatility than experienced on NASDAQ. You may not be able to sell your shares of Class A common stock on any such substitute market in the quantities, at the times, or at the prices that could potentially be available on a more liquid trading market. As a result of these factors, if our Class A common stock is delisted from NASDAQ, the value and liquidity of our Class A common stock would likely be significantly adversely affected. A *delisting* of our common stock from NASDAQ could also adversely affect our ability to obtain financing for our operations and/or result in a loss of confidence by investors, employees and/or business partners.

We are highly dependent on our senior management team and other highly skilled personnel, and if we are not successful in attracting or retaining highly qualified personnel or are unable to find and integrate appropriate replacements for employees who choose to leave the Company (including in our finance function where we have had significant recent turnover), we may not be able to successfully implement our business strategy and our results of operation and ability to execute on our growth strategy will be affected.

Our success depends, in significant part, on the continued services of our senior management team and on our ability to attract, motivate, develop and retain a sufficient number of other highly skilled personnel, including engineers, manufacturing and quality assurance, design, finance, marketing, sales and support personnel. Our senior management team has extensive experience in the aerospace industry, and we believe that their depth of experience is instrumental to our continued success. The loss of any one or more members of our senior management team, for any reason, including resignation or retirement, could impair our ability to execute our business strategy and have a material adverse effect on our business, financial condition and results of operations.

Competition for qualified highly skilled personnel can be strong, and we can provide no assurance that we will be successful in attracting or retaining such personnel now or in the future.. Further, any inability to recruit, develop and retain qualified employees may result in high employee turnover and may force us to pay significantly higher wages, which may harm our profitability. The loss of any key employee or our inability to recruit, develop and retain these individuals as needed, could have a material adverse effect on our business, financial condition and results of operations.

Further, in the last six months, we have experienced turnover in critical leadership positions in our finance team, including the chief financial officer, the corporate controller and the director of SEC reporting. If we are unable to retain and successfully integrate their replacements, as well as retain the remaining members of our finance team, it could have a material adverse impact on our business and the reliability of our financial statements. Over the same period, we have also experienced turnover in other areas of our business, particularly related to engineering and operations. Similarly, if we are unable to integrate their replacements or retain other critical members of these functions, our ability to execute on our growth strategy and develop Launch System 2 and the production and delivery of our space products will be materially impeded.

We are unsure how the news of our headcount reduction will impact our retention efforts for those employees who are not affected (the “retained employees”). If any of the retained employees decide to leave the Company and we are unable to find and integrate qualified replacements for them, our business and future growth plans will be materially impacted.

We use social media as part of our marketing strategy and to provide information to our investors and the general public about our products and services, including the stages of development of our rocket and launch system. If we do not appropriately manage the content, timing and delivery of our communications through these social media channels and the content that others, including our employees, post regarding our business, products and services, our reputation could be damaged or we could be subject to regulatory or other violations, all of which could have a material adverse effect on our business operations.

Despite our efforts to monitor evolving social media communication guidelines and comply with applicable rules, there is risk that the use of social media by us, our employees or our customers to communicate about our products, services or business may cause us to be found in violation of applicable requirements. For example, due to text restrictions on certain social media platforms, information that we share on social media may not be qualified as forward-looking statements or could be viewed as not providing full and complete information about our business. Further, images we share through social media may not meet certain requirements under export regulations such as ITAR and EAR, despite our best efforts to review such material before it is submitted. As a result, we may be subject to enforcement actions from regulatory bodies related to our social media activities. Efforts we take to correct disclosures may be viewed negatively by our investors. In addition, adverse events with respect to our company, including launch failures, unapproved marketing or other unintended messages posted on social media could require an active response from us, which may not be completed in a timely manner and could result in reputational damage. Further, our employees may knowingly or inadvertently make use of social media in ways that may not comply with our corporate policies or other legal or contractual requirements. This, may give rise to liability or lead to the loss of trade secrets or other intellectual property or disclosure of material non-public information. Furthermore, negative posts or comments about us or our products and services in social media could seriously damage our reputation, brand image and goodwill, which would have a material adverse effect on our business, financial condition, and results of operations.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

Kelyn Brannon’s last day of employment with us is November 9, 2022. Axel Martinez, our current Executive Vice President of Finance, will be promoted to Chief Financial Officer effective November 10, 2022. Mr. Martinez will also serve as our principal financial officer and principal accounting officer.

Our financial arrangements with Ms. Brannon in connection with the transition of her employment and Mr. Martinez’ compensation were previously disclosed on a current report on Form 8-K filed with the Securities and Exchange Commission on September 30, 2022, and have not changed.

Item 6. Exhibits

Exhibit Number	Description	Incorporated by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.1*	Standard Industrial/Commercial Single Lessee Lease Net with SS (Oakmead) LLC dated July 28, 2022				
10.2	Common Stock Purchase Agreement, dated August 2, 2022, between Astra Space, Inc. and B. Riley Principal Capital II, LLC.	8-K	001-39426	10.1	August 2, 2022
10.3	Registration Rights Agreement, dated August 2, 2022, between Astra Space, Inc. and B. Riley Principal Capital II, LLC.	8-K	001-39426	10.2	August 2, 2022
10.4	Employment Agreement with Axel Martinez dated September 27, 2022	8-K	001-39426	10.1	September 30, 2022
31.1*	Certification of Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1**	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2**	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.				
101.SCH	Inline XBRL Taxonomy Extension Schema Document				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Filed herewith.

** Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Astra Space, Inc.

Date: November 9, 2022

By: /s/ Chris C. Kemp
Chris C. Kemp
Chief Executive Officer

Date: November 9, 2022

By: /s/ Kelyn J. Brannon
Kelyn J. Brannon
Chief Financial Officer, Principal Financial Officer and Principal Accounting Officer

STANDARD INDUSTRIAL/COMMERCIAL SINGLE-LESSEE LEASE - NET

1. Basic Provisions ("Basic Provisions").

1.1 **Parties.** This Lease ("Lease"), dated for reference purposes only July 28, 2022, is made by and between S&S (Oakmead), LLC, a Delaware limited liability company ("Lessor") and Astra Space Operations, Inc., a Delaware corporation ("Lessee"), (collectively the "**Parties**," or individually a "**Party**").

1.2 **Premises:** That certain real property, including all improvements therein or to be provided by Lessor under the terms of this Lease, commonly known as (street address, city, state, zip): 415 Oakmead Parkway, Sunnyvale, CA 94085 ("Premises"). The Premises are located in the County of Santa Clara and are generally described as: an approximately 60,517 square foot freestanding single story industrial research and development building (the "Building") situated on an approximately 4.24 acre lot with APNs 216-44-108 and 216-44-110 (the Building and such lot are collectively, the "Project"). (See also Paragraph 2)

1.3 **Term:** Three (3) years and Zero (0) months ("Original Term") commencing the earlier of August 1, 2022 or upon full execution of the Lease Agreement ("Commencement Date") and ending July 31, 2025 ("Expiration Date"). (See also Paragraph 3) Parties will do a Commencement Date Memorandum to confirm the actual Commencement Date.

1.4 **Early Possession:** Not applicable; intentionally omitted.

1.5 **Base Rent:** \$151,292.50 per month ("**Base Rent**"), payable on the first day of each month commencing August 1, 2022. (See also Paragraph 4)

There are provisions in this Lease for the Base Rent to be adjusted. (See Addendum.)

1.6 **Base Rent and Other Monies Paid Upon Execution:**

(a) **Base Rent:** \$151,292.50 for the period August 1, 2022 - August 31, 2022.

(b) **Security Deposit:** \$314,930.47 ("Security Deposit"). (See also Paragraph 5)

(c) **Association Fees:** None.

(d) **Other:** None.

(e) **Total Due Upon Execution of this Lease:** \$466,222.97.

1.7 **Agreed Use:** Research and development, assembly, light manufacturing and storage of rockets, spacecraft and related products, and for associated general office purposes and for other lawful uses related to and ancillary to the foregoing agreed use. (See also Paragraph 6)

1.8 **Insuring Party.** Intentionally omitted.

1.9 **Real Estate Brokers.** (See also Paragraph 15 and 25)

(a) **Representation:** Each Party acknowledges receiving a Disclosure Regarding Real Estate Agency Relationship, confirms and consents to the following agency relationships in this Lease with the following real estate brokers ("**Broker(s)**") and/or their agents ("**Agent(s)**"):

Lessor's Brokerage Firm Cushman & Wakefield U.S., Inc. License No. 01880493 Is the broker of (check one): the

Lessor; or both the Lessee and Lessor (dual agent).

Lessor's Agent Kalil Jenab/Nick Lazzarini/Steven Jenab License No. 00848988/01788935/02085072 is

(check one): the Lessor's Agent (salesperson or broker associate); or both the Lessee's Agent and the Lessor's Agent (dual agent).

Lessee's Brokerage Firm NAI Northern California License No. Is the broker of (check one): the Lessee; or both

the Lessee and Lessor (dual agent).

Lessee's Agent Douglas Sharpe License No. is (check one): the Lessee's Agent (salesperson or broker associate); or both

the Lessee's Agent and the Lessor's Agent (dual agent).

(b) **Payment to Brokers.** Upon execution and delivery of this Lease by both Parties, Lessor shall pay to the Brokers the brokerage fee agreed to in a separate written agreement for the brokerage services rendered by the Brokers in connection with the Original Term of this Lease. Under no circumstance shall Lessee be liable for, and Lessor shall indemnify, defend, protect and hold harmless Lessee and Lessee's Agent from and against, all losses, costs, claims, liabilities and damages (including reasonable attorneys' fees and court costs) arising out of any failure of Lessor to pay the Brokers the foregoing brokerage fee payable in connection with the Original Term of this Lease.

1.10 **Guarantor.** None.

1.11 **Attachments.** Attached hereto are the following, all of which constitute a part of this Lease: (a) an Addendum consisting of Paragraphs 51 through 55; (b) a plot plan depicting the Premises; and (c) a current set of the Rules and Regulations.

2. Premises.

2.1 **Letting.** Lessor hereby leases to Lessee, and Lessee hereby leases from Lessor, the Premises, for the term, at the rental, and upon all of the terms, covenants and conditions set forth in this Lease. While the approximate square footage of the Premises may have been used in the marketing of the Premises for purposes of comparison, the Base Rent stated herein is NOT tied to square footage and is not subject to adjustment should the actual size be determined to be different.

NOTE: Lessee is advised to verify the actual size prior to executing this Lease.

2.2 **Condition.** Lessor shall deliver the Premises to Lessee in "as-is, where-is", "with all faults" condition, subject to being broom clean and free of debris on the Commencement Date, and, so long as the required service contracts described in Paragraph 7.1(b) below are obtained by Lessee and in effect within thirty (30) days following the Commencement Date, warrants that the existing electrical, plumbing, fire sprinkler, lighting, heating, ventilating and air conditioning systems ("HVAC"), loading doors, sump pumps, if any, roof membrane and all other such base building elements in the Premises, other than those constructed by Lessee, shall be in good operating order and condition on said date, that the structural elements of the roof, bearing walls and foundation of the Building shall be free of material defects, and that the Premises do not contain hazardous levels of any mold or fungi defined as toxic under applicable state or federal law. If a non-compliance with said warranty exists as of the Commencement Date, or if one of such systems or elements should malfunction or fail within the appropriate warranty period, Lessor shall, as Lessor's sole obligation with respect to such matter, except as otherwise provided in this Lease, promptly after receipt of written notice from Lessee setting forth with specificity the nature and extent of such non-compliance, malfunction or failure, rectify same at Lessor's expense. The warranty period shall be as follows: **30 days**. If Lessee does not give Lessor the required notice within the appropriate warranty period, correction of any such non-compliance, malfunction or failure shall be the obligation of Lessee at Lessee's sole cost and expense. Lessor also warrants, that unless otherwise specified in writing, Lessor is unaware of (i) any recorded notices of default affecting the Premises; (ii) any delinquent amounts due under any loan secured by the Premises; and (iii) any bankruptcy proceeding affecting the Premises.

b. Except as otherwise provided in this Lease: (i) Lessee acknowledges that Lessee has agreed to lease the Premises in its present condition and that Lessee is relying solely on its own examination and inspections of the Premises and not on any statements or representations made by Lessor or any employees, contractors of agents thereof; (ii) Lessee hereby acknowledges that Lessor makes no warranty or representation, express or implied, or arising by operation of law, including, but in no way limited to, any warranty of condition, habitability, merchantability or fitness for a particular purpose of the Premises or any portion thereof; and (iii) Lessor hereby specifically disclaims any warranty, guaranty or representation, oral or written, past, present or future, of, as to, or concerning the nature and condition of the Premises or any part thereof.

2.3 **Compliance.** Lessor warrants that to the best of its knowledge the improvements on the Premises comply with the building codes, applicable laws, covenants or restrictions of record, regulations, and ordinances ("**Applicable Requirements**") that were in effect at the time that each improvement, or portion thereof, was constructed. Said warranty does not apply to the use to which Lessee will put the Premises, modifications which may be required by the Americans with Disabilities Act (the "**ADA**") or any similar laws as a result of Lessee's specific and unique use of the Premises (as compared with uses by Lessees in general), or any Alterations, Utility Installations or other changes made to the Premises by Lessee. **NOTE: Lessee is responsible for determining whether or not the Applicable Requirements, and especially the zoning, are appropriate for Lessee's intended use, and acknowledges that past uses of the Premises may no longer be allowed.** If the Premises do not comply with said warranty, Lessor shall, except as otherwise provided, promptly after receipt of written notice from Lessee setting forth with specificity the nature and extent of such non-compliance, rectify the same at Lessor's expense. If Lessee does not give Lessor written notice of a non-compliance with this warranty within 6 months following the Commencement Date, correction of that non-compliance shall be the obligation of Lessee at Lessee's sole cost and expense. If the Applicable Requirements are hereafter changed so as to require during the term of this Lease the construction of an addition to or an alteration of the Premises and/or Building, the remediation of any Hazardous Substance, or the reinforcement or other physical modification of the Unit, Premises and/or Building ("**Capital Expenditure**"), Lessor and Lessee shall allocate the cost of such work as follows:

(a) Subject to Paragraph 2.3(c) below, if such Capital Expenditures are required as a result of the specific and unique use of the Premises by Lessee as compared with uses by Lessees in general, Lessee shall be fully responsible for the cost thereof, provided, however, that if such Capital Expenditure is required during the last 180 days of this Lease and the cost thereof exceeds 6 months' Base Rent, Lessee may instead terminate this Lease unless Lessor notifies Lessee, in writing, within 10 days after receipt of Lessee's termination notice that Lessor has elected to pay the difference between the actual cost thereof and an amount equal to 6 months' Base Rent. If Lessee elects termination, Lessee shall immediately cease the use of the Premises which requires such Capital Expenditure and deliver to Lessor written notice specifying a termination date at least 90 days thereafter. Such termination date shall, however, in no event be earlier than the last day that Lessee could legally utilize the Premises without commencing such Capital Expenditure.

(b) If such Capital Expenditure is not the result of the specific and unique use of the Premises by Lessee (such as, governmentally mandated seismic modifications), then Lessor shall pay for such Capital Expenditure and Lessee shall only be obligated to pay, each month during the remainder of the term of this Lease or any extension thereof, on the date that on which the Base Rent is due, an amount equal to 1/144th of the portion of such costs reasonably attributable to the Premises. Lessee shall pay Interest on the balance but may prepay its obligation at anytime. If, however, such Capital Expenditure is required during the last 2 years of this Lease or if Lessor reasonably determines that it is not economically feasible to pay its share thereof, Lessor shall have the option to terminate this Lease upon 90 days prior written notice to Lessee unless Lessee notifies Lessor, in writing, within 10 days after receipt of Lessor's termination notice that Lessee will pay for such Capital Expenditure. If Lessor does not elect to terminate, and fails to tender its share of any such Capital Expenditure, Lessee may advance such funds and deduct same, with Interest, from Rent until Lessor's share of such costs have been fully paid. If Lessee is unable to finance Lessor's share, or if the balance of the Rent due and payable for the remainder of this Lease is not sufficient to fully reimburse Lessee on an offset basis, Lessee shall have the right to terminate this Lease upon 30 days written notice to Lessor.

(c) Notwithstanding anything in the Lease to the contrary, if the Applicable Requirements require during the term of this Lease any structural changes, upgrades or additions to the Premises, Building or Project, or any of the base building systems serving the same, or the modification or alteration of any of the portions of the Premises, Project and/or Building required be maintained by Lessor pursuant to Paragraph 7.2 hereof, then Lessor shall make any such changes, upgrades, additions, modifications, alterations or other maintenance or repairs, except to the extent they are required solely as a result of Lessee's specific and unique use of the Premises (as compared with uses by Lessees in general) or Utility Installations or Alterations caused by Lessee; provided however that Lessee shall be required to reimburse Lessor, as additional rent, for the reasonable, actual and direct costs and expenses incurred by Lessor in connection with making any such changes, upgrades, additions, modifications, alterations or other maintenance or repairs. If the Capital Expenditures are instead triggered by Lessee as a result of an actual or proposed change in use, change in intensity of use, or modification to the Premises, then, and in that event, Lessee shall either: (i) immediately cease such changed use or intensity of use and/or take such other steps as may be necessary to eliminate the requirement for such Capital Expenditures, or (ii) complete such Capital Expenditures at its own expense. Lessee shall not, however, have any right to terminate this Lease. Any Capital Expenditure performed by Lessee, must have Lessor's prior written approval; not to be unreasonably withheld.

2.4 **Acknowledgements.** Lessee acknowledges that: (a) it has been given an opportunity to inspect and measure the Premises, (b) it has been advised by Lessor and/or Brokers to satisfy itself with respect to the size and condition of the Premises (including but not limited to the electrical, HVAC and fire sprinkler systems, security, environmental aspects, and compliance with Applicable Requirements and the Americans with Disabilities Act), and their suitability for Lessee's intended use, (c) Lessee has made such investigation as it deems necessary with reference to such matters and assumes all responsibility therefor as the same relate to its occupancy of the Premises, (d) it is not relying on any representation as to the size of the Premises made by Brokers or Lessor, (e) the square footage of the Premises was not material to Lessee's decision to lease the Premises and pay the Rent stated herein, and (f) neither Lessor, Lessor's agents, nor Brokers have made any oral or written representations or warranties with respect to said matters other than as set forth in this Lease. In addition, Lessor acknowledges that: (i) Brokers have made no representations, promises or warranties concerning Lessee's ability to honor the Lease or suitability to occupy the Premises, and (ii) it is Lessor's sole responsibility to investigate the financial capability and/or suitability of all proposed Lessees.

2.5 **Lessee as Prior Owner/Occupant.** Intentionally omitted.

3.Term.

3.1 **Term.** The Commencement Date, Expiration Date and Original Term of this Lease are as specified in Paragraph 1.3.

3.2 **Early Possession.** Intentionally omitted.

3.3 **Delay In Possession.** Lessor agrees to use commercially reasonable efforts to deliver exclusive possession of the Premises to Lessee by the Commencement Date. If, despite said efforts, Lessor is unable to deliver possession by such date, Lessor shall not be subject to any liability therefor, nor shall such failure affect the validity of this Lease or change the Expiration Date. Lessee shall not, however, be obligated to pay Rent or perform its other obligations until Lessor delivers possession of the Premises and any period of rent abatement that Lessee would otherwise have enjoyed shall run from the date of delivery of possession and continue for a period equal to what Lessee would otherwise have enjoyed under the terms hereof, but minus any days of delay caused by the acts or omissions of Lessee. If possession of the Premises is not delivered to Lessee within 60 days after the Commencement Date (subject to any delays caused by Lessee and subject to up to an additional 60 days of force majeure delays outside the control of Lessor), then, so long as Lessee did not cause any such delays, Lessee shall, as Lessee's sole and exclusive remedy, be entitled to terminate this Lease by delivering written notice of Lessee's election to terminate this Lease to Lessor within 30 days after the expiration of the foregoing 60 day or longer period. This Lease shall terminate as of the date that is 30 days after Lessee's notice (in which case neither party shall have further duties or obligations under this Lease) unless possession is delivered to Lessee on or prior to such 30th day and in such event, the Lease shall remain in effect. Notwithstanding the above, however, Lessee shall have no right to terminate this Lease pursuant to this Paragraph 3.3 if possession has not been delivered solely due to Lessee's failure to provide evidence of insurance as permitted by Paragraph 3.4 below.

3.4 **Lessee Compliance.** Lessor shall not be required to tender possession of the Premises to Lessee until Lessee complies with its obligation to provide evidence of insurance (Paragraph 8.5). Pending delivery of such evidence, Lessee shall be required to perform all of its obligations under this Lease from and after the Commencement Date, including the payment of Rent, notwithstanding Lessor's election to withhold possession pending receipt of such evidence of insurance. Further, if Lessee is required to perform any other conditions prior to or concurrent with the Commencement Date, the Commencement Date shall occur but Lessor may elect to withhold possession until such conditions are satisfied.

4.Rent.

4.1 **Rent Defined.** All monetary obligations of Lessee to Lessor under the terms of this Lease (except for the Security Deposit) are deemed to be rent ("**Rent**").

4.2 **Payment.** Lessee shall cause payment of Rent to be received by Lessor in lawful money of the United States, without offset or deduction (except as specifically permitted in this Lease), on or before the day on which it is due. In the event that any invoice prepared by Lessor is inaccurate such inaccuracy shall not constitute a waiver and Lessee shall be obligated to pay the amount set forth in this Lease. Rent for any period during the term hereof which is for less than one full calendar month shall be prorated based upon the actual number of days of said month. Payment of Rent shall be made to Lessor at its address stated herein or to such other persons or place as Lessor may from time to time designate in writing. Acceptance of a payment which is less than the amount then due shall not be a waiver of Lessor's rights to the balance of such Rent, regardless of Lessor's endorsement of any check so stating. In the event that any check, draft, or other instrument of payment given by Lessee to Lessor is dishonored for any reason, Lessee agrees to pay to Lessor the sum of \$25 in addition to any Late Charge and Lessor, at its option, may require all future Rent be paid by cashier's check. Payments will be applied first to accrued late charges and attorney's fees, second to accrued interest, then to Base Rent, Insurance and Real Property Taxes, and any remaining amount to any other outstanding charges or costs.

4.3 **Association Fees.** Intentionally Omitted.

4.4 **Management Fee.** In addition to the Base Rent, Lessee shall pay to Lessor each month a management fee in an amount not to exceed 5% of Base Rent only. Said management fee shall be paid at the same time and in the same manner as the Base Rent.

5.**Security Deposit.** Lessee shall deposit with Lessor upon execution hereof the Security Deposit as security for Lessee's faithful performance of its obligations under this Lease. If Lessee fails to pay Rent, or otherwise Defaults under this Lease, Lessor may use, apply or retain all or any portion of said Security Deposit for the payment of any amount already due Lessor, for Rents which will be due in the future, and/ or to reimburse or compensate Lessor for any liability, expense, loss or damage which Lessor may suffer or incur by reason thereof. If Lessor uses or applies all or any portion of the Security Deposit, Lessee shall within 10 days after written request therefor deposit monies with Lessor sufficient to restore said Security Deposit to the full amount required by this Lease. If the Base Rent increases during the term of this Lease, Lessee shall, upon written request from Lessor, deposit additional monies with Lessor so that the total amount of the Security Deposit shall at all times bear the same proportion to the increased Base Rent as the initial Security Deposit bore to the initial Base Rent. Should the Agreed Use be amended to accommodate a material change in the business of Lessee or to accommodate a sublessee or assignee, Lessor shall have the right to increase the Security Deposit to the extent necessary, in Lessor's reasonable judgment, to account for any increased wear and tear that the Premises may suffer as a result thereof. If a change in control of Lessee occurs during this Lease and following such change the financial condition of Lessee is, in Lessor's reasonable judgment, significantly reduced, Lessee shall deposit such additional monies with Lessor as shall be sufficient to cause the Security Deposit to be at a commercially reasonable level based on such change in financial condition. Lessor shall not be required to keep the Security Deposit separate from its general accounts. Within 90 days after the expiration or termination of this Lease, Lessor shall return that portion of the Security Deposit not used or applied by Lessor. Lessor shall upon written request provide Lessee with an accounting showing how that portion of the Security Deposit that was not returned was applied. No part of the Security Deposit shall be considered to be held in trust, to bear interest or to be prepayment for any monies to be paid by Lessee under this Lease. THE SECURITY DEPOSIT SHALL NOT BE USED BY LESSEE IN LIEU OF PAYMENT OF THE LAST MONTH'S RENT. In lieu of a cash deposit, Lessee may, at any time, deliver to Lessor a clean, irrevocable, unconditional and transferable (with Lessee's reasonable cooperation and at Lessee's sole cost and expense, and at no additional cost or expense to Lessor) standby letter of credit (as the "**Letter of Credit**") issued by and drawn upon a reputable commercial bank or financial institution reasonably acceptable to Lessor (the "**Issuing Bank**") which Letter of Credit shall have a term of not less than one year, and, be in the amount of \$314,930.47, and shall otherwise be in form reasonably acceptable to Lessor. Upon delivery of such Letter of Credit, Lessor shall, within five (5) Business Days of receipt of the Letter of Credit, return to Lessee the cash Security Deposit Lessor is then holding under this Lease. The Letter of Credit shall provide that: (i)The Issuing Bank shall pay to Lessor an amount up to the face amount of the Letter of Credit upon presentation of the original Letter of Credit, to cure an Event of Default by Lessee after notice and expiration of applicable cure periods, and a sight draft in the amount to be drawn along with a certification from Lessor that an Event of Default has occurred under the Lease and is continuing; (ii) the Letter of Credit shall be automatically renewed, without amendment, for consecutive periods of one year each during the Term of this Lease plus at least an additional ninety (90) days following the Expiration Date, unless the Issuing Bank sends written notice (the "**Non-Renewal Notice**") to Lessor not less than sixty (60) days next preceding the then expiration date of the Letter of Credit, that it elects not to renew such Letter of Credit; and (iii) In the event that the Issuing Bank sends a Non-Renewal Notice, Lessee shall promptly, and in no event later than the date that is thirty (30) days prior to the expiration date of the Letter of Credit, provide Lessor with a substitute Letter of Credit acceptable to Lessor in the commercially reasonable exercise of its judgment. In the event that Lessee fails prior to said thirty (30) day period to provide Lessor with a substitute Letter of Credit or cash security, Lessor shall thereafter have the right, exercisable by a sight draft and certification to the above, to draw the full amount of the Letter of Credit (which moneys shall be held by Lessor as a cash deposit pursuant to the terms of this Section 5, pending the replacement of same with a Letter of Credit, at Lessee's option). Lessor agrees that it will not draw on the Letter of Credit, except upon the occurrence of an Event of Default by Lessee hereunder, or the non-renewal of such Letter of Credit by the Issuing Bank after the expiration of the period provided to Lessee above to substitute a new Letter of Credit or cash security. Any draw on the Letter of Credit by Lessor shall be without prejudice to, or limitation of, any other remedy provided in the Lease or available at law, and following any such draw Lessee shall upon demand deliver a replacement or additional Letter of Credit in the amount of such draw or deliver a cash Security Deposit in the amount of such draw. Lessee hereby waives the provisions of Section 1950.7 of the California Civil Code and all other provisions of law, local, state or federal, now or hereafter in effect, which establish the time frame by which Lessor must refund a security deposit under a lease, and/or provide that Lessor may claim from the security deposit only those sums reasonably necessary to remedy Events of Default in the payment of rent, to repair damage caused by Lessee or to clean the Premises, it

being agreed that Lessor may, in addition, claim those sums specified above in this Section 5 and/or those sums reasonably necessary to compensate Lessor for any loss or damage caused by Lessee's breach of this Lease or the acts or omission of Lessee or Lessee's employees, agents, contractors or invitees, including any damages Lessor suffers following termination of the Lease.

6. Use.

6.1 Use. Lessee shall use and occupy the Premises only for the Agreed Use, or any other legal use which is reasonably comparable thereto, and for no other purpose. Lessee shall not use or permit the use of the Premises in a manner that is unlawful, creates damage, waste or a nuisance, or that unreasonably disturbs occupants of or causes damage to neighboring premises or properties. Other than guide, signal and seeing eye dogs, Lessee shall not keep or allow in the Premises any pets, animals, birds, fish, or reptiles. Lessor shall not unreasonably withhold or delay its consent to any written request for a modification of the Agreed Use, so long as the same will not impair the structural integrity of the improvements on the Premises or the mechanical or electrical systems therein, and/or is not significantly more burdensome to the Premises. If Lessor elects to withhold consent, Lessor shall within 7 days after such request give written notification of same, which notice shall include an explanation of Lessor's objections to the change in the Agreed Use.

6.2 Hazardous Substances.

(a) Reportable Uses Require Consent. The term "**Hazardous Substance**" as used in this Lease shall mean any product, substance, or waste whose presence, use, manufacture, disposal, transportation, or release, either by itself or in combination with other materials expected to be on the Premises, is either: (i) potentially injurious to the public health, safety or welfare, the environment or the Premises, (ii) regulated or monitored by any governmental authority, or (iii) a basis for potential liability of Lessor to any governmental agency or third party under any applicable statute or common law theory. Hazardous Substances shall include, but not be limited to, hydrocarbons, petroleum, gasoline, and/or crude oil or any products, by-products or fractions thereof. Lessee shall not engage in any activity in or on the Premises which constitutes a Reportable Use of Hazardous Substances without the express prior written consent of Lessor and timely compliance (at Lessee's expense) with all Applicable Requirements. "**Reportable Use**" shall mean (i) the installation or use of any above or below ground storage tank, (ii) the generation, possession, storage, use, transportation, or disposal of a Hazardous Substance that requires a permit from, or with respect to which a report, notice, registration or business plan is required to be filed with, any governmental authority, and/or (iii) the presence at the Premises of a Hazardous Substance with respect to which any Applicable Requirements requires that a notice be given to persons entering or occupying the Premises or neighboring properties. Lessee shall not engage in any activity in or on the Premises which constitutes a Reportable Use of Hazardous Substances without the express prior written consent of Lessor, which consent shall not be unreasonably withheld, conditioned or delayed, and subject to Lessee's full, strict and timely compliance (at Lessee's expense) with all Applicable Requirements at all times. In addition, Lessor may condition its consent to any Reportable Use upon receiving such additional assurances as Lessor reasonably deems necessary to protect itself, the public, the Premises and/or the environment against damage, contamination, injury and/or liability, including, but not limited to, the installation (and removal on or before Lease expiration or termination) of protective modifications (such as concrete encasements) and/or increasing the Security Deposit.

(b) Duty to Inform Lessor. If Lessee knows, or has reasonable cause to believe, that a Hazardous Substance has come to be located in, on, under or about the Premises, other than as previously consented to by Lessor, Lessee shall immediately give written notice of such fact to Lessor, and provide Lessor with a copy of any report, notice, claim or other documentation which it has concerning the presence of such Hazardous Substance.

(c) Lessee Remediation. Lessee shall not cause or permit any Hazardous Substance to be spilled or released in, on, under, or about the Premises (including through the plumbing or sanitary sewer system) and shall promptly, at Lessee's expense, comply with all Applicable Requirements and take all investigatory and/or remedial action reasonably recommended, whether or not formally ordered or required, for the cleanup of any contamination of, and for the maintenance, security and/or monitoring of the Premises or neighboring properties, that was caused or materially contributed to by Lessee, or pertaining to or involving any Hazardous Substance brought onto the Premises during the term of this Lease, by or for Lessee, or any third party.

(d) Lessee Indemnification. Lessee shall indemnify, defend and hold Lessor, its agents, employees, lenders, partners, affiliates, principals, officers, members, trustees, beneficiaries, shareholders, directors and ground lessor, if any, harmless from and against any and all loss of rents and/or damages, liabilities, judgments, claims, expenses, penalties, and reasonable attorneys' and reasonable consultants' fees arising out of or involving any Hazardous Substance brought onto the Premises by or for Lessee, or Lessee's employees, contractors, agents or invitees, or otherwise released as a result of or caused by Lessee's own acts, omissions, negligence or misconduct in the use or maintenance of the Premises. Lessee's obligations shall include, but not be limited to, the effects of any contamination or injury to person, property or the environment created or suffered by Lessee, and the cost of investigation, removal, remediation, restoration and/or abatement, and shall survive the expiration or termination of this Lease. **No termination, cancellation or release agreement entered into by Lessor and Lessee shall release Lessee from its obligations under this Lease with respect to Hazardous Substances, unless specifically so agreed by Lessor in writing at the time of such agreement.**

(e) Lessor Indemnification. Except as otherwise provided in paragraph 8.7, Lessor and its successors and assigns shall indemnify, defend, reimburse and hold Lessee, its employees and lenders, harmless from and against any and all environmental damages, including the cost of remediation, which result from Hazardous Substances which existed on the Premises prior to Lessee's occupancy or which are caused by the acts or omissions (where there is an express duty to act hereunder) of Lessor, its agents or employees. Lessor's obligations, as and when required by the Applicable Requirements, shall include, but not be limited to, the cost of investigation, removal, remediation, restoration and/or abatement, and shall survive the expiration or termination of this Lease.

(f) Investigations and Remediations. Lessor shall retain the responsibility and pay for any investigations or remediation measures required by governmental entities having jurisdiction with respect to the existence of Hazardous Substances on the Premises prior to Lessee's occupancy, unless such remediation measure is required as a result of Lessee's use (including "Alterations", as defined in paragraph 7.3(a) below) of the Premises, in which event Lessee shall be responsible for such payment. Lessee shall cooperate fully in any such activities at the request of Lessor, including allowing Lessor and Lessor's agents to have reasonable access to the Premises at reasonable times in order to carry out Lessor's investigative and remedial responsibilities.

(g) Lessor Termination Option. If a Hazardous Substance Condition (see Paragraph 9.1(e)) occurs during the term of this Lease, unless Lessee is legally responsible therefor (in which case Lessee shall make the investigation and remediation thereof required by the Applicable Requirements and this Lease shall continue in full force and effect, but subject to Lessor's rights under Paragraph 6.2(d) and Paragraph 13), Lessor may, at Lessor's option, either (i) investigate and remediate such Hazardous Substance Condition, if required, as soon as reasonably possible at Lessor's expense, in which event this Lease shall continue in full force and effect, or (ii) if the estimated cost to remediate such condition exceeds 12 times the then monthly Base Rent or \$100,000, whichever is greater, give written notice to Lessee, within 30 days after receipt by Lessor of knowledge of the occurrence of such Hazardous Substance Condition, of Lessor's desire to terminate this Lease as of the date 60 days following the date of such notice. In the event Lessor elects to give a termination notice, Lessee may, within 10 days thereafter, give written notice to Lessor of Lessee's commitment to pay the amount by which the cost of the remediation of such Hazardous Substance Condition exceeds an amount equal to 12 times the then monthly Base Rent or \$100,000, whichever is greater. Lessee shall provide Lessor with said funds or satisfactory assurance thereof within 30 days following such commitment. In such event, this Lease shall continue in full force and effect, and Lessor shall proceed to make such remediation as soon as reasonably possible after the required funds are available. If Lessee does not give such notice and provide the required funds or assurance thereof within the time provided, this Lease shall terminate as of the date specified in Lessor's notice of termination.

6.3 Lessee's Compliance with Applicable Requirements. Except as otherwise provided in this Lease, Lessee shall, at Lessee's sole expense, fully, diligently and in a timely manner, materially comply with all Applicable Requirements, the requirements of any applicable fire insurance underwriter or rating bureau, and the recommendations of Lessor's engineers and/or consultants which relate in any manner to the Premises, without regard to whether said Applicable Requirements are now in effect or become effective after the Commencement Date. Lessee shall, within 10 days after receipt of Lessor's written request, provide Lessor with copies of all permits and other documents, and other information evidencing Lessee's compliance with any Applicable Requirements specified by Lessor, and shall immediately upon receipt, notify Lessor in writing (with copies of any documents involved) of any threatened or actual claim, notice,

citation, warning, complaint or report pertaining to or involving the failure of Lessee or the Premises to comply with any Applicable Requirements. Likewise, Lessee shall immediately give written notice to Lessor of: (i) any water damage to the Premises and any suspected seepage, pooling, dampness or other condition conducive to the production of mold; or (ii) any mustiness or other odors that might indicate the presence of mold in the Premises. In addition, Lessee shall provide copies of all relevant material safety data sheets that Lessee is required by Applicable Requirements to complete ("MSDS"), to Lessor promptly after receipt of a written request therefor. In addition, Lessee shall provide Lessor with copies of its business license, certificate of occupancy and/or any similar document within 10 days of the receipt of a written request therefor, to the extent applicable.

6.4 Inspection; Compliance. Lessor, its employees, contractors or agents, and Lessor's "Lender" (as defined in Paragraph 30) authorized by Lessor, shall have the right to enter into the Premises at any time in the case of an emergency, and otherwise at reasonable times during normal business hours upon not less than 72 hours advance notice to Lessee, for the purpose of inspecting and/or testing the condition of the Premises and/or for verifying compliance by Lessee with this Lease. Lessee shall have the right to have an employee accompany any such Lessor party while on the Premises or in the Building. The cost of any such inspections shall be paid by Lessor, unless a violation of Applicable Requirements, or a Hazardous Substance Condition (see paragraph 9.1(e)) is found to exist or be imminent, or the inspection is requested or ordered by a governmental authority. In such case, Lessee shall upon request reimburse Lessor for the cost of such inspection, so long as such inspection is reasonably related to the violation or contamination. Lessor, its employees, contractors or agents, and Lessor's Lender authorized by Lessor to enter the Premises, shall take all commercially reasonable steps to avoid or minimize (to the greatest extent possible) interference with Lessee's use of the Premises.

7. Maintenance; Repairs; Utility Installations; Trade Fixtures and Alterations.

7.1 Lessee's Obligations.

(a)**In General.** Subject to the provisions of Paragraph 2.2 (Condition), 2.3 (Compliance), 6.3 (Lessee's Compliance with Applicable Requirements), 7.2 (Lessor's Obligations), 9 (Damage or Destruction), and 14 (Condemnation), Lessee shall, at Lessee's sole expense, keep the Premises, Utility Installations (intended for Lessee's exclusive use, no matter where located), and Alterations in good order, condition and repair (whether or not the portion of the Premises requiring repairs, or the means of repairing the same, are reasonably or readily accessible to Lessee, and whether or not the need for such repairs occurs as a result of Lessee's use, any prior use, the elements or the age of such portion of the Premises), including, but not limited to, all equipment or facilities, such as plumbing, HVAC equipment, electrical, lighting facilities, boilers, pressure vessels, fire protection system, fixtures, walls (interior and exterior), foundations, ceilings, roofs, roof drainage systems, floors, windows, doors, plate glass, skylights, landscaping, driveways, parking lots, fences, retaining walls, signs, sidewalks and parkways located in, on, or adjacent to the Premises. Lessee, in keeping the Premises in good order, condition and repair, shall exercise and perform good maintenance practices, specifically including the procurement and maintenance of the service contracts required by Paragraph 7.1(b) below. Lessee's obligations shall include restorations, replacements or renewals when necessary to keep the Premises and all improvements thereon or a part thereof in good order, condition and state of repair. Lessee shall, during the term of this Lease, keep the exterior appearance of the Building in a first-class condition (including, e.g. graffiti removal) consistent with the exterior appearance of other similar facilities of comparable age and size in the vicinity, including, when necessary, the exterior repainting of the Building. Notwithstanding anything to the contrary set forth herein, Lessee's obligation to maintain the Premises shall be subject to ordinary wear and tear. Additionally, Lessee's obligation to repair any Utility Installations shall be limited to only to the extent that the same are exclusively serving the Premises or located within the Premises and, if applicable, from the main point of connection to the Premises (and Lessor shall be responsible for any Utility Installations not exclusively serving the Premises and located outside of the Premises or beyond such main point of connection).

(b)**Service Contracts.** Lessee shall, at Lessee's sole expense, procure and maintain contracts, with copies to Lessor, in customary form and substance for, and with contractors specializing and experienced in the maintenance of the following equipment and improvements, if any, if and when installed on the Premises: (i) HVAC equipment, (ii) boiler, and pressure vessels, (iii) fire extinguishing systems, including fire alarm and/or smoke detection, (iv) landscaping and irrigation systems, (v) roof covering and drains, and (vi) clarifiers.

(c)**Failure to Perform.** If Lessee fails to perform Lessee's obligations under this Paragraph 7.1, Lessor may enter upon the Premises after 10 days' prior written notice to Lessee (except in the case of an emergency, in which case no notice shall be required), perform such obligations on Lessee's behalf, and put the Premises in good order, condition and repair, and Lessee shall promptly pay to Lessor a sum equal to 115% of the cost thereof.

(d)**Replacement.** Subject to Lessee's indemnification of Lessor as set forth in Paragraph 8.7 below, and without relieving Lessee of liability resulting from Lessee's failure to exercise and perform good maintenance practices, if an item described in Paragraph 7.1(b) cannot be repaired other than at a cost which is in excess of 50% of the cost of replacing such item, then such item shall be replaced by Lessor, and the cost thereof shall be prorated between the Parties and Lessee shall only be obligated to pay, each month during the remainder of the term of this Lease or any extension thereof, on the date on which Base Rent is due, an amount equal to the product of multiplying the cost of such replacement by a fraction, the numerator of which is one, and the denominator of which is 144 (i.e. 1/144th of the cost per month). Lessee shall pay Interest on the unamortized balance but may prepay its obligation at anytime.

7.2 Lessor's Obligations. Subject to the provisions of Paragraphs 2.2 (Condition), 2.3 (Compliance), 9 (Damage or Destruction) and 14 (Condemnation), it is intended by the Parties hereto that Lessor have no obligation, in any manner whatsoever, to repair and maintain the Premises, or the equipment therein, all of which obligations are intended to be that of the Lessee, except that Lessor shall maintain and/or repair, as necessary in Lessor's commercially reasonable discretion, exterior walls, foundations, structural elements of the roof, retaining walls or any other structural elements of the Building and Premises (except to the extent required to repair any damage thereto caused or exacerbated by Lessee or Lessee's employees, contractors or agents, which repairs shall be made by Lessor but at Lessee's sole cost and expense). It is the intention of the Parties that the terms of this Lease govern the respective obligations of the Parties as to maintenance and repair of the Premises.

7.3 Utility Installations; Trade Fixtures; Alterations.

(a)**Definitions.** The term "Utility Installations" refers to all floor and window coverings, air and/or vacuum lines, power panels, electrical distribution, security and fire protection systems, communication cabling, lighting fixtures, HVAC equipment, plumbing, and fencing in or on the Premises. The term "Trade Fixtures" shall mean Lessee's machinery and equipment that can be removed without doing material damage to the Premises. The term "Alterations" shall mean any modification of the improvements, other than Utility Installations or Trade Fixtures, whether by addition or deletion. "Lessee Owned Alterations and/or Utility Installations" are defined as Alterations and/or Utility Installations made by Lessee that are not yet owned by Lessor pursuant to Paragraph 7.4(a).

(b)**Consent.** Lessee shall not make any Alterations or Utility Installations to the Premises without Lessor's prior written consent, in Lessor's sole and absolute discretion, except that Lessor shall not unreasonably withhold, condition or delay such consent to any non-structural Alterations or Utility Installations to the interior of the Premises (excluding the roof) as long as they are not visible from the outside, do not involve puncturing, relocating or removing the roof or any existing walls, will not affect the electrical, plumbing, HVAC, and/or life safety systems, and do not trigger the requirement for additional modifications and/or improvements to the Premises resulting from Applicable Requirements, such as compliance with Title 24. Lessee may, however, make nonstructural Alterations or Utility Installations to the interior of the Premises (excluding the roof) without such consent but upon notice to Lessor, as long as they are not visible from the outside, do not involve puncturing, relocating or removing the roof or any existing walls, will not affect the electrical, plumbing, HVAC, and/or life safety systems, do not trigger the requirement for additional modifications and/or improvements to the Premises resulting from Applicable Requirements, such as compliance with Title 24, and the aggregate cost thereof during this Lease as extended does not exceed \$100,000.00 in any one year. For any proposed Alterations or Utility Installations by Lessee requiring Lessor's consent under this Lease, Lessor shall respond to Lessee within ten (10) business days following receipt of the applicable drawings, plans or specifications. If Lessor does not respond within such ten (10) business day period, Lessee shall provide Lessor a reminder, in which case Lessor will have an additional five (5) business days to respond to the request for consent. If Lessor does not respond within such five (5) business day period, Lessor's consent shall be deemed given to such proposed Alterations or Utility Installations. Notwithstanding the foregoing, Lessee shall not make or permit any roof penetrations and/or install anything on the roof without the prior written

approval of Lessor. Lessee shall be solely responsible for any additional modifications and/or improvements to the Premises required by Applicable Requirements (such as compliance with Title 24), that are triggered as a result of any Alterations or Utility Installations performed by Lessee. In connection with the Alterations and Utility Installations performed by Lessee, Lessee shall (i) acquire all applicable governmental permits, (ii) furnish Lessor with copies of both the permits and the drawings, plans and specifications, if any, prior to commencement of the work, (iii) comply with all conditions of said permits and other Applicable Requirements and (iv) perform the same in a workmanlike manner with good and sufficient materials. In all cases, approval by Lessor of any of Lessee's drawings, plans and specifications prepared in connection with any alterations, improvements, modifications or additions to the Premises or the Project shall not constitute a representation or warranty of Lessor as to the adequacy or sufficiency of such drawings, plans and specifications, or alterations, improvements, modifications or additions to which they relate, for any use, purpose or condition, but such approval shall merely be the consent of Lessor as required hereunder. Lessor may, as a precondition to granting such approval, require Lessee to utilize a contractor chosen and/or approved by Lessor. Any Alterations or Utility Installations that Lessee shall desire to make and which require the consent of the Lessor shall be presented to Lessor in written form with detailed plans. Consent shall be deemed conditioned upon Lessee's: (i) acquiring all applicable governmental permits, (ii) furnishing Lessor with copies of both the permits and the plans and specifications prior to commencement of the work, and (iii) compliance with all conditions of said permits and other Applicable Requirements in a prompt and expeditious manner. Any Alterations or Utility Installations shall be performed in a workmanlike manner with good and sufficient materials. Lessee shall promptly upon completion furnish Lessor with as-built plans and specifications.

(c)**Liens; Bonds.** Lessee shall pay, when due, all claims for labor or materials furnished or alleged to have been furnished to or for Lessee at or for use on the Premises, which claims are or may be secured by any mechanic's or materialmen's lien against the Premises or any interest therein. Lessee shall give Lessor not less than 10 days notice prior to the commencement of any work in, on or about the Premises, and Lessor shall have the right to post notices of non-responsibility. If Lessee shall contest the validity of any such lien, claim or demand, then Lessee shall, at its sole expense defend and protect itself, Lessor and the Premises against the same and shall pay and satisfy any such adverse judgment that may be rendered thereon before the enforcement thereof.

7.4 Ownership; Removal; Surrender; and Restoration.

(a)**Ownership.** Subject to Lessor's right to require removal or elect ownership as hereinafter provided, all Alterations and Utility Installations made by Lessee shall be removed upon Lease Expiration, unless Lessee & Lessor agree otherwise in writing the property of Lessee, but considered a part of the Premises. Lessor may, at any time, elect in writing to be the owner of all or any specified part of the Lessee Owned Alterations and Utility Installations. Unless otherwise instructed per paragraph 7.4(b) hereof, all Lessee Owned Alterations and Utility Installations shall, at the expiration or termination of this Lease, become the property of Lessor and be surrendered by Lessee with the Premises, except as otherwise specified below in Paragraph 7.4(c).

(b)**Removal.** By delivery to Lessee of written notice from Lessor not earlier than 90 and not later than 30 days prior to the end of the term of this Lease, Lessor may require that any or all Lessee Owned Alterations or Utility Installations be removed by the expiration or termination of this Lease. Lessor may require the removal at anytime of all or any part of any Lessee Owned Alterations or Utility Installations made without the required consent.

(c)**Surrender; Restoration.** Lessee shall surrender the Premises by the Expiration Date or any earlier termination date, with all of the improvements, parts and surfaces thereof broom clean and free of debris, and in good operating order, condition and state of repair, ordinary wear and tear excepted. "Ordinary wear and tear" shall not include any damage or deterioration that would have been prevented by good maintenance practice. Notwithstanding the foregoing and the provisions of Paragraph 7.1(a), if the Lessee occupies the Premises for 12 months or less, then Lessee shall surrender the Premises in the same condition as delivered to Lessee on the Commencement Date with no allowance for ordinary wear and tear. Lessee shall repair any damage occasioned by the installation, maintenance or removal of Trade Fixtures, Lessee owned Alterations and/or Utility Installations, furnishings, and equipment as well as the removal of any storage tank installed by or for Lessee. Lessee shall also completely remove from the Premises any and all Hazardous Substances brought onto the Premises by or for Lessee (except Hazardous Substances which were deposited via underground migration from areas outside of the Premises) to the level specified in Applicable Requirements. Lessee may also remove from the Premises at any time during the Term, or within ten (10) days after the expiration of the Term of the Lease or any earlier termination thereof, any architectural treatments or other items containing any of Lessee's trademarks, service marks, copyrights, logos, pictures or other identifiers or trade dress from the Premises. Trade Fixtures shall remain the property of Lessee and shall be removed by Lessee. Any personal property of Lessee not removed on or before the Expiration Date or any earlier termination date shall be deemed to have been abandoned by Lessee and may be disposed of or retained by Lessor as Lessor may desire. The failure by Lessee to timely vacate the Premises pursuant to this Paragraph 7.4(c) without the express written consent of Lessor shall constitute a holdover under the provisions of Paragraph 26 below.

8. Insurance; Indemnity.

8.1 **Payment For Insurance.** Lessee shall pay for all insurance required under Paragraph 8 except to the extent of the cost attributable to liability insurance carried by Lessor under Paragraph 8.2(b) in excess of \$2,000,000 per occurrence. Premiums for policy periods commencing prior to or extending beyond the Lease term shall be prorated to correspond to the Lease term. Payment shall be made by Lessee to Lessor within 10 days following receipt of an invoice.

8.2 Liability Insurance.

(a)**Carried by Lessee.** Lessee shall obtain and keep in force a Commercial General Liability policy of insurance protecting Lessee and Lessor as an additional insured against claims for bodily injury, personal injury and property damage based upon or arising out of the ownership, use, occupancy or maintenance of the Premises and all areas appurtenant thereto. Such insurance shall be on an occurrence basis providing single limit coverage in an amount not less than \$1,000,000 per occurrence with an annual aggregate of not less than \$2,000,000. Lessee shall add Lessor as an additional insured by means of an endorsement at least as broad as the Insurance Service Organization's "Additional Insured-Managers or Lessors of Premises" Endorsement. The policy shall not contain any intra-insured exclusions as between insured persons or organizations, but shall include coverage for liability assumed under this Lease as an **"insured contract"** for the performance of Lessee's indemnity obligations under this Lease. The limits of said insurance shall not, however, limit the liability of Lessee nor relieve Lessee of any obligation hereunder. Lessee shall provide an endorsement on its liability policy(ies) which provides that its insurance shall be primary to and not contributory with any similar insurance carried by Lessor, whose insurance shall be considered excess insurance only.

(b)**Carried by Lessor.** Lessor shall maintain liability insurance as described in Paragraph 8.2(a), in addition to, and not in lieu of, the insurance required to be maintained by Lessee. Lessee shall not be named as an additional insured therein.

8.3 Property Insurance - Building, Improvements and Rental Value.

(a) **Building and Improvements.** Lessor shall obtain and keep in force a policy or policies in the name of Lessor, with loss payable to Lessor, any ground-lessor, and to any Lender insuring loss or damage to the Premises. The amount of such insurance shall be equal to the full insurable replacement cost of the Premises, as the same shall exist from time to time, or the amount required by any Lender, but in no event more than the commercially reasonable and available insurable value thereof. Lessee Owned Alterations and Utility Installations, Trade Fixtures, and Lessee's personal property shall be insured by Lessee not by Lessor. If the coverage is available and commercially appropriate, such policy or policies shall insure against all risks of direct physical loss or damage (except the perils of flood and/or earthquake unless required by a Lender), including coverage for debris removal and the enforcement of any Applicable Requirements requiring the upgrading, demolition, reconstruction or replacement of any portion of the Premises as the result of a covered loss. Said policy or policies shall also contain an agreed valuation provision in lieu of any coinsurance clause, waiver of subrogation, and inflation guard protection causing an increase in the annual property insurance coverage amount by a factor of not less than the adjusted U.S. Department of Labor Consumer Price Index for All Urban Consumers for the city nearest to where the Premises are located. If such insurance coverage has a deductible clause, the deductible amount shall not exceed \$25,000 per occurrence, and Lessee shall be liable for such deductible amount in the event of an Insured Loss. Notwithstanding anything to the contrary in the foregoing paragraph, Lessor covenants and agrees that, throughout the Term, it will insure the Building (excluding foundations, excavations and other non-insurable items) and all of the machinery and equipment contained therein owned by Lessor (excluding any property with respect to which Lessee is obliged to insure pursuant to the provisions of Paragraph 8) against damage by fire and extended perils coverage in such

reasonable amounts as would be carried by a prudent owner of a similar property in the same locale. Lessor may, but shall not be obligated to, take out and carry any other form or forms of insurance as it or Lessor's Lender may reasonably determine to be advisable. The premiums, deductibles (to the extent set forth above in this Paragraph 8.3(a) for an Insured Loss) and any other costs of all such insurance carried by Lessor shall be considered Rent, and Lessee shall pay to Lessor such costs of Lessor's insurance at the same time and in the same manner as the Base Rent as provided in Paragraph 4.1 of the Lease. Notwithstanding any contribution by Lessee to the cost of insurance premiums, Lessee acknowledges that it has no right to receive any proceeds from the insurance policies carried by Lessor, and that the insurance will be for the sole benefit of Lessor, with no coverage for Lessee for any risk insured against.

(b) Rental Value. The Insuring Party shall obtain and keep in force a policy or policies in the name of Lessor with loss payable to Lessor and any Lender, insuring the loss of the full Rent for one year with an extended period of indemnity for an additional 180 days ("Rental Value insurance"). Said insurance shall contain an agreed valuation provision in lieu of any coinsurance clause, and the amount of coverage shall be adjusted annually to reflect the projected Rent otherwise payable by Lessee, for the next 12 month period. Lessee shall be liable for any deductible amount in the event of such loss.

(c)Adjacent Premises. Intentionally omitted.

8.4 Lessee's Property; Business Interruption Insurance; Worker's Compensation Insurance.

(a)Property Damage. Lessee shall obtain and maintain insurance coverage on all of Lessee's personal property, Trade Fixtures, and Lessee Owned Alterations and Utility Installations. Such insurance shall be full replacement cost coverage with a deductible of not to exceed \$5,000 per occurrence. The proceeds from any such insurance shall be used by Lessee for the replacement of personal property, Trade Fixtures and Lessee Owned Alterations and Utility Installations.

(b)Business Interruption. Lessee shall obtain and maintain loss of income and extra expense insurance in amounts as will reimburse Lessee for direct or indirect loss of earnings attributable to all perils commonly insured against by prudent lessees in the business of Lessee or attributable to prevention of access to the Premises as a result of such perils.

(c)Worker's Compensation Insurance. Lessee shall obtain and maintain Worker's Compensation Insurance in such amount as may be required by Applicable Requirements. Such policy shall include a 'Waiver of Subrogation' endorsement. Lessee shall provide Lessor with a copy of such endorsement along with the certificate of insurance or copy of the policy required by paragraph 8.5.

(d)No Representation of Adequate Coverage. Lessor makes no representation that the limits or forms of coverage of insurance specified herein are adequate to cover Lessee's property, business operations or obligations under this Lease.

(e)Flood/Earthquake Insurance. Notwithstanding anything to the contrary contained in the Lease, except to the extent required by Applicable Requirements (including but not limited to FEMA), Lessee shall have no obligation to obtain and maintain any flood or earthquake insurance.

8.5 Insurance Policies. Insurance required herein shall be by companies maintaining during the policy term a "General Policyholders Rating" of at least A-, VII, as set forth in the most current issue of "Best's Insurance Guide". Lessee shall not do or permit to be done anything which invalidates the required insurance policies. Lessee shall, prior to the Commencement Date, deliver to Lessor certified copies of policies of such insurance or certificates with copies of the required endorsements evidencing the existence and amounts of the required insurance. No such policy shall be cancelable or subject to modification except after 30 days prior written notice to Lessor. Lessee shall, at least 10 days prior to the expiration of such policies, to furnish Lessor with evidence of renewals or "insurance binders" evidencing renewal thereof, or Lessor may increase his liability insurance coverage and charge the cost thereof to Lessee, which amount shall be payable by Lessee to Lessor upon demand. Such policies shall be for a term of at least one year, or the length of the remaining term of this Lease, whichever is less. If either Party shall fail to procure and maintain the insurance required to be carried by it, the other Party may, but shall not be required to, procure and maintain the same. S&S (Oakmead), LLC, Stephens & Stephens X, LLC, D.R. Stephens & Company, LLC, and Stephens & Company shall all be listed as "Additional Insured" on all policies pertaining to the Premises carried by Lessee and evidence of this designation shall be provided to Lessor upon the Commencement Date.

8.6 Waiver of Subrogation. Without affecting any other rights or remedies, Lessee and Lessor each hereby release and relieve the other, and waive their entire right to recover damages against the other, for loss of or damage to its property arising out of or incident to the perils required to be insured against herein. The effect of such releases and waivers is not limited by the amount of insurance carried or required, or by any deductibles applicable hereto. The Parties agree to have their respective property damage insurance carriers waive any right to subrogation that such companies may have against Lessor or Lessee, as the case may be, so long as the insurance is not invalidated thereby.

8.7 Indemnity. Except as and to the extent arising out of or caused by a breach of this Lease by Lessor, or the gross negligence or willful misconduct of Lessor, its employees, contractors, or agents, Lessee shall indemnify, protect, defend and hold harmless the Premises, Lessor and its agents, Lessor's master or ground lessor, partners and Lenders, from and against any and all claims, loss of rents and/or damages, liens, judgments, penalties, attorneys' and consultants' fees, expenses and/or liabilities arising out of, involving, or in connection with, a Breach of the Lease by Lessee and/or the use and/or occupancy of the Premises and/or Project by Lessee and/or by Lessee's employees, contractors or invitees. If any action or proceeding is brought against Lessor by reason of any of the foregoing matters, Lessee shall upon notice defend the same at Lessee's expense by counsel reasonably satisfactory to Lessor and Lessor shall cooperate with Lessee in such defense. Lessor need not have first paid any such claim in order to be defended or indemnified.

8.8 Exemption of Lessor and its Agents from Liability. Unless caused by the willful misconduct or gross negligence of Lessor or its employee, contractor or agent, neither Lessor nor its agents shall be liable under any circumstances for: (i) injury or damage to the person or goods, wares, merchandise or other property of Lessee, Lessee's employees, contractors, invitees, customers, or any other person in or about the Premises, whether such damage or injury is caused by or results from fire, steam, electricity, gas, water or rain, indoor air quality, the presence of mold or from the breakage, leakage, obstruction or other defects of pipes, fire sprinklers, wires, appliances, plumbing, HVAC or lighting fixtures, or from any other cause, whether the said injury or damage results from conditions arising upon the Premises or upon other portions of the building of which the Premises are a part, or from other sources or places, (ii) any damages arising from any act or neglect of any other Lessee of Lessor or from the failure of Lessor or its agents to enforce the provisions of any other lease in the Project, or (iii) injury to Lessee's business or for any loss of income or profit therefrom. Instead, it is intended that Lessee's sole recourse in the event of such damages or injury be to file a claim on the insurance policy(ies) that Lessee is required to maintain pursuant to the provisions of paragraph 8.

8.9 Failure to Provide Insurance. Intentionally omitted.

9. Damage or Destruction.

9.1 Definitions.

(a)"Premises Partial Damage" shall mean damage or destruction to the improvements on the Premises, other than Lessee Owned Alterations and Utility Installations, which can reasonably be repaired in 6 months or less from the date of the damage or destruction. Lessor shall notify Lessee in writing within 30 days from the date of the damage or destruction as to whether or not the damage is Partial or Total.

(b)"Premises Total Destruction" shall mean damage or destruction to the Premises, other than Lessee Owned Alterations and Utility Installations and Trade Fixtures, which cannot reasonably be repaired in 6 months or less from the date of the damage or destruction. Lessor shall notify Lessee in writing within 30 days from the date of the damage or destruction as to whether or not the damage is Partial or Total.

(c)"Insured Loss" shall mean damage or destruction to improvements on the Premises, other than Lessee Owned Alterations and Utility Installations and Trade Fixtures, which was caused by an event required to be covered by the insurance described in Paragraph 8.3(a), irrespective of any deductible amounts or coverage limits involved.

(d)"Replacement Cost" shall mean the cost to repair or rebuild the improvements owned by Lessor at the time of the occurrence to their condition existing immediately prior thereto, including demolition, debris removal and upgrading

required by the operation of Applicable Requirements, and without deduction for depreciation.

(e) "**Hazardous Substance Condition**" shall mean the occurrence or discovery of a condition involving the presence of, or a contamination by, a Hazardous Substance, in, on, or under the Premises which requires restoration.

9.2 Partial Damage - Insured Loss. If a Premises Partial Damage that is an Insured Loss occurs, then Lessor shall, at Lessor's expense, repair such damage (but not Lessee's Trade Fixtures or Lessee Owned Alterations and Utility Installations) as soon as reasonably possible and this Lease shall continue in full force and effect; provided, however, that Lessee shall, at Lessor's election, make the repair of any damage or destruction the total cost to repair of which is \$10,000 or less, and, in such event, Lessor shall make any applicable insurance proceeds available to Lessee on a reasonable basis for that purpose. Notwithstanding the foregoing, if the required insurance was not in force or the insurance proceeds are not sufficient to effect such repair, the Insuring Party shall promptly contribute the shortage in proceeds (except as to the deductible which is Lessee's responsibility) as and when required to complete said repairs. In the event, however, such shortage was due to the fact that, by reason of the unique nature of the improvements, full replacement cost insurance coverage was not commercially reasonable and available, Lessor shall have no obligation to pay for the shortage in insurance proceeds or to fully restore the unique aspects of the Premises unless Lessee provides Lessor with the funds to cover same, or adequate assurance thereof, within 10 days following receipt of written notice of such shortage and request therefor. If Lessor receives said funds or adequate assurance thereof within said 10 day period, the party responsible for making the repairs shall complete them as soon as reasonably possible and this Lease shall remain in full force and effect. If such funds or assurance are not received, Lessor may nevertheless elect by written notice to Lessee within 10 days thereafter to: (i) make such restoration and repair as is commercially reasonable with Lessor paying any shortage in proceeds, in which case this Lease shall remain in full force and effect, or (ii) have this Lease terminate 30 days thereafter. Lessee shall not be entitled to reimbursement of any funds contributed by Lessee to repair any such damage or destruction. Premises Partial Damage due to flood or earthquake shall be subject to Paragraph 9.3, notwithstanding that there may be some insurance coverage, but the net proceeds of any such insurance shall be made available for the repairs if made by either Party.

9.3 Partial Damage - Uninsured Loss. If a Premises Partial Damage that is not an Insured Loss occurs, unless caused by a negligent or willful act of Lessee (in which event Lessee shall make the repairs at Lessee's expense), Lessor may either: (i) repair such damage as soon as reasonably possible at Lessor's expense, in which event this Lease shall continue in full force and effect, or (ii) terminate this Lease by giving written notice to Lessee within 30 days after receipt by Lessor of knowledge of the occurrence of such damage. Such termination shall be effective 60 days following the date of such notice. In the event Lessor elects to terminate this Lease, Lessee shall have the right within 10 days after receipt of the termination notice to give written notice to Lessor of Lessee's commitment to pay for the repair of such damage without reimbursement from Lessor. Lessee shall provide Lessor with said funds or satisfactory assurance thereof within 30 days after making such commitment. In such event this Lease shall continue in full force and effect, and Lessor shall proceed to make such repairs as soon as reasonably possible after the required funds are available. If Lessee does not make the required commitment, this Lease shall terminate as of the date specified in the termination notice.

9.4 Total Destruction. Notwithstanding any other provision hereof, if a Premises Total Destruction occurs, this Lease shall terminate 60 days following such Destruction. If the damage or destruction was caused by the gross negligence or willful misconduct of Lessee, Lessor shall have the right to recover Lessor's damages from Lessee, except as provided in Paragraph 8.6.

9.5 Damage Near End of Term. If at any time during the last 6 months of this Lease there is damage for which the cost to repair exceeds one month's Base Rent, whether or not an Insured Loss, Lessor may terminate this Lease effective 60 days following the date of occurrence of such damage by giving a written termination notice to Lessee within 30 days after the date of occurrence of such damage. Notwithstanding the foregoing, if Lessee at that time has an exercisable option to extend this Lease or to purchase the Premises, then Lessee may preserve this Lease by, (a) exercising such option and (b) providing Lessor with any shortage in insurance proceeds (or adequate assurance thereof) needed to make the repairs on or before the earlier of (i) the date which is 10 days after Lessee's receipt of Lessor's written notice purporting to terminate this Lease, or (ii) the day prior to the date upon which such option expires. If Lessee duly exercises such option during such period and provides Lessor with funds (or adequate assurance thereof) to cover any shortage in insurance proceeds, Lessor shall, at Lessor's commercially reasonable expense, repair such damage as soon as reasonably possible and this Lease shall continue in full force and effect. If Lessee fails to exercise such option and provide such funds or assurance during such period, then this Lease shall terminate on the date specified in the termination notice and Lessee's option shall be extinguished.

9.6 Abatement of Rent; Lessee's Remedies.

(a) **Abatement.** In the event of Premises Partial Damage or Premises Total Destruction or a Hazardous Substance Condition for which Lessee is not responsible under this Lease, the Rent payable by Lessee for the period required for the repair, remediation or restoration of such damage shall be abated in proportion to the degree to which Lessee's use of the Premises is impaired, but not to exceed the proceeds received from the Rental Value insurance. All other obligations of Lessee hereunder shall be performed by Lessee, and Lessor shall have no liability for any such damage, destruction, remediation, repair or restoration except as provided herein.

(b) **Remedies.** If Lessor is obligated to repair or restore the Premises and does not commence, in a substantial and meaningful way, such repair or restoration within 90 days after such obligation shall accrue, Lessee may, at any time prior to the commencement of such repair or restoration, give written notice to Lessor and to any Lenders of which Lessee has actual notice, of Lessee's election to terminate this Lease on a date not less than 60 days following the giving of such notice. If Lessee gives such notice and such repair or restoration is not commenced within 30 days thereafter, this Lease shall terminate as of the date specified in said notice. If the repair or restoration is commenced within such 30 days, this Lease shall continue in full force and effect. "Commence" shall mean either the unconditional authorization of the preparation of the required plans, or the beginning of the actual work on the Premises, whichever first occurs. Further, Lessee shall have the right to terminate the Lease if the Premises are substantially damaged or rendered substantially unLesseeable due to no fault of Lessee (or its employees, contractors, agents or invitees) and Lessor fails to complete the repair or restoration of the Premises within 180 days following the commencement of such repair or restoration by written notice to Lessor within 30 days following the end of such 180 day period (provided, however, that such termination shall be nullified and of no force and effect if Lessor thereafter completes the repair or restoration within such 30 day period).

9.7 Termination; Advance Payments. Upon termination of this Lease pursuant to Paragraph 6.2(g) or Paragraph 9, an equitable adjustment shall be made concerning advance Base Rent and any other advance payments made by Lessee to Lessor. Lessor shall, in addition, return to Lessee so much of Lessee's Security Deposit as has not been, or is not then required to be, used by Lessor.

10. Real Property Taxes.

10.1 Definition. As used herein, the term "Real Property Taxes" shall include any form of assessment; real estate, general, special, ordinary or extraordinary, or rental levy or tax (other than inheritance, personal income or estate taxes); improvement bond; and/or license fee imposed upon or levied against any legal or equitable interest of Lessor in the Premises or the Project, Lessor's right to other income therefrom, and/or Lessor's business of leasing, by any authority having the direct or indirect power to tax and where the funds are generated with reference to the Building address. Real Property Taxes shall also include any tax, fee, levy, assessment or charge, or any increase therein: (i) imposed by reason of events occurring during the term of this Lease, including but not limited to, a change in the ownership of the Premises, and (ii) levied or assessed on machinery or equipment provided by Lessor to Lessee pursuant to this Lease. Notwithstanding anything contained herein to the contrary, "Real Property Taxes" shall not include and Lessee shall not be required to pay any portion of any tax or assessment expense or any increase therein attributable to Lessor's net income, transfer taxes, or estate taxes, or any taxes assessed against any property other than the Premises. Lessor shall be responsible for any Real Property Taxes, including any penalties thereon, that are delinquent as of the Commencement Date or which are otherwise delinquent due to Lessor's failure to pay any such taxes in a timely fashion (except to the extent caused by Lessee's breach of its obligations to pay Real Property Taxes hereunder). In the event any Real Property Taxes (or any component thereof) may be paid in periodic installments, Lessee shall be responsible only for those installments relating to the period included within the Term.

10.2 Payment of Taxes. In addition to Base Rent, Lessee shall pay to Lessor an amount equal to the Real Property Tax installment due at least 20 days prior to the applicable delinquency date. If any such installment shall cover any period of time prior to or after the expiration or termination of this Lease, Lessee's share of such installment shall be prorated. In the event Lessee incurs a late charge on any Rent payment, Lessor may estimate the current Real Property Taxes, and require that such taxes be paid in advance to Lessor by Lessee monthly in advance with the payment of the Base Rent. Such monthly payments shall be an amount equal to the amount of the estimated installment of taxes divided by the number of months remaining before the month in which said installment becomes delinquent. When the actual amount of the applicable tax bill is known, the amount of such equal monthly advance payments shall be adjusted as required to provide the funds needed to pay the applicable taxes. If the amount collected by Lessor is insufficient to pay such Real Property Taxes when due, Lessee shall pay Lessor, upon demand, such additional sum as is necessary. Advance payments may be intermingled with other moneys of Lessor and shall not bear interest. In the event of a Breach by Lessee in the performance of its obligations under this Lease, then any such advance payments may be treated by Lessor as an additional Security Deposit.

10.3 Joint Assessment. If the Premises are not separately assessed, Lessee's liability shall be an equitable proportion of the Real Property Taxes for all of the land and improvements included within the tax parcel assessed, such proportion to be conclusively determined by Lessor from the respective valuations assigned in the assessor's work sheets or such other information as may be reasonably available.

10.4 Personal Property Taxes. Lessee shall pay, prior to delinquency, all taxes assessed against and levied upon Lessee Owned Alterations, Utility Installations, Trade Fixtures, furnishings, equipment and all personal property of Lessee. When possible, Lessee shall cause its Lessee Owned Alterations and Utility Installations, Trade Fixtures, furnishings, equipment and all other personal property to be assessed and billed separately from the real property of Lessor. If any of Lessee's said property shall be assessed with Lessor's real property, Lessee shall pay Lessor the taxes attributable to Lessee's property within 10 days after receipt of a written statement setting forth the taxes applicable to Lessee's property.

11. Utilities and Services.

11.1 Lessee shall pay for all water, gas, heat, light, power, telephone, trash disposal and other utilities and services supplied to the Premises, together with any taxes thereon. If any such services are not separately metered or billed to Lessee, Lessee shall pay a reasonable proportion, to be determined by Lessor, of all charges jointly metered or billed. There shall be no abatement of rent and Lessor shall not be liable in any respect whatsoever for the inadequacy, stoppage, interruption or discontinuance of any utility or service due to riot, strike, labor dispute, breakdown, accident, repair or other cause beyond Lessor's reasonable control or in cooperation with governmental request or directions.

11.2 Within fifteen days of Lessor's written request, Lessee agrees to deliver to Lessor such information, documents and/or authorization as Lessor needs in order for Lessor to comply with new or existing Applicable Requirements relating to commercial building energy usage, ratings, and/or the reporting thereof.

12. Assignment and Subletting.

12.1 Lessor's Consent Required.

(a) Lessee shall not voluntarily or by operation of law assign, transfer, license mortgage or encumber (collectively, "**assign or assignment**") or sublet all or any part of Lessee's interest in this Lease or in the Premises without Lessor's prior written consent, such consent not to be unreasonably withheld, conditioned or delayed.

(b) Unless Lessee is a corporation and its stock is publicly traded on a national stock exchange, a change in the control of Lessee shall constitute an assignment requiring consent. The transfer, on a cumulative basis, of 25% or more of the voting control of Lessee shall constitute a change in control for this purpose.

(c) Notwithstanding anything to the contrary contained in this Paragraph 12, the following transfers ("**Permitted Transfers**") may be made by Lessee without Lessor's consent but upon at least 30 days prior written notice to Lessor: any sublease of the Premises or assignment of this Lease to (1) any corporation or other entity resulting from any merger, consolidation or reorganization of Lessee, or (2) any corporation, limited liability company, or other entity, which either controls or is controlled by or under common control with Lessee (any such entity in (1) or (2) a "**Permitted Transferee**"), provided, however, that following any such Permitted Transfer Lessee shall not be released from its obligations or liabilities under this Lease; further provided that all of the following conditions are satisfied: (i) Lessee is not in default under this Lease; (ii) the Agreed Use of the Premises shall not be changed; (iii) Lessee's successor shall have a net worth which is at least equal to the greater of (x) Lessee's net worth at the date of this Lease and (y) Lessee's net worth as of the day prior to the proposed purchase, merger, consolidation or reorganization; (iv) any such Permitted Transfer must be for a legitimate business purpose other than solely for the purposes of a transfer of Lessee's interest in this Lease and was not effectuated, and any such Permitted Transferee was not formed, as a subterfuge to avoid the obligations of this Paragraph 12; (v) neither Lessor nor any affiliate of Lessor has been or is then involved in litigation against, or has been threatened with litigation by, the Permitted Transferee or its affiliates; and (vi) the Permitted Transferee shall not be entitled, directly or indirectly, to diplomatic or sovereign immunity, regardless of whether the Permitted Transferee agrees to waive such diplomatic or sovereign immunity, and shall be subject to the service of process in, and the jurisdiction of the courts of, the City, County and State in which the Premises is located. "**Net Worth**" shall mean the net worth established under generally accepted accounting principles.

(d) An assignment or subletting made without required consent shall, at Lessor's option, be a Default curable after notice per Paragraph 13.1(d), or a noncurable Breach without the necessity of any notice and grace period. If Lessor elects to treat such unapproved assignment or subletting as a noncurable Breach, Lessor may either: (i) terminate this Lease, or (ii) upon 30 days written notice, increase the monthly Base Rent to 110% of the Base Rent then in effect. Further, in the event of such Breach and rental adjustment, (i) the purchase price of any option to purchase the Premises held by Lessee shall be subject to similar adjustment to 110% of the price previously in effect, and (ii) all fixed and non-fixed rental adjustments scheduled during the remainder of the Lease term shall be increased to 110% of the scheduled adjusted rent.

(e) Lessee's remedy for any breach of Paragraph 12.1 by Lessor shall be limited to compensatory damages and/or injunctive relief.

(f) Lessor may reasonably withhold consent to a proposed assignment or subletting if Lessee is in Default at the time consent is requested.

(g) Intentionally omitted.

12.2 Terms and Conditions Applicable to Assignment and Subletting.

(a) Regardless of Lessor's consent, no assignment or subletting shall: (i) be effective without the express written assumption by such assignee or sublessee of the obligations of Lessee under this Lease, (ii) release Lessee of any obligations hereunder, or (iii) alter the primary liability of Lessee for the payment of Rent or for the performance of any other obligations to be performed by Lessee.

(b) Lessor may accept Rent or performance of Lessee's obligations from any person other than Lessee pending approval or disapproval of an assignment. Neither a delay in the approval or disapproval of such assignment nor the acceptance of Rent or performance shall constitute a waiver or estoppel of Lessor's right to exercise its remedies for Lessee's Default or Breach.

(c) Lessor's consent to any assignment or subletting shall not constitute a consent to any subsequent assignment or subletting.

(d) In the event of any Default or Breach by Lessee, Lessor may proceed directly against Lessee, any Guarantors or anyone else responsible for the performance of Lessee's obligations under this Lease, including any assignee or sublessee, without first exhausting Lessor's remedies against any other person or entity responsible therefor to Lessor, or any security held by Lessor.

(e) Each request for consent to an assignment or subletting shall be in writing, accompanied by information relevant to Lessor's determination as to the financial and operational responsibility and appropriateness of the proposed assignee or sublessee, including but not limited to the intended use and/or required modification of the Premises, if any, together with a fee of \$500 as consideration for Lessor's considering and processing said request. Lessee agrees to provide

Lessor with such other or additional information and/or documentation as may be reasonably requested. (See also Paragraph 36)

(f) Any assignee of, or sublessee under, this Lease shall, by reason of accepting such assignment, entering into such sublease, or entering into possession of the Premises or any portion thereof, be deemed to have assumed and agreed to conform and comply with each and every term, covenant, condition and obligation herein to be observed or performed by Lessee during the term of said assignment or sublease, other than such obligations as are contrary to or inconsistent with provisions of an assignment or sublease to which Lessor has specifically consented to in writing.

(g) Lessor's consent to any assignment or subletting shall not transfer to the assignee or sublessee any Option granted to the original Lessee by this Lease unless such transfer is specifically consented to by Lessor in writing. (See Paragraph 39.2)

12.3 Additional Terms and Conditions Applicable to Subletting. The following terms and conditions shall apply to any subletting by Lessee of all or any part of the Premises and shall be deemed included in all subleases under this Lease whether or not expressly incorporated therein:

(a) Lessee hereby assigns and transfers to Lessor all of Lessee's interest in all Rent payable on any sublease, and Lessor may collect such Rent and apply same toward Lessee's obligations under this Lease; provided, however, that until a Breach shall occur in the performance of Lessee's obligations, Lessee may collect said Rent. In the event that the amount collected by Lessor exceeds Lessee's then outstanding obligations any such excess shall be shared equally between Lessor and Lessee. For purposes of this Paragraph 12.3, "excess" shall be calculated as the total remaining Rent to be paid under the remaining Lease term, as compared to the total sublease rent to be collected over the sublease term after deducting reasonable brokerage fees. refunded to Lessee. Lessor shall not, by reason of the foregoing or any assignment of such sublease, nor by reason of the collection of Rent, be deemed liable to the sublessee for any failure of Lessee to perform and comply with any of Lessee's obligations to such sublessee. Lessee hereby irrevocably authorizes and directs any such sublessee, upon receipt of a written notice from Lessor stating that a Breach exists in the performance of Lessee's obligations under this Lease, to pay to Lessor all Rent due and to become due under the sublease. Sublessee shall rely upon any such notice from Lessor and shall pay all Rents to Lessor without any obligation or right to inquire as to whether such Breach exists, notwithstanding any claim from Lessee to the contrary.

(b) In the event of a Breach by Lessee, Lessor may, at its option, require sublessee to attorn to Lessor, in which event Lessor shall undertake the obligations of the sublessor under such sublease from the time of the exercise of said option to the expiration of such sublease; provided, however, Lessor shall not be liable for any prepaid rents or security deposit paid by such sublessee to such sublessor or for any prior Defaults or Breaches of such sublessor.

(c) Any matter requiring the consent of the sublessor under a sublease shall also require the consent of Lessor.

(d) No sublessee shall further assign or sublet all or any part of the Premises without Lessor's prior written consent.

(e) Lessor shall deliver a copy of any notice of Default or Breach by Lessee to the sublessee, who shall have the right to cure the Default of Lessee within the grace period, if any, specified in such notice. The sublessee shall have a right of reimbursement and offset from and against Lessee for any such Defaults cured by the sublessee.

13. Default; Breach; Remedies.

13.1 Default; Breach. A "Default" is defined as a failure by the Lessee to comply with or perform any of the terms, covenants, conditions or Rules and Regulations under this Lease. A "Breach" is defined as the occurrence of one or more of the following Defaults, and the failure of Lessee to cure such Default within any applicable grace period:

(a) The abandonment of the Premises; the vacating of the Premises prior to the expiration or termination of this Lease without providing a commercially reasonable level of security, or where the coverage of the property insurance described in Paragraph 8.3 is jeopardized as a result thereof, or without providing reasonable assurances to minimize potential vandalism; or failure to deliver to Lessor exclusive possession of the entire Premises in accordance herewith prior to the expiration or termination of this Lease.

(b) The failure of Lessee to make any payment of Rent or any Security Deposit required to be made by Lessee hereunder, whether to Lessor or to a third party, when due, to provide reasonable evidence of insurance or surety bond, or to fulfill any obligation under this Lease which endangers or threatens life or property, where such failure continues for a period of 3 business days following written notice to Lessee. THE ACCEPTANCE BY LESSOR OF A PARTIAL PAYMENT OF RENT OR SECURITY DEPOSIT SHALL NOT CONSTITUTE A WAIVER OF ANY OF LESSOR'S RIGHTS, INCLUDING LESSOR'S RIGHT TO RECOVER POSSESSION OF THE PREMISES.

(c) The failure of Lessee to allow Lessor and/or its agents access to the Premises or the commission of waste, act or acts constituting public or private nuisance, and/or an illegal activity on the Premises by Lessee, where such actions continue for a period of 5 business days following written notice to Lessee.

(d) The failure by Lessee to provide (i) the rescission of an unauthorized assignment or subletting; (ii) an Estoppel Certificate or financial statements to the extent and within the time required hereunder; or (iii) a requested subordination to the extent and within the time required hereunder, where any such failure continues for a period of 10 days following written notice to Lessee.

(e) A Default by Lessee as to the terms, covenants, conditions or provisions of this Lease, or of the rules adopted under Paragraph 40 hereof, other than those described in subparagraphs 13.1(a), (b), (c) or (d), above, where such Default continues for a period of 30 days after written notice; provided, however, that if the nature of Lessee's Default is such that more than 30 days are reasonably required for its cure, then it shall not be deemed to be a Breach if Lessee commences such cure within said 30 day period and thereafter diligently prosecutes such cure to completion.

(f) The occurrence of any of the following events: (i) the making of any general arrangement or assignment for the benefit of creditors; (ii) becoming a "debtor" as defined in 11 U.S.C. § 101 or any successor statute thereto (unless, in the case of a petition filed against Lessee, the same is dismissed within 60 days); (iii) the appointment of a trustee or receiver to take possession of substantially all of Lessee's assets located at the Premises or of Lessee's interest in this Lease, where possession is not restored to Lessee within 30 days; or (iv) the attachment, execution or other judicial seizure of substantially all of Lessee's assets located at the Premises or of Lessee's interest in this Lease, where such seizure is not discharged within 30 days; provided, however, in the event that any provision of this subparagraph is contrary to any applicable law, such provision shall be of no force or effect, and not affect the validity of the remaining provisions.

(g) The discovery that any financial statement of Lessee or of any Guarantor given to Lessor was materially false.

(h) Intentionally omitted.

13.2 Remedies. If Lessee fails to perform any of its affirmative duties or obligations, within 10 days after written notice (or in case of an emergency, without notice), Lessor may, at its option, perform such duty or obligation on Lessee's behalf, including but not limited to the obtaining of reasonably required bonds, insurance policies, or governmental licenses, permits or approvals. Lessee shall pay to Lessor an amount equal to 115% of the costs and expenses incurred by Lessor in such performance upon receipt of an invoice therefor. In the event of a Breach, Lessor may, with or without further notice or demand, and without limiting Lessor in the exercise of any right or remedy which Lessor may have by reason of such Breach:

(a) Terminate Lessee's right to possession of the Premises by any lawful means, in which case this Lease shall terminate and Lessee shall immediately surrender possession to Lessor. In such event Lessor shall be entitled to recover from Lessee: (i) the unpaid Rent which had been earned at the time of termination; (ii) the worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that the Lessee proves could have been reasonably avoided; (iii) the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss that the Lessee proves could be reasonably avoided; and (iv) any other amount necessary to compensate Lessor for all the detriment proximately caused by the Lessee's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including but not limited to the cost of recovering possession of the Premises, expenses of reletting, including necessary renovation and alteration of the Premises, reasonable attorneys' fees, and that portion of any leasing commission paid by Lessor in connection with this Lease applicable to the unexpired term of this Lease. The worth at the time of award of the amount referred to in provision (iii) of the immediately preceding

sentence shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of the District within which the Premises are located at the time of award plus one percent. Efforts by Lessor to mitigate damages caused by Lessee's Breach of this Lease shall not waive Lessor's right to recover any damages to which Lessor is otherwise entitled. If termination of this Lease is obtained through the provisional remedy of unlawful detainer, Lessor shall have the right to recover in such proceeding any unpaid Rent and damages as are recoverable therein, or Lessor may reserve the right to recover all or any part thereof in a separate suit. If a notice and grace period required under Paragraph 13.1 was not previously given, a notice to pay rent or quit, or to perform or quit given to Lessee under the unlawful detainer statute shall also constitute the notice required by Paragraph 13.1. In such case, the applicable grace period required by Paragraph 13.1 and the unlawful detainer statute shall run concurrently, and the failure of Lessee to cure the Default within the greater of the two such grace periods shall constitute both an unlawful detainer and a Breach of this Lease entitling Lessor to the remedies provided for in this Lease and/or by said statute.

(b)Continue the Lease and Lessee's right to possession and recover the Rent as it becomes due, in which event Lessee may sublet or assign, subject only to reasonable limitations. Acts of maintenance, efforts to relet, and/or the appointment of a receiver to protect the Lessor's interests, shall not constitute a termination of the Lessee's right to possession.

(c)Pursue any other remedy now or hereafter available under the laws or judicial decisions of the state wherein the Premises are located. The expiration or termination of this Lease and/or the termination of Lessee's right to possession shall not relieve Lessee from liability under any indemnity provisions of this Lease as to matters occurring or accruing during the term hereof or by reason of Lessee's occupancy of the Premises.

13.3 **Inducement Recapture.** Intentionally omitted.

13.4 **Late Charges.** Lessee hereby acknowledges that late payment by Lessee of Rent will cause Lessor to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult to ascertain. Such costs include, but are not limited to, processing and accounting charges, and late charges which may be imposed upon Lessor by any Lender. Accordingly, if any Rent shall not be received by Lessor within 5 days after such amount shall be due, then, without any requirement for notice to Lessee, Lessee shall immediately pay to Lessor a one-time late charge equal to 10% of each such overdue amount or \$100, whichever is greater. Lessor shall not be obliged to provide notice under this provision more than one (1) time during each consecutive twelve (12) month period during the Term. The Parties hereby agree that such late charge represents a fair and reasonable estimate of the costs Lessor will incur by reason of such late payment. Acceptance of such late charge by Lessor shall in no event constitute a waiver of Lessee's Default or Breach with respect to such overdue amount, nor prevent the exercise of any of the other rights and remedies granted hereunder. In the event that a late charge is payable hereunder, whether or not collected, for 3 consecutive installments of Base Rent, then notwithstanding any provision of this Lease to the contrary, Base Rent shall, at Lessor's option, become due and payable quarterly in advance.

13.5 **Interest.** Any monetary payment due Lessor hereunder, other than late charges, not received by Lessor, when due shall bear interest from the 31st day after it was due. The interest ("**Interest**") charged shall be computed at the rate of 10% per annum but shall not exceed the maximum rate allowed by law. Interest is payable in addition to the potential late charge provided for in Paragraph 13.4.

13.6 **Breach by Lessor.**

(a)**Notice of Breach.** Lessor shall not be deemed in breach of this Lease unless Lessor fails within a reasonable time to perform an obligation required to be performed by Lessor. For purposes of this Paragraph, a reasonable time shall be 30 days after receipt by Lessor, and any Lender whose name and address shall have been furnished to Lessee in writing for such purpose, of written notice specifying wherein such obligation of Lessor has not been performed; provided, however, that if the nature of Lessor's obligation is such that more than 30 days are reasonably required for its performance, then Lessor shall not be in breach if performance is commenced within such 30 day period and thereafter diligently pursued to completion.

(b)**Performance by Lessee on Behalf of Lessor.** In the event that neither Lessor nor Lender cures said breach within 30 days after receipt of said notice, or if having commenced said cure they do not diligently pursue it to completion, then Lessee may elect to cure said breach at Lessee's expense and offset from Rent the actual and reasonable cost to perform such cure, provided however, that such offset shall not exceed an amount equal to one month's Base Rent, reserving Lessee's right to seek reimbursement from Lessor for any such expense in excess of such offset. Lessee shall document the cost of said cure and supply said documentation to Lessor.

14. **Condemnation.** If the Premises or any portion thereof are taken under the power of eminent domain or sold under the threat of the exercise of said power (collectively "**Condemnation**"), this Lease shall terminate as to the part taken as of the date the condemning authority takes title or possession, whichever first occurs. If more than 10% of the rentable floor area of the Premises, or more than 25% of the parking spaces for the Project, are taken by Condemnation, Lessee may, at Lessee's option, to be exercised in writing within 30 days after Lessor shall have given Lessee written notice of such taking (or in the absence of such notice, within 30 days after the condemning authority shall have taken possession) terminate this Lease as of the date the condemning authority takes such possession. If Lessee does not terminate this Lease in accordance with the foregoing, this Lease shall remain in full force and effect as to the portion of the Premises remaining, except that the Base Rent shall be reduced in proportion to the reduction in utility of the Premises caused by such Condemnation. Condemnation awards and/or payments shall be the property of Lessor, whether such award shall be made as compensation for diminution in value of the leasehold, the value of the part taken, or for severance damages; provided, however, that Lessee shall be entitled to any compensation paid by the condemnor for Lessee's relocation expenses, loss of business goodwill and/or Trade Fixtures, without regard to whether or not this Lease is terminated pursuant to the provisions of this Paragraph. All Alterations and Utility Installations made to the Premises by Lessee, for purposes of Condemnation only, shall be considered the property of the Lessee and Lessee shall be entitled to any and all compensation which is payable therefor. In the event that this Lease is not terminated by reason of the Condemnation, Lessor shall repair any damage to the Premises caused by such Condemnation.

15. **Brokerage Fees.**

15.1 **Additional Commission.** Intentionally omitted.

15.2 **Assumption of Obligations.** Any buyer or transferee of Lessor's interest in this Lease shall be deemed to have assumed Lessor's obligation hereunder. Brokers shall be third party beneficiaries of the provisions of Paragraphs 1.9, 15, 22 and 31. If Lessor fails to pay to Brokers any amounts due as and for brokerage fees pertaining to this Lease when due, then such amounts shall accrue Interest. In addition, if Lessor fails to pay any amounts to Lessee's Broker when due, Lessee's Broker may send written notice to Lessor and Lessee of such failure and if Lessor fails to pay such amounts within 10 days after said notice, Lessee shall pay said monies to its Broker and offset such amounts against Rent. In addition, Lessee's Broker shall be deemed to be a third party beneficiary of any commission agreement entered into by and/or between Lessor and Lessor's Broker for the limited purpose of collecting any brokerage fee owed.

15.3 **Representations and Indemnities of Broker Relationships.** Lessee and Lessor each represent and warrant to the other that it has had no dealings with any person, firm, broker, agent or finder (other than the Brokers and Agents, if any) in connection with this Lease, and that no one other than said named Brokers and Agents is entitled to any commission or finder's fee in connection herewith. Lessee and Lessor do each hereby agree to indemnify, protect, defend and hold the other harmless from and against liability for compensation or charges which may be claimed by any such unnamed broker, finder or other similar party by reason of any dealings or actions of the indemnifying Party, including any costs, expenses, attorneys' fees reasonably incurred with respect thereto.

16. **Estoppel Certificates.**

(a)Each Party (as "**Responding Party**") shall within 15 days after written notice from the other Party (the "**Requesting Party**") execute, acknowledge and deliver to the Requesting Party a statement in writing in form similar to the then most current "**Estoppel Certificate**" form published by AIR CRE, plus such additional information, confirmation and/or statements as may be reasonably requested by the Requesting Party.

(b)If the Responding Party shall fail to execute or deliver the Estoppel Certificate within such 15 day period, the Requesting Party may execute an Estoppel Certificate stating that: (i) the Lease is in full force and effect without

modification except as may be represented by the Requesting Party, (ii) there are no uncured defaults in the Requesting Party's performance, and (iii) if Lessor is the Requesting Party, not more than one month's rent has been paid in advance. Prospective purchasers and encumbrancers may rely upon the Requesting Party's Estoppel Certificate, and the Responding Party shall be estopped from denying the truth of the facts contained in said Certificate.

(c) If Lessor desires to finance, refinance, or sell the Premises, or any part thereof, Lessee shall within 10 days after written notice from Lessor deliver to any potential lender or purchaser designated by Lessor such financial statements as may be reasonably required by such lender or purchaser, including but not limited to Lessee's financial statements for the past 3 years. All such financial statements shall be received by Lessor and such lender or purchaser in confidence and shall be used only for the purposes herein set forth.

17. Definition of Lessor. The term "**Lessor**" as used herein shall mean the owner or owners at the time in question of the fee title to the Premises, or, if this is a sublease, of the Lessee's interest in the prior lease. In the event of a transfer of Lessor's title or interest in the Premises or this Lease, Lessor shall deliver to the transferee or assignee (in cash or by credit) any unused Security Deposit held by Lessor. Upon such transfer or assignment and delivery of the Security Deposit, as aforesaid, the prior Lessor shall be relieved of all liability with respect to the obligations and/or covenants under this Lease thereafter to be performed by the Lessor. Subject to the foregoing, the obligations and/or covenants in this Lease to be performed by the Lessor shall be binding only upon the Lessor as hereinabove defined.

18. Severability. The invalidity of any provision of this Lease, as determined by a court of competent jurisdiction, shall in no way affect the validity of any other provision hereof.

19. Days. Unless otherwise specifically indicated to the contrary, the word "**days**" as used in this Lease shall mean and refer to calendar days.

20. Limitation on Liability. The obligations of Lessor under this Lease shall not constitute personal obligations of Lessor, or its partners, members, directors, officers or shareholders, and Lessee shall look solely to Lessor's interest in the Premises, Building and Project and the rents and revenue generated thereby, and to no other assets of Lessor, for the satisfaction of any liability of Lessor with respect to this Lease, and shall not seek recourse against Lessor's partners, members, directors, officers or shareholders, or any of their personal assets for such satisfaction.

21. Time of Essence. Time is of the essence with respect to the performance of all obligations to be performed or observed by the Parties under this Lease.

22. No Prior or Other Agreements; Broker Disclaimer. This Lease contains all agreements between the Parties with respect to any matter mentioned herein, and no other prior or contemporaneous agreement or understanding shall be effective. Lessor and Lessee each represents and warrants to the Brokers that it has made, and is relying solely upon, its own investigation as to the nature, quality, character and financial responsibility of the other Party to this Lease and as to the use, nature, quality and character of the Premises. Brokers have no responsibility with respect thereto or with respect to any default or breach hereof by either Party.

23. Notices.

23.1 Notice Requirements. All notices required or permitted by this Lease or applicable law shall be in writing and may be delivered in person (by hand or by courier) or may be sent by regular, certified or registered mail or U.S. Postal Service Express Mail or other national couriers, with postage prepaid or by email, and shall be deemed sufficiently given if served in a manner specified in this Paragraph 23. The addresses set forth below shall be that Party's address for delivery or mailing of notices. Either Party may by written notice to the other specify a different address for notice. A copy of all notices to Lessor shall be concurrently transmitted to such party or parties at such addresses as Lessor may from time to time hereafter designate in writing.

Lessor's address for delivery or mailing of notice shall be as follows:

D.R. Stephens & Company, LLC
465 California Street, Suite 330
San Francisco, CA 94104
Attn: Lane Stephens
Email: lstephens@drstephens.com

A concurrent copy of all notices to Lessor shall be sent to:

Lubin Olson & Niewiadomski LLP
Transamerica Pyramid
600 Montgomery Street, 1400
San Francisco, CA 94111
Attn: Paul Niewiadomski
Email: pniewiadomski@lubinolson.com

Lessee's address for delivery or mailing of notice shall be as follows:

Astra Space Operations, Inc.
Attn: Legal
1900 Skyhawk St.
Alameda, CA 94501
Email: legal@astra.com

And with respect to legal notices or notices of default only, with a copy to:

Cozen O'Connor
33 South Sixth Street, Suite 3800
Minneapolis, Minnesota 55402
Attn: Katheryn Gettman, Esq.
Email: kgettman@cozen.com

23.2 Date of Notice. Any notice sent by registered or certified mail, return receipt requested, shall be deemed given on the date of delivery shown on the receipt card, or if no delivery date is shown, the postmark thereon. If sent by regular mail the notice shall be deemed given 72 hours after the same is addressed as required herein and mailed with postage prepaid. Notices delivered by United States Express Mail or overnight courier that guarantees next day delivery shall be deemed given 24 hours after delivery of the same to the Postal Service or courier. Notices delivered by hand shall be deemed delivered upon actual receipt. If notice is received on a Saturday, Sunday or legal holiday, it shall be deemed received on the next business day.

23.3 Options. Notwithstanding the foregoing, in order to exercise any Options (see paragraph 39), the Notice must be sent by Certified Mail (return receipt requested), Express Mail (signature required), courier (signature required) or some other methodology that provides a receipt establishing the date the notice was received by the Lessor.

24. Waivers.

(a) No waiver by Lessor of the Default or Breach of any term, covenant or condition hereof by Lessee, shall be deemed a waiver of any other term, covenant or condition hereof, or of any subsequent Default or Breach by Lessee of the same or of any other term, covenant or condition hereof. Lessor's consent to, or approval of, any act shall not be deemed to render unnecessary the obtaining of Lessor's consent to, or approval of, any subsequent or similar act by Lessee, or be construed as the basis of an estoppel to enforce the provision or provisions of this Lease requiring such consent.

(b) The acceptance of Rent by Lessor shall not be a waiver of any Default or Breach by Lessee. Any payment by Lessee may be accepted by Lessor on account of monies or damages due Lessor, notwithstanding any qualifying statements or conditions made by Lessee in connection therewith, which such statements and/or conditions shall be of no force or effect whatsoever unless specifically agreed to in writing by Lessor at or before the time of deposit of such payment.

(c) THE PARTIES AGREE THAT THE TERMS OF THIS LEASE SHALL GOVERN WITH REGARD TO ALL MATTERS RELATED THERETO AND HEREBY WAIVE THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE TO THE EXTENT THAT SUCH STATUTE IS INCONSISTENT WITH THIS LEASE.

25. Disclosures Regarding The Nature of a Real Estate Agency Relationship. Intentionally omitted.

26.No Right To Holdover. Lessee has no right to retain possession of the Premises or any part thereof beyond the expiration or termination of this Lease. At or prior to the expiration or termination of this Lease Lessee shall deliver exclusive possession of the Premises to Lessor. For purposes of this provision and Paragraph 13.1(a), exclusive possession shall mean that Lessee shall have vacated the Premises, removed all of its personal property therefrom and that the Premises have been returned in the condition specified in this Lease. In the event that Lessee does not deliver exclusive possession to Lessor as specified above, then Lessor's damages during any holdover period shall be computed at the amount of the Rent (as defined in Paragraph 4.1) due during the last full month before the expiration or termination of this Lease (disregarding any temporary abatement of Rent that may have been in effect), but with Base Rent being 150% of the Base Rent payable during such last full month. Nothing contained herein shall be construed as consent by Lessor to any holding over by Lessee.

27.Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

28.Covenants and Conditions; Construction of Agreement. All provisions of this Lease to be observed or performed by Lessee are both covenants and conditions. In construing this Lease, all headings and titles are for the convenience of the Parties only and shall not be considered a part of this Lease. Whenever required by the context, the singular shall include the plural and vice versa. This Lease shall not be construed as if prepared by one of the Parties, but rather according to its fair meaning as a whole, as if both Parties had prepared it.

29.Binding Effect; Choice of Law. This Lease shall be binding upon the Parties and their successors and assigns and be governed by the laws of the State in which the Premises are located. Any litigation between the Parties hereto concerning this Lease shall be initiated in the county in which the Premises are located. Signatures to this Lease accomplished by means of electronic signature or similar technology shall be legal and binding.

30.Subordination; Attornment; Non-Disturbance.

30.1 Subordination. This Lease and any Option granted hereby shall be subject and subordinate to any ground lease, mortgage, deed of trust, or other hypothecation or security device (collectively, "**Security Device**"), now or hereafter placed upon the Premises, to any and all advances made on the security thereof, and to all renewals, modifications, and extensions thereof. Lessee agrees that the holders of any such Security Devices (in this Lease together referred to as "**Lender**") shall have no liability or obligation to perform any of the obligations of Lessor under this Lease. Any Lender may elect to have this Lease and/or any Option granted hereby superior to the lien of its Security Device by giving written notice thereof to Lessee, whereupon this Lease and such Options shall be deemed prior to such Security Device, notwithstanding the relative dates of the documentation or recordation thereof.

30.2 Attornment. In the event that Lessor transfers title to the Premises, or the Premises are acquired by another upon the foreclosure or termination of a Security Device to which this Lease is subordinated (i) Lessee shall, subject to the non-disturbance provisions of Paragraph 30.3, attorn to such new owner, and upon request, enter into a new lease, containing all of the terms and provisions of this Lease, with such new owner for the remainder of the term hereof, or, at the election of the new owner, this Lease will automatically become a new lease between Lessee and such new owner, and (ii) Lessor shall thereafter be relieved of any further obligations hereunder and such new owner shall assume all of Lessor's obligations, except that such new owner shall not: (a) be liable for any act or omission of any prior lessor or with respect to events occurring prior to acquisition of ownership; (b) be subject to any offsets or defenses which Lessee might have against any prior lessor, (c) be bound by prepayment of more than one month's rent, or (d) be liable for the return of any security deposit paid to any prior lessor which was not paid or credited to such new owner.

30.3 Non-Disturbance. With respect to Security Devices entered into by Lessor after the execution of this Lease, Lessee's subordination of this Lease shall be subject to receiving a commercially reasonable non-disturbance agreement (a "**Non-Disturbance Agreement**") from the Lender which Non-Disturbance Agreement provides that Lessee's possession of the Premises, and this Lease, including any options to extend the term hereof, will not be disturbed so long as Lessee is not in Breach hereof and attorns to the record owner of the Premises. Further, within 60 days after the execution of this Lease, Lessor shall, if requested by Lessee, use its commercially reasonable efforts to obtain a Non-Disturbance Agreement

from the holder of any pre-existing Security Device which is secured by the Premises. In the event that Lessor is unable to provide the Non-Disturbance Agreement within said 60 days, then Lessee may, at Lessee's option, directly contact Lender and attempt to negotiate for the execution and delivery of a Non-Disturbance Agreement.

30.4 Self-Executing. The agreements contained in this Paragraph 30 shall be effective without the execution of any further documents; provided, however, that, upon written request from Lessor or a Lender in connection with a sale, financing or refinancing of the Premises, Lessee and Lessor shall execute such further writings as may be reasonably required to separately document any subordination, attornment and/or Non-Disturbance Agreement provided for herein.

31. Attorneys' Fees. If any Party or Broker brings an action or proceeding involving the Premises whether founded in tort, contract or equity, or to declare rights hereunder, the Prevailing Party (as hereafter defined) in any such proceeding, action, or appeal thereon, shall be entitled to reasonable attorneys' fees. Such fees may be awarded in the same suit or recovered in a separate suit, whether or not such action or proceeding is pursued to decision or judgment. The term, "**Prevailing Party**" shall include, without limitation, a Party or Broker who substantially obtains or defeats the relief sought, as the case may be, whether by compromise, settlement, judgment, or the abandonment by the other Party or Broker of its claim or defense. The attorneys' fees award shall not be computed in accordance with any court fee schedule, but shall be such as to fully reimburse all attorneys' fees reasonably incurred.

32. Lessor's Access; Showing Premises; Repairs. Lessor and Lessor's agents shall have the right to enter the Premises at anytime, in the case of an emergency, and otherwise during Lessee's regular business hours after 72 hours' prior notice for the purpose of showing the same to prospective purchasers, lenders, or Lessees, and making such alterations, repairs, improvements or additions to the Premises as Lessor may deem necessary or desirable and the erecting, using and maintaining of utilities, services, pipes and conduits through the Premises and/or other premises as long as there is no material adverse effect on Lessee's use of the Premises. All such activities shall be without abatement of rent or liability to Lessee.

33. Auctions. Lessee shall not conduct, nor permit to be conducted, any auction upon the Premises without Lessor's prior written consent. Lessor shall not be obligated to exercise any standard of reasonableness in determining whether to permit an auction.

34. Signs. Lessor may place on the Premises ordinary "For Sale" signs at anytime and ordinary "For Lease" signs during the last 6 months of the term hereof. Except for ordinary "for sublease" signs, Lessee shall not place any sign upon the Premises without Lessor's prior written consent, which shall not be unreasonably withheld, conditioned or delayed. All signs must comply with all Applicable Requirements.

35. Termination; Merger. Unless specifically stated otherwise in writing by Lessor, the voluntary or other surrender of this Lease by Lessee, the mutual termination or cancellation hereof, or a termination hereof by Lessor for Breach by Lessee, shall automatically terminate any sublease or lesser estate in the Premises; provided, however, that Lessor may elect to continue any one or all existing subtenancies. Lessor's failure within 10 days following any such event to elect to the contrary by written notice to the holder of any such lesser interest, shall constitute Lessor's election to have such event constitute the termination of such interest.

36. Consents. All requests for consent shall be in writing. Except as otherwise provided herein, wherever in this Lease the consent of a Party is required to an act by or for the other Party, such consent shall not be unreasonably withheld or delayed. Lessor's actual reasonable costs and expenses (including but not limited to architects', attorneys', engineers' and other consultants' fees) incurred in the consideration of, or response to, a request by Lessee for any Lessor consent, including but not limited to consents to an assignment, a subletting or the presence or use of a Hazardous Substance, shall be paid by Lessee upon receipt of an invoice and supporting documentation therefor. Lessor's consent to any act, assignment or subletting shall not constitute an acknowledgment that no Default or Breach by Lessee of this Lease exists, nor shall such consent be deemed a waiver of any then existing Default or Breach, except as may be otherwise specifically stated in writing by Lessor at the time of such consent. The failure to specify herein any particular condition to Lessor's consent shall not preclude the imposition by Lessor at the time of consent of such further or other conditions as are then reasonable with reference to the particular matter for which consent is being given. In the event that either Party disagrees with any determination made by the other hereunder and reasonably requests the reasons for such determination, the determining party shall furnish its reasons in writing and in reasonable detail within 10 business days following such request.

37. Guarantor.

37.1 **Execution.** Intentionally Omitted.

37.2 **Default.** Intentionally Omitted.

38. Quiet Possession. Subject to payment by Lessee of the Rent and performance of all of the covenants, conditions and provisions on Lessee's part to be observed and performed under this Lease, Lessee shall have quiet possession and quiet enjoyment of the Premises during the term hereof.

39. Options. If Lessee is granted any Option, as defined below, then the following provisions shall apply.

39.1 **Definition.** "**Option**" shall mean: (a) the right to extend or reduce the term of or renew this Lease or to extend or reduce the term of or renew any lease that Lessee has on other property of Lessor, including the options for any Extension Term pursuant to Paragraph 52; (b) the right of first refusal or first offer to lease either the Premises or other property of Lessor; (c) the right to purchase, the right of first offer to purchase or the right of first refusal to purchase the Premises or other property of Lessor.

39.2 **Options Personal To Original Lessee and Permitted Transferee.** Any Option granted to Lessee in this Lease is personal to the original Lessee, and cannot be assigned or exercised by anyone other than said original Lessee and any Permitted Transferee and only while the original Lessee or any Permitted Transferee is in full possession of the Premises and, if requested by Lessor, with Lessee or such Permitted Transferee certifying that Lessee or such Permitted Transferee has no intention of thereafter assigning or subletting.

39.3 **Multiple Options.** In the event that Lessee has any multiple Options to extend or renew this Lease, a later Option cannot be exercised unless the prior Options have been validly exercised.

39.4 **Effect of Default on Options.**

(a) Lessee shall have no right to exercise an Option: (i) during the period commencing with the giving of any notice of Default and continuing until said Default is cured, (ii) during the period of time any Rent is unpaid (without regard to whether notice thereof is given Lessee), (iii) during the time Lessee is in Breach of this Lease, or (iv) in the event that Lessee has been given 3 or more notices of separate Default, whether or not the Defaults are cured, during the 12 month period immediately preceding the exercise of the Option.

(b) The period of time within which an Option may be exercised shall not be extended or enlarged by reason of Lessee's inability to exercise an Option because of the provisions of Paragraph 39.4(a).

(c) An Option shall terminate and be of no further force or effect, notwithstanding Lessee's due and timely exercise of the Option, if, after such exercise and prior to the commencement of the extended term or completion of the purchase, (i) Lessee fails to pay Rent for a period of 30 days after such Rent becomes due (without any necessity of Lessor to give notice thereof), or (ii) if Lessee commits a Breach of this Lease.

40. Rules and Regulations. Lessee agrees that it will abide by and conform to the Rules and Regulations attached hereto as Exhibit B and all reasonable rules and regulations which Lessor may make from time to time for the management, safety, and care of said properties, including the care and cleanliness of the grounds and including the parking, loading and unloading of vehicles, and to cause its employees, suppliers, shippers, customers, contractors and invitees to so abide and conform.

41. Security Measures. Lessee hereby acknowledges that the Rent payable to Lessor hereunder does not include the cost of guard service or other security measures, and that Lessor shall have no obligation whatsoever to provide same. Lessee assumes all responsibility for the protection of the Premises, Lessee, its agents and invitees and their property from the acts of third parties.

42. Reservations. Lessor reserves to itself the right, from time to time, to grant, without the consent or joinder of Lessee, such easements, rights and dedications that Lessor deems necessary, and to cause the recordation of parcel maps and restrictions, so long as such easements, rights, dedications, maps and restrictions do not materially interfere with the use of the Premises by Lessee. Lessee agrees to sign any documents reasonably requested by Lessor to effectuate any such easement rights, dedication, map or restrictions.

43. Performance Under Protest. Intentionally omitted.

44. Authority; Multiple Parties; Execution.
(a) If either Party hereto is a corporation, trust, limited liability company, partnership, or similar entity, each individual executing this Lease on behalf of such entity represents and warrants that he or she is duly authorized to execute and deliver this Lease on its behalf. Each Party shall, within 30 days after request, deliver to the other Party satisfactory evidence of such authority.
(b) If this Lease is executed by more than one person or entity as "Lessee", each such person or entity shall be jointly and severally liable hereunder. It is agreed that any one of the named Lessees shall be empowered to execute any amendment to this Lease, or other document ancillary thereto and bind all of the named Lessees, and Lessor may rely on the same as if all of the named Lessees had executed such document.
(c) This Lease may be executed by the Parties in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

45. Conflict. Any conflict between the printed provisions of this Lease and the typewritten or handwritten provisions shall be controlled by the typewritten or handwritten provisions.

46. Offer. Preparation of this Lease by either Party or their agent and submission of same to the other Party shall not be deemed an offer to lease to the other Party. This Lease is not intended to be binding until executed and delivered by all Parties hereto.

47. Amendments. This Lease may be modified only in writing, signed by the Parties in interest at the time of the modification.

48. Waiver of Jury Trial. THE PARTIES HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING INVOLVING THE PROPERTY OR ARISING OUT OF THIS LEASE.

49. Arbitration of Disputes. Intentionally omitted.

50. Accessibility; Americans with Disabilities Act.
(a) The Premises have not undergone an inspection by a Certified Access Specialist (CASp). Note: A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or Lessee from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or Lessee, if requested by the lessee or Lessee. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises.

In the event that the Premises have been issued an inspection report by a CASp the Lessor shall provide a copy of the disability access inspection certificate to Lessee within 7 days of the execution of this Lease.

(b) Since compliance with the Americans with Disabilities Act (ADA) and other state and local accessibility statutes are dependent upon Lessee's specific use of the Premises, Lessor makes no warranty or representation as to whether or not the Premises comply with ADA or any similar legislation. In the event that Lessee's use of the Premises requires modifications or additions to the Premises in order to be in compliance with ADA or other accessibility statutes, Lessee agrees to make any such necessary modifications and/or additions at Lessee's expense.

LESSOR AND LESSEE HAVE CAREFULLY READ AND REVIEWED THIS LEASE AND EACH TERM AND PROVISION CONTAINED HEREIN, AND BY THE EXECUTION OF THIS LEASE SHOW THEIR INFORMED AND VOLUNTARY CONSENT THERETO. THE PARTIES HEREBY AGREE THAT, AT THE TIME THIS LEASE IS EXECUTED, THE TERMS OF THIS LEASE ARE COMMERCIALY REASONABLE AND EFFECTUATE THE INTENT AND PURPOSE OF LESSOR AND LESSEE WITH RESPECT TO THE PREMISES.

ATTENTION: NO REPRESENTATION OR RECOMMENDATION IS MADE BY AIR CRE OR BY ANY BROKER AS TO THE LEGAL SUFFICIENCY, LEGAL EFFECT, OR TAX CONSEQUENCES OF THIS LEASE OR THE TRANSACTION TO WHICH IT RELATES. THE PARTIES ARE URGED TO:

1. SEEK ADVICE OF COUNSEL AS TO THE LEGAL AND TAX CONSEQUENCES OF THIS LEASE.

2. RETAIN APPROPRIATE CONSULTANTS TO REVIEW AND INVESTIGATE THE CONDITION OF THE PREMISES. SAID INVESTIGATION SHOULD INCLUDE BUT NOT BE LIMITED TO: THE POSSIBLE PRESENCE OF HAZARDOUS SUBSTANCES, THE ZONING OF THE PREMISES, THE STRUCTURAL INTEGRITY, THE CONDITION OF THE ROOF AND OPERATING SYSTEMS, AND THE SUITABILITY OF THE PREMISES FOR LESSEE'S INTENDED USE.

WARNING: IF THE PREMISES ARE LOCATED IN A STATE OTHER THAN CALIFORNIA, CERTAIN PROVISIONS OF THE LEASE MAY NEED TO BE REVISED TO COMPLY WITH THE LAWS OF THE STATE IN WHICH THE PREMISES ARE LOCATED.

The parties hereto have executed this Lease at the place and on the dates specified above their respective signatures.

Executed on: _____, 2022

By LESSOR:

S&S (Oakmead), LLC

By: _____

Name:

Title:

Federal ID No.:

LESSOR'S BROKER:

Cushman & Wakefield U.S., Inc.

Attn: Kalil Jenab/Nick Lazzarini/Steven Jenab

Title: Vice Chairman/Managing Director/Associate

Address: 525 University Ave, Suite 220, Palo Alto, CA 94301

Federal ID No.:

Broker DRE License #: 01880493

Agent DRE License #: 00848988/01788935/02085072

Executed on: _____, 2022

By LESSEE:

Astra Space Operations, Inc.

By: _____

Name: Kelyn Brannon

Title: Chief Financial Officer

Federal ID No.:

LESSEE'S BROKER:

NAI Northern California

Attn: Douglas Sharpe

Title:

Address:

Federal ID No.:

Broker DRE License #:

Agent DRE License #:

**ADDENDUM TO AIR CRE STANDARD
INDUSTRIAL/COMMERCIAL SINGLE-LESSEE LEASE – NET**

THIS ADDENDUM TO AIR CRE STANDARD INDUSTRIAL/COMMERCIAL SINGLE-LESSEE LEASE - NET (this “**Addendum**”) is made and entered into by and between **S&S (Oakmead), LLC**, a Delaware limited liability company (“**Lessor**”), and **Astra Space Operations, Inc.**, a Delaware corporation (“**Lessee**”), for the premises known as 415 Oakmead Parkway, Sunnyvale, California 94085 (“**Premises**”) and is intended by the parties to amend and augment the terms of that certain AIR CRE Standard Industrial/Commercial Single-Lessee Lease – Net entered into concurrently herewith dated July 28, 2022 (the “**Lease**”).

This Addendum contains paragraphs which are in addition to those contained in the Lease. Unless otherwise defined herein, capitalized terms used in this Addendum have the meanings given them in the Lease. In the event of any conflict between this Addendum and the rest of the Lease, this Addendum shall control.

ACCORDINGLY, in consideration of the Premises and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Lessor and Lessee agree that the Lease shall include the following paragraphs and modifications as specified below:

51.Base Rent. Lessee shall pay to Lessor Base Rent as shown below, in advance, on the first day of each calendar month, without prior written notice, demand or offset:

Month	Monthly Base Rent (NNN)
1 – 12	\$151,292.50
13 - 24	\$157,344.20
25 – 36	\$163,637.97

52. Option to Extend. Lessee is given the option to extend the term subject to all of the provisions contained in this Lease, except for monthly Base Rent, for a period of three (3) years (“**Extension Term**”) following the Expiration Date (i.e., July 31, 2025), by giving notice of Lessee’s intent to exercise the option (“**Option Notice**”) to Lessor at least one hundred eighty (180) days and no more than three hundred sixty five (365) days before the Expiration Date. If Lessee is in Default beyond the applicable notice and cure periods on the date of giving the Option Notice, the Option Notice shall be totally ineffective, or if Lessee is in Default beyond the applicable notice and cure periods on the date the Extension Term will commence, Lessor may elect that the Extension Term shall not commence and this Lease shall expire at the end of the Original Term. The Base Rent shall be set at the commencement of the Extension Term at the fair market rent based upon same or similar uses for renewals/extensions of similar premises in similar buildings in the greater Sunnyvale area. In no event shall the Base Rent during the first year of the Extension Term be less than one hundred and four percent (104%) of that paid during the last month of the Original Term of the Lease. Following the first year of the Extension Term, monthly Base Rent shall increase by four percent (4%) annually. The parties shall have thirty (30) days after Lessor receives the Option Notice in which to agree on monthly Base Rent during the Extension Term. If the parties agree on the monthly Base Rent for the Extension Term during that period, they shall immediately execute an amendment to this Lease stating the base monthly rent for the Extension Term (failure of either party to execute such an amendment shall not affect the exercise of the option by Lessee). If the parties are unable to agree on the monthly Base Rent for the Extension Term within that period, then within ten (10) days after the expiration of that period, each party, at its sole cost and by giving notice to the other party, shall appoint a real estate appraiser with at least five (5) years of full-time commercial appraisal experience in the area in which the Premises are located, to appraise and set the monthly Base Rent for the Extension Term. If a party does not appoint an appraiser within ten (10) days after the other party has given notice of the name of its appraiser, the single appraiser appointed shall be the sole appraiser and shall set the monthly Base Rent for the Extension Term. If the two appraisers are appointed by the parties as stated in this paragraph, they shall meet promptly and attempt to set the monthly Base Rent for the Extension Term. If they are unable to agree within thirty (30) days after the second appraiser has been appointed, they shall attempt to elect a third appraiser meeting the qualifications stated in this paragraph within ten (10) days after the last day the two appraisers are given to set the monthly Base Rent. If they are unable to agree on the third appraiser, either of the parties to this Lease, by giving ten (10) days’ notice to the other party can apply to the then President of the county real estate board of Santa Clara County, or the Presiding Judge of the Superior Court of that County, for the selection of a third appraiser who meets the qualifications stated in this paragraph. Each of the parties shall bear one-half (1/2) of the cost of appointing the third appraiser and of paying the third appraiser’s fee. The third appraiser, however selected, shall be a person who has not previously acted in any capacity for either party. Within thirty (30) days after the selection of the third appraiser, the third appraiser shall choose a Base Rent between the Base Rents proposed by the first two appraisers.

53. Premises Delivery Conditions. Lessor shall deliver the Premises “as is” with roof watertight, free of leaks, with the existing building system in good working order. Lessor provides no representation or warranties to the chillers, generators etc. Lessor nor any of Lessor’s agents has made any other oral or written representations or warranties with respect to the condition, suitability or fitness of the

Premises. In the event of the breach of any of the foregoing warranties, Lessor shall promptly rectify the same at its sole cost and expense. Lessor will provide to Lessee copies of any existing environmental reports in Lessor’s possession for the Premises. This Paragraph 53 does not modify Lessor’s or Lessee’s obligations under Paragraph 6.2 of the Lease.

54. Access/Utility Lines. Lessee shall have the right to use all then existing easements and appurtenances to the Premises and/or the Building required in connection with the Agreed Use of the Premises, including, without limitation, all rights to utilize driveways providing access to and from the Premises, and utility lines and drainage areas. Lessee shall be entitled to have access to the Premises on a 24-hour, 7 days a week, 365 days a year basis.

55. Mutual Representations. Each Party hereto represents to the other that (i) neither the representing Party (Lessor or Lessee, as applicable) nor any person or entity that directly owns a 10% or greater equity interest in it nor any of its officers, directors or managing members is a person or entity (each, a “Prohibited Person”) with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control (“OFAC”) of the Department of the Treasury (including those named on OFAC’s Specially Designated and Blocked Persons List) or under Executive Order 13224 (the “Executive Order”) signed on September 24, 2001, and entitled “Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism”), or other governmental action, (ii) the representing party’s activities do not violate the International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001 or the regulations or orders promulgated thereunder (as amended from time to time, the “Money Laundering Act”) and (iii) throughout the term of the Lease, the representing party shall comply with the Executive Order and with the Money Laundering Act. Each party further represents to the other that said representing party and its officers, directors, employees, partners, members and/or other principals or owners are not listed as “Specially Designated Nationals and Blocked Persons” (“SDN”) on the list of such persons and entities issued by the U.S. Department of the Treasury’s Office of Foreign Assets Control (“OFAC”).

56. Confidentiality. Each Party hereto acknowledges and agrees that it shall keep the terms and conditions of the Lease and this Addendum confidential, except to the extent disclosure is required by applicable laws, judicial order or subpoena or except as hereinafter provided. Each Party shall be entitled to discuss and disclose the transaction with employees, agents, attorneys, accountants, consultants, potential and actual lenders, potential purchasers, members, investors and partners of such party on a "need to know" basis only; provided that such parties either have a professional obligation to maintain the confidentiality required hereby or otherwise agree to comply with the foregoing confidentiality obligations.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have signed this Addendum as of the Effective Date:

LESSOR:

S&S (OAKMEAD), LLC

LESSEE:

ASTRA SPACE OPERATIONS, INC.

By: /s/ Lane B. Stephens
Name: Lane B. Stephens
Title: Manager

By: /s/ Kelyn Brannon
Name: Kelyn Brannon
Title: Chief Financial Officer

EXHIBIT 1A

Floor Plan

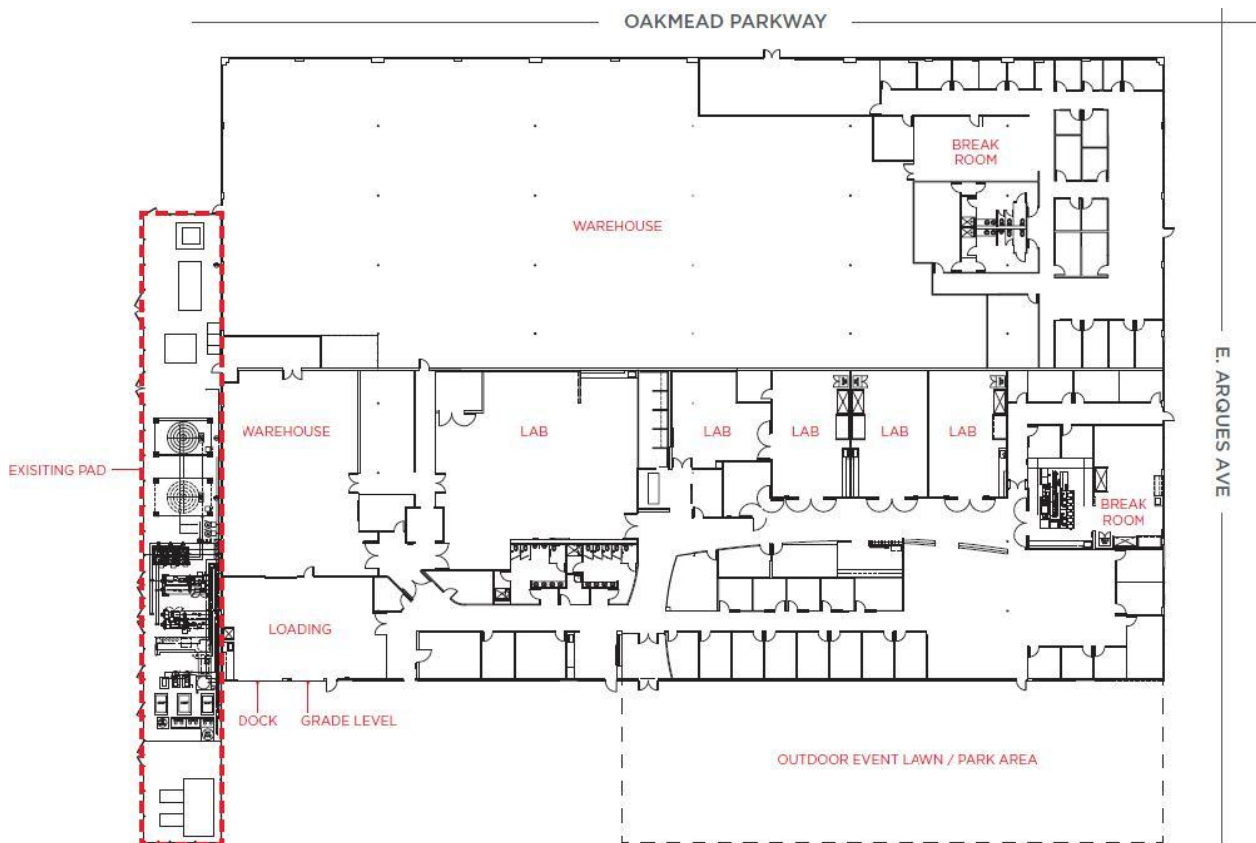
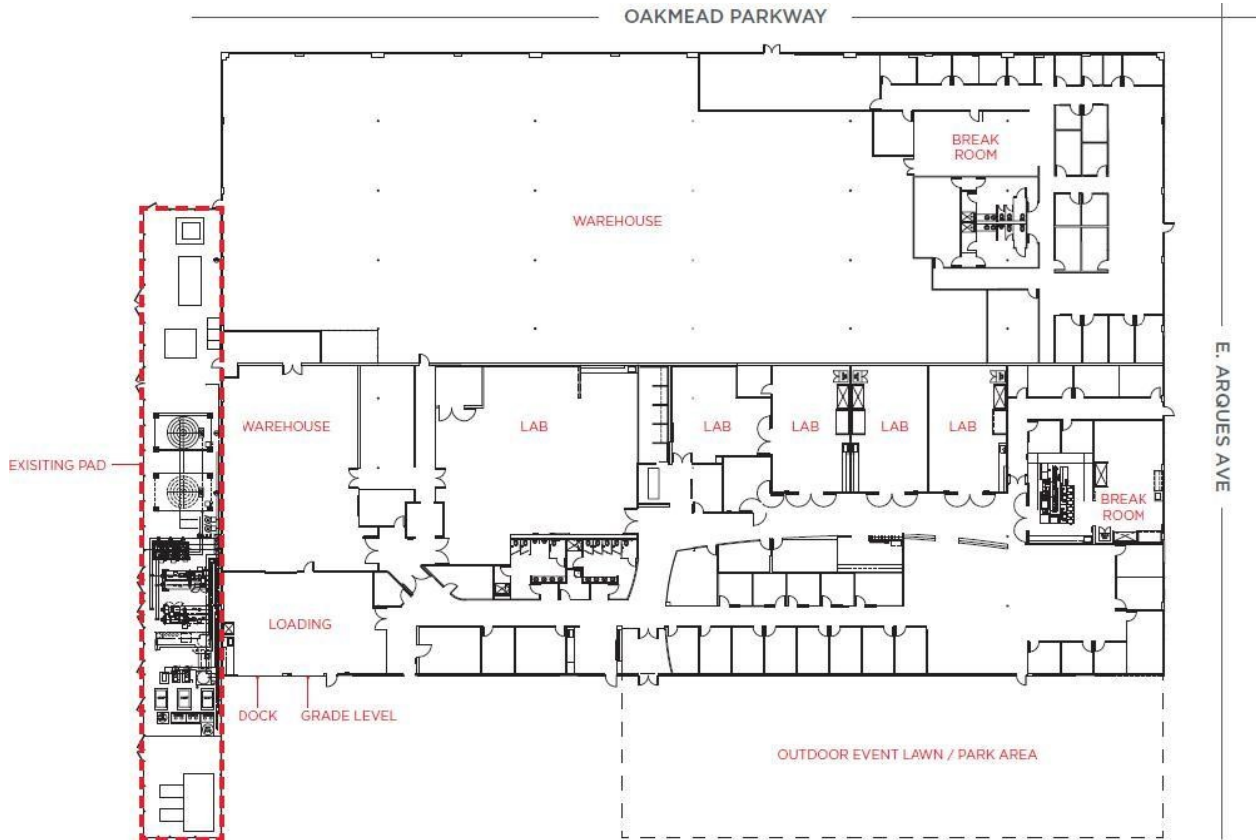


EXHIBIT 2A

Site Plan

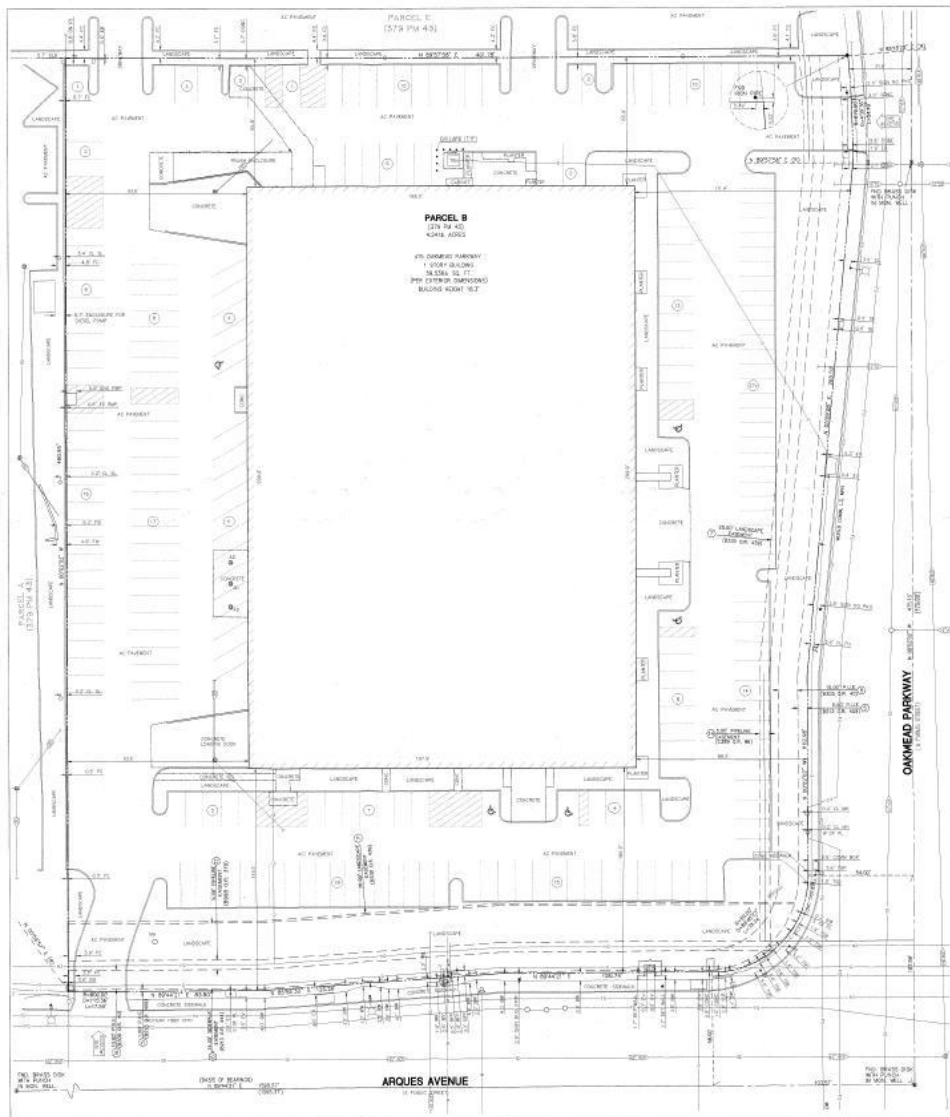


EXHIBIT B

RULES AND REGULATIONS

This Exhibit sets forth the rules and regulations governing Lessee's use of the Premises leased to Lessee pursuant to the terms, covenants and conditions of the Lease to which this Exhibit is attached and therein made part thereof. Unless otherwise defined, capitalized terms used herein shall have the same meanings as set forth in the Lease. In the event of any conflict or inconsistency between this Exhibit and the Lease, the Lease shall control.

1. Lessee shall not place anything or allow anything to be placed near the glass of any window, door, partition or wall which may be inconsistent with the Permitted Use (when compared with surrounding properties and Lessees).

2. The walls, walkways, sidewalks, entrance passages, courts and vestibules shall not be obstructed in violation of Applicable Law or used for any purpose other than ingress and egress of pedestrian travel to and from the Premises, and shall not be used for loitering or gathering (other than customary office social gatherings from time to time), or to display, store or place any merchandise, equipment or devices, or for any other purpose. The walkways, entrance passageways, courts, vestibules and roof are not for the use of the general public and Lessor shall in all cases retain the right to control and prevent access thereto by all persons whose presence in the reasonable judgment of the Lessor shall be prejudicial to the safety, character, reputation and interest of the Premises, provided that nothing herein contained shall be construed to prevent such access to the Building to persons with whom Lessee normally deals in the ordinary course of Lessee's business unless such persons are engaged in illegal activities.

3. No awnings or other projection shall be attached to the outside walls of the Building, nor shall any security bars or gates, curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises, in each instance without the prior written consent of Lessor, which consent shall not be unreasonably withheld, conditioned or delayed. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreened without the express written consent of Lessor. Subject to Lessor's prior written consent (which consent shall not be unreasonably withheld, conditioned or delayed), Lessee shall at all times have the right to install a security system, including "glass break sensors."

4. Lessee shall not in any way deface any part of the Premises or the Building. Lessee shall not lay linoleum, tile, carpet or other similar floor covering so that the same shall be affixed to the floor of the Premises in any manner except as approved by Lessor in writing in accordance with Article VIII of the Lease. The expense of repairing any damage resulting from a violation of this rule or removal of any floor covering shall be borne by Lessee.

5. The toilet rooms, urinals, wash bowls and other plumbing apparatus shall not be used for any purpose other than that for which they were constructed and no foreign substance of any kind whatsoever shall be thrown therein. The expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by Lessee.

6. The Premises shall not be used for heavy manufacturing (other than electronic assembly) or retail sales. No exterior storage shall be allowed at any time without the prior written approval of Lessor. The Premises shall not be used for a beauty parlor, manicuring, any medical use or washing

of clothes without the prior written consent of Lessor, or for lodging or sleeping or for any immoral or illegal purposes. Lessee shall not make, or permit to be made, unreasonable noises or disturb or interfere with occupants of neighboring buildings, whether by the use of any musical instrument, radio, phonograph, machinery, or otherwise. Lessee shall, at Lessee's sole cost and expense install sufficient noise and vibration suppression in the Premises so that noise and vibrations from within the Premises do not constitute a nuisance to the Lessees of neighboring buildings nor shall such noise and vibrations violate any Applicable Law.

7. Lessee shall not use keep or permit to be used, or kept, any foul or obnoxious gas or substance in the Premises or permit or suffer the Premises to be used or occupied in an offensive or objectionable manner to Lessor or occupants of neighboring buildings by reason of any odors, fumes or gases. Except as permitted under the Lease, neither Lessee nor any of Lessee's Agents shall at any time bring or keep upon the Premises any toxic, hazardous, inflammable, combustible or explosive fluid, chemical or substance without the prior written consent of Lessor. Smoking in the Building may be regulated from time to time as determined by Lessor, and Lessee and Lessee's Agents shall strictly comply with any such regulations.

8. No animals (other than domestic pets and/or "seeing eye" or other service animals) shall be permitted at any time within the Premises or the Building.

9. Lessee shall not use the name or address of the Building in connection with or in promoting or advertising the business of Lessee, except as Lessee's address, without the prior written consent of Lessor. Lessor shall have the right to prohibit any advertising by Lessee which, in Lessor's reasonable opinion, impairs the reputation of the Premises or its desirability for its intended uses, and, upon written notice from Lessor, Lessee shall refrain from or discontinue such advertising.

10. Canvassing, soliciting, peddling, parading, picketing, demonstrating or otherwise engaging in any conduct that unreasonably impairs the value or use of the Premises are prohibited and Lessee shall reasonably cooperate to prevent the same.

11. All equipment of any electrical or mechanical nature shall be placed by Lessee on the Premises in such a way as to best minimize, absorb and prevent any vibration, noise or annoyance that could damage the Building or result in complaints from neighboring properties or violate any zoning permit. No cooking shall be done or permitted upon the Premises except pursuant to normal use of a microwave oven, convection oven, toaster oven, toaster and coffee maker for the sole benefit of Lessee and Lessee's Agents. In addition, Lessee shall be able to cook on a barbecue, on occasion, in the exterior of the Premises.

13. Intentionally omitted.

14. No air conditioning unit or other similar apparatus shall be installed or used by Lessee without the prior written consent of Lessor in accordance with Article VIII of the Lease.

15. Except as otherwise set forth in the Lease, no aerial antenna or other devices shall be erected on the roof or exterior walls of the Building, or on the grounds, without in each instance the prior written consent of Lessor in accordance with Article VIII of the Lease. Any aerial antenna or other device so installed by or on behalf of Lessee without such written consent shall be subject to removal by Lessor at any time without prior notice at the

expense of Lessee, and Lessee shall upon Lessor's demand pay a removal fee to Lessor of not less than \$500.00. In the event that cable service is not available at the Premises, Lessor shall allow Lessee to have a Satellite dish erected on the Premises.

16. Intentionally Omitted.

17. Lessee shall see that the windows, transoms and doors of the Premises are closed and securely locked before leaving the Building and shall observe reasonable care to not leave windows open, if applicable, when it rains. Lessee shall exercise reasonable care and caution that all water faucets or water apparatus are entirely shut off before Lessee or Lessee's employees leave the Building, and that all electricity, gas or air that is not required during non-business hours shall likewise be carefully shut off, so as to prevent waste or damage.

18. All keys for the Premises shall be provided to Lessee by Lessor and Lessee shall return to Lessor any of such keys so provided upon the termination of the Lease. Lessee may change locks or install other locks on doors of the Premises and/or install its own access-card system, subject to prior written consent of Lessor. In the event of loss of any keys furnished by Lessor for Lessee, Lessee shall pay to Lessor the costs thereof. Upon termination of its tenancy, Lessee shall deliver to Lessor all keys and access cards to the Building.

19. Lessee shall use commercially reasonable efforts to exclude or expel from the Premises any Lessee Agent who, in the reasonable discretion of Lessee, is under the influence of liquor or drugs; provided, however, that nothing set forth in these Rules and Regulations shall preclude Lessee from hosting business and social gatherings at the Premises which are consistent with the Permitted Use, which gatherings may include the serving and consumption of alcoholic beverages. Lessee agrees to comply with all such Rules and Regulations, and amendments or supplements thereto. Should Lessee not abide by these Rules and Regulations, Lessor or any "Operator," "Association" or "Declarant" under any Restrictions may serve a thirty (30) day notice to correct the material deficiencies. If Lessee has not corrected the material deficiencies by the end of the notice period, Lessee will be in default of the Lease, and, in addition to all other rights and remedies of Lessor, Lessor and/or its designee shall have the right, without further notice, to cure the violation at Lessee's expense. Lessor reserves the right to amend or supplement the foregoing Rules and Regulations and to adopt and promulgate additional rules and regulations applicable to the Premises, and Lessee shall abide by (and cause its employees, agents, contractors and invitees to abide by) any such amendments, supplements and additional rules and regulations, provided that, the same are reasonable. Notice of such rules and regulations and amendments and supplements thereto, if any, shall be given to the Lessee. Lessee shall be deemed to have read these Rules and Regulations and to have agreed to abide by them as a condition precedent, waivable only by Lessor, to Lessee's occupancy of the Premises. Lessor may waive any one or more of these Rules and Regulations, but no such waiver by Lessor shall be construed as an ongoing waiver of such Rules and Regulations, nor prevent Lessor from thereafter enforcing any such Rules and Regulations against Lessee.

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Chris Kemp, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Astra Space, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2022

By: /s/ Chris C. Kemp
Chris C. Kemp
Chief Executive Officer

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kelyn Brannon, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Astra Space, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2022

By: /s/ Kelyn J. Brannon
Kelyn J. Brannon
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Astra Space, Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: November 9, 2022

By: /s/ Chris C. Kemp

Chris C. Kemp

Chief Executive Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Astra Space, Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: November 9, 2022

By: /s/ Kelyn J. Brannon
Kelyn J. Brannon
Chief Financial Officer
