

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 22, 2022

Astra Space, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-39426
(Commission File Number)

85-1270303
(IRS Employer
Identification No.)

**1900 Skyhawk Street
Alameda, California**
(Address of Principal Executive Offices)

94501
(Zip Code)

Registrant's Telephone Number, Including Area Code: (866) 278-7217

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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	NASDAQ Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

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. ☐

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On April 22, 2022, Craig O. McCaw informed Astra Space, Inc. (the “Company”) that he will not stand for re-election at the 2022 annual meeting of stockholders (the “Annual Meeting”), when his current term as a Class II director expires. Mr. McCaw’s decision not to stand for re-election is not the result of any disagreement with the Company or any of its affiliates on any matter related to the Company’s operations, policies or practices, but rather so that he may pursue his other business interests.

Item 7.01 Regulation FD Disclosure.

The Company will distribute to its stockholders an annual report wrap of the Company’s Form 10-K, including a letter from Chris Kemp, the Company’s Chairman, Chief Executive Officer and Co-Founder (the “Wrap”). The Wrap will be included with the proxy statement and other proxy materials that the Company expects to begin mailing to stockholders on April 29, 2022. A copy of the Wrap is furnished with this Form 8-K as Exhibit 99.1 and incorporated into this Item 7.01 by reference.

The information in this Item 7.01 of this Form 8-K, including the accompanying Exhibit 99.1, shall be deemed “furnished” and shall not be deemed “filed” for the purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of such section, nor shall it be incorporated by reference in any filing made by the Company pursuant to the Securities Act of 1933, as amended, or the Exchange Act, regardless of the general incorporation language of such filing, except to the extent that such filing incorporates by reference any or all of such information by express reference thereto.

Item 8.01 Other Events.

On April 28, 2022, the Company issued a press release announcing that it will report financial results for the first quarter ended March 31, 2022, on Thursday, May 5, 2022 at 4:30 p.m. ET. A copy of our press release is filed as Exhibit 99.2 hereto.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Annual Report Wrap of Form 10-K and accompanying letter of Chris Kemp
99.2	Press Release dated April 28, 2022
104	Cover Page Interactive Data File (embedded with the Inline XBRL document)

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.

Date: April 28, 2022

Astra Space, Inc.

By: /s/ Kelyn Brannon

Name: Kelyn Brannon

Title: Chief Financial Officer

Dear shareholders,

On behalf of my co-founder Adam London and the entire team here at Astra, we are honored that you have chosen to support us in our mission to improve life on Earth from space.

We believe that success in our mission will lead to a healthier and more connected planet, and if we execute well, you can expect Astra to become a business of great consequence. What inspires us every day at Astra and what unites us with our customers is our mission. We believe space has the potential to radically improve our world, making it more sustainable, efficient, and connected. Though we applaud efforts to expand humanity's reach into the solar system, we've elected to keep Astra's focus on Earth first and foremost.

Because of our emphasis on long term value creation and a development philosophy, which is radically different than many of our peers, we want to share our approach with you, our shareholders, to ensure that our mission, values, strategy, and principles are aligned with your expectations.

LONG TERM FOCUS

Adam and I founded Astra because we believe the space economy is at an inflection point akin to the birth of the Internet, both in scale and opportunity, and that dramatically

lowering the barrier to accessing space will create tremendous societal and economic value.

This long term focus guides our strategy, product roadmaps, and investments. This has served us well, as investments in building out our Alameda campus, including a state-of-the-art production facility have allowed us to rapidly iterate and reduce dependencies on third-party suppliers. We believe that a long term focus will strongly position the company to meet our customers where the market is going, and allow us to be prepared to scale to meet their needs.

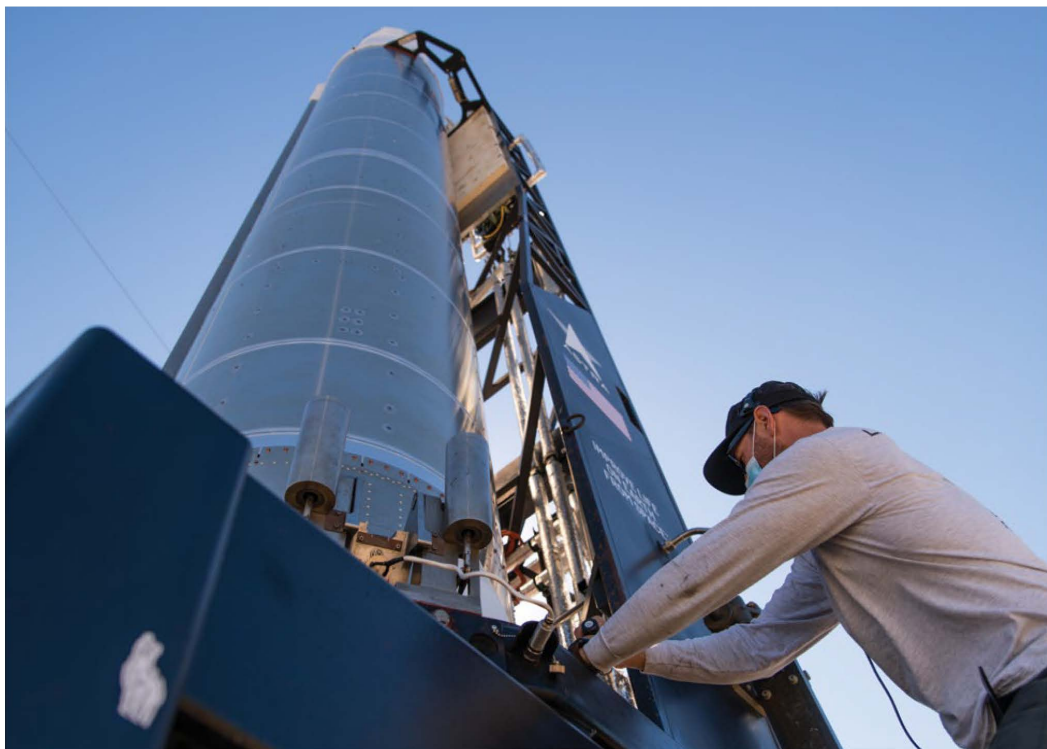
CUSTOMER FOCUS

Aerospace and defense companies traditionally have had a very different focus. For decades they have been awarded large contracts to build small numbers of expensive assets. From billion-dollar spy satellites and large communication satellites deployed every decade into geostationary orbits, to GPS satellites, space telescopes like the Hubble and the James Webb Space Telescope, to building and sending people to the International Space Station. Space has historically been the domain of nation states, large corporations, and billionaires.

Disruptive new companies are launching new space services that run across constellations of hundreds to thousands of satellites. Just as the near perfect reliability of services like Google do not rely on a single server, these space services will no longer rely on every launch being successful, or all satellites being operational for a decade or more.



A view of Earth and of Astra's launch system in Low Earth Orbit (LEO), March 2022



This evolution is akin to the mainframe computing era taking a giant leap to the cloud computing era.

Our customers are more concerned about how quickly they can offer valuable services — and the overall economics of these services — than on the reliability of any single launch or satellite. We call companies that are primarily focused on building space technology and services, including companies that are building next generation communication and Earth observation services, “Spacetech” companies.

This focus distinguishes Astra from traditional aerospace and defense companies and other companies focused on building large and expensive rockets that must be reliable enough to deliver people and billion dollar satellites to space.

As a shareholder, you should understand that we are not targeting 100% reliability as is required for human-rated (or exquisite government) space systems. We know that to be successful, ultimately, almost all of our rockets and spacecraft must work as designed, but the difference between “almost all” and 100% in aerospace is stark — the latter requires dramatically higher cost, increased complexity, and longer time to market, and this is not what our customers want or need.

You can understand why: If Astra ultimately reached only 90% reliability in launch (and we expect to do much better than this), and you were launching hundreds of satellites, this would effectively increase the cost of each satellite on orbit by 10%, but the reduced per-launch cost for all of your satellites enabled by avoiding the additional systems, complexity, paperwork, etc. required for achieving approximately 100% reliability would more than pay for this 10%, which we expect would save our customers significant money. Further we believe that producing a consistent product at scale is one of the best ways to understand and improve its true reliability, while maintaining or reducing costs.

ASTRANAUTS

Our employees are everything. We have been fortunate enough to attract some of the most entrepreneurial, creative, and hardest working engineers, product managers, and business leaders in the world.

Astra’s success is a direct result of the dedication, productivity, and focus of each and every one of our employees.

The velocity of iteration allows us to learn and improve our products as quickly as possible, so given the scope and complexity of the systems we are building, we have organized Astra into small, atomic, entrepreneurial, “start-up” like teams that are each responsible for a product, or a piece of our system.

Systems engineers define the interfaces between our products, and define critical requirements. Product managers prioritize business objectives for upcoming product releases, such as deciding whether to focus on decreasing materials or labor costs, or increasing performance or reliability. This allows some of the most talented engineers in the world to constantly delight our customers in an unforgiving, technically complex, and constantly evolving environment.

Management’s job at Astra is removing impediments. From daily standups that enable any impediment that cannot be resolved within the company to reach the management team, to investing in equipping our people with the right systems and tools, we believe that our highest calling is ensuring we allocate our finite time and capital to create the greatest possible value for our employees, customers, and shareholders.

ASTRA STRATEGY

With this foundation, let’s review Astra’s strategy, our progress this past year, and our outlook for the future.

With such an expansive opportunity before us, we realize we need consistent focus and execution to earn the right to grow into the company we aspire to be. We are building a foundational foothold in an established, but lucrative portion of the ecosystem — launch services — that, over time, will become a strategic advantage for us as our long-term vision unfolds. Astra’s mission of improving life on Earth from space and our vision for a healthier and more connected planet are the foundation of Astra’s strategy, which has three phases.

When we took Astra public last summer, Adam and I shared our long-term vision for a frequent, low-cost launch system that would allow us to develop, deploy, and maintain a space services platform that would enable our customers to focus on building space applications instead of space infrastructure. We shared a vision of a “cloud constellation” composed of spacecraft that our customers can leverage like technology companies leverage cloud computing, providing network and computing services on demand, with plug-and-play hardware peripherals that could be plugged into satellites just before a launch.

We believe that this is the future of Spacetech, and frequent access to space is the critical first step to enabling this future, making it Phase 1 of our strategy. With hundreds of small satellite constellations in development, and over a dozen companies that have gone public, collectively raising over \$20 billion in the past year, we see launch as the critical enabler of not only Astra’s long-term plans, but the key enabler of these new Spacetech companies. That’s why in Phase 1 of our strategy — **Launch Services** — we are focused on dramatically increasing

2021-2022 MILESTONES SO FAR

MARCH 2022
ASTRA DELIVERS FIRST
CUSTOMER PAYLOADS

DECEMBER 2021
ASTRA ANNOUNCES
SECOND US SPACEPORT

NOVEMBER 2021
LAUNCH VEHICLE 0007
REACHES ORBIT

AUGUST 2021
ASTRA SPACECRAFT
ENGINE IGNITES ON
FIRST ATTEMPT
IN ORBIT

JULY 2021
ASTRA GOES PUBLIC

JUNE 2021
ASTRA ACQUIRES
APOLLO FUSION

access to space by scaling our launch services business as quickly as possible.

However, only focusing on rockets would be like Amazon stopping at delivery trucks. As we learned with rockets, the core technologies required to power next generation satellites are simply not available at the cost, performance levels, and production scale that our vision of the future of space requires. Therefore, in Phase 2, **Space Technology** — Astra plans to develop, license, or acquire core space technologies that will be productized and incorporated into our rockets, satellites, and other infrastructure that will be used to deliver space services. Core technologies include propulsion and solar power. The acquisition of Apollo Fusion last summer is one example of us acquiring and productizing a core space technology.

The vast majority of value in the trillion dollar space economy forecasted in 2040 is in space services, such as communication services and a new generation of geospatial data services. Just as the apps on your iPhone are powered by cloud services here on Earth, we believe that future space applications will be powered by the space equivalent of today's earthbound cloud data centers. So in Phase 3, **Space Services** — we plan to vertically integrate Astra's core technologies into an Astra Constellation, which will be optimally launched and maintained by the Astra Launch System, allowing us to power the space economy.

PHASE 1: LAUNCH SERVICES

Today in Phase 1, Astra is primarily focused on dramatically increasing access to space, because you can't build a space platform that will improve life on Earth from space if you can't get to space.

While rocket science may be notoriously complicated, economies of scale apply like any other industry. Put simply, if you produce something at higher and higher volumes, regardless of how complex it is, it is easier to reduce the per-unit cost.

To get more to space economically, you can either scale up your rocket (and make a really big rocket), or design a rocket that is easy and inexpensive to produce, and scale out your factory to make many smaller rockets. While large reusable rockets are ideal for transporting people and large cargo to space, our customers tell us that the flexibility of getting to the right place in space as quickly as possible, at the lowest possible per-launch cost is what is important to them. This is why we have chosen to scale out our factory instead of scale up our rocket. We believe a thriving space economy requires both high volume small launch and human-rated large launch, and that the lowest cost leaders in each of these categories will be winners.



Note that small launch will be very useful to all but the largest satellites. We've repeatedly demonstrated our ability to significantly iterate and improve our launch system quickly. We've designed, built, tested and flown four different rocket types over the first five years of Astra and are hard at work on the next one. Our objective is to continue to evolve our launch service offering as the market evolves, such that our rocket will be capable of launching the vast majority of satellites launched over the next decade, even if only 1 or 2 at a time.

In addition to scale, Astra has focused on mobility and automation. Our entire launch system is mobile, and can be easily and discreetly transported anywhere in the world in standard ISO shipping containers by truck, ship, rail, or cargo aircraft.

What's more, a very small team, currently just six people, can deploy an entire launch system and be ready to launch in less than seven days. We demonstrated this capability earlier this year when we conducted our first launch out of Cape Canaveral for NASA. Through further automation and process efficiency improvements, we aspire to reduce the size of this team even further.

Astra's ability to launch quickly from anywhere a shipping container can be delivered allows us to expand our launch services to more licensed locations without fixed capital investments. Our mobile launch system also enables our allies — including governments that do not have direct access to space — to rapidly establish their own sovereign space launch capabilities by partnering with Astra. Finally, our unique ability to mass

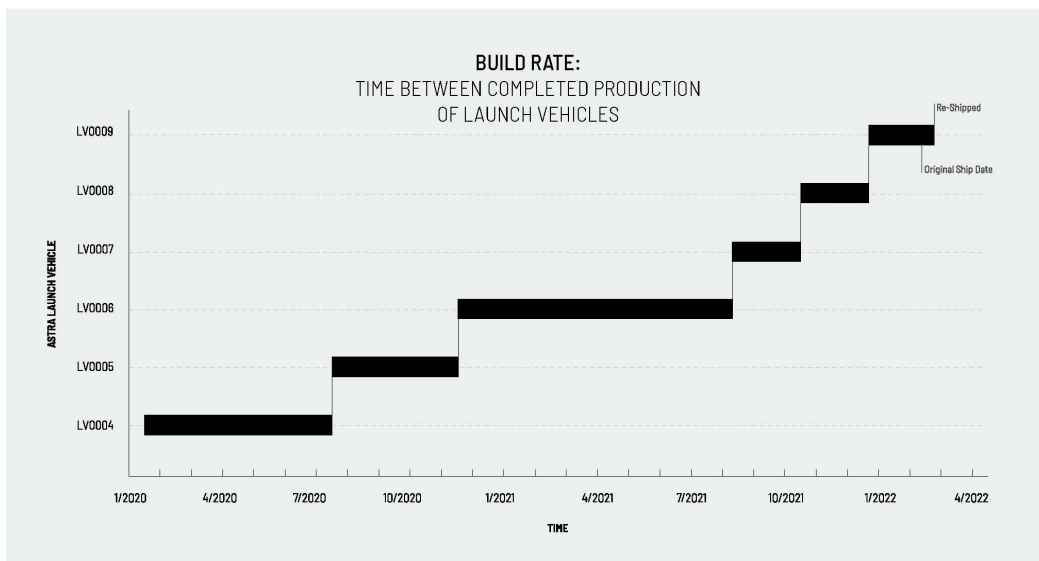
produce and permanently and discreetly deploy turnkey launch systems could play an essential role in enabling America's strategy for a resilient national security space infrastructure.

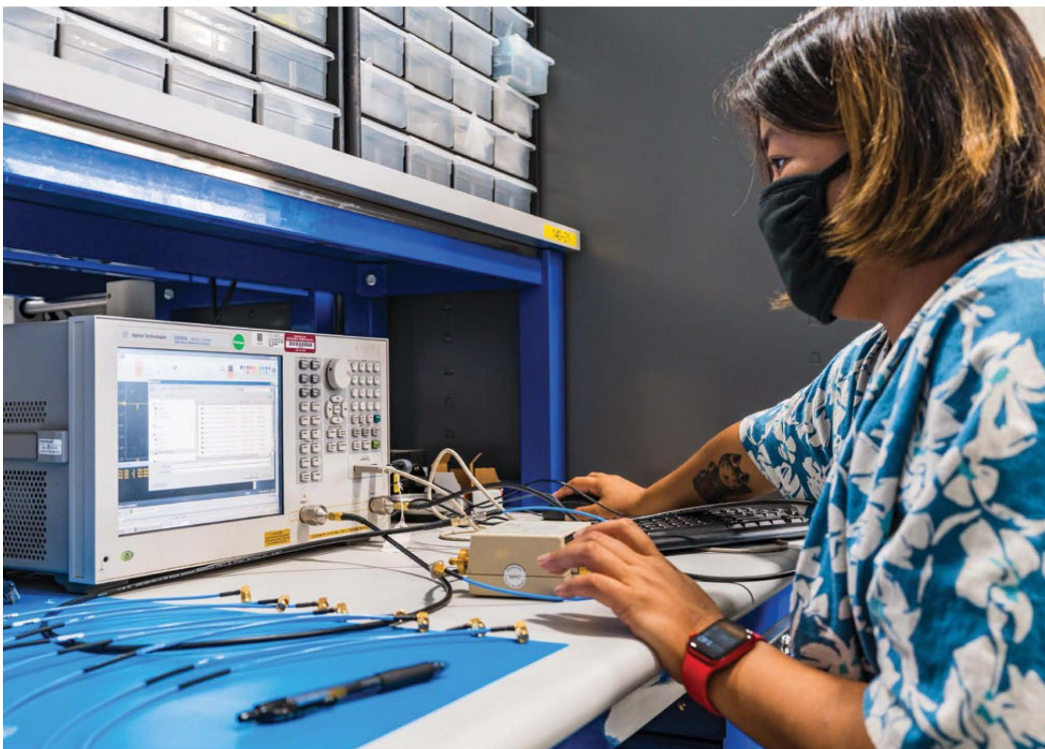
Our customers have expressed that they want more launches more frequently from more locations at a lower per-launch cost. Our long-term goal remains to reliably launch daily, and the 33 day period between our last two launches demonstrates the early progress towards this goal.

PHASE 2: SPACE TECHNOLOGY

In Phase 2, we are focused on productizing core space technologies.

Paying \$50,000 to \$100,000 for a single space-qualified part that fits in the palm of your hand that would cost less than \$500 if it was a consumer product is painful, particularly if you need four of them for a satellite. Having to wait 9 months to get these parts made to order makes rapid iteration impossible, and then having the items arrive six months late adds insult to injury. This is expected because few of these components are standard and most are essentially handmade by skilled craftspeople, followed by numerous tests and paperwork before delivery. Like rockets, core space technologies are not at scale today, but need to be. Therefore, in Phase 2, Astra plans to develop the most critical core space technologies, including electric propulsion and solar power, that will be incorporated into our newer rockets, satellites and other space infrastructure to ultimately deliver space services.





The key to our success in Phase 1 has been our ability to rapidly iterate hardware. To enable this, we invested in building out both our on-site testing capability and the Astra Factory, a vertically integrated manufacturing facility that is currently producing our launch system, including our rocket stages, rocket engines, valves, mechanisms, avionics, and more, with many parts machined out of raw materials on-site. Success in Phase 2 will require rapid iteration of hardware in space, and thus will be enabled by both our incredible on-Earth facilities and the captive, frequent access to space that our scaling launch service provides.

We will leverage this capability to productize the core technologies that we develop, license, or acquire, and test and qualify these products in space. Like Tesla selling batteries to other automakers, we believe that productizing core technologies (such as spacecraft engines) and selling them to our customers (and even competitors) will drive scale and increase the profitability and total value of the space economy powered by the Astra platform.

Our acquisition of Apollo Fusion last summer is the first example of how we're catalyzing space technology to meet customer needs. The in-space performance of the Spacecraft Engine is exceeding expectations, and we are incredibly pleased by the market reception of these in-space electric thrusters. It's a perfect example of how investing in a high-performance, scalable, standardized system can improve the space industry, and it is a great foundation for Phase 2.

PHASE 3: SPACE SERVICES

In Phase 3, space services, we plan to vertically integrate Astra's core space technologies into satellites that will form an Astra constellation. We are laying the foundation for our space platform by securing licenses for spectrum, developing core space technologies, and securing anchor customers for Astra services. Astra's strategy is to allow our customers to deploy software on a single mega-constellation that is being constantly refreshed with new technology.

Our long-term vision for this platform is an intelligent sphere of silicon at the edge of space that will connect everything on our planet and help humanity protect mother Earth.

THIS PAST YEAR

We achieved many milestones in our execution of this strategy in 2021, including:

- Delivering our first commercial payload into Earth orbit, making us the fastest private U.S. company in history to reach this milestone, just five years after we were founded in 2016.
- Becoming the first true SpaceX company to list on Nasdaq

- Acquiring Apollo Fusion and successfully demonstrating the operation of the Astra Spacecraft Engine in space
- Growing our employee base from 99 to 324 as of December 31, 2021. There were many high impact hires in 2021 and I am proud of the team we're building.
- While we make investments in scaling our business, we also continue to focus on prudently managing cash, ending 2021 with \$325 million in cash and cash equivalents on hand.

Importantly, we're focused on delivering for our customers. In 2021, we secured contracts with a diverse range of commercial and government customers, including NASA, the U.S. Space Force, Planet, Spaceflight, and Spire Global, Inc. As of the end of 2021, we have over 50 launches under contract and a \$160 million backlog, demonstrating the value of our services and the trust our customers place in us.

So far this year, we're continuing to accelerate momentum to meet our customers' needs. In January, NASA awarded Astra the Venture-Class Acquisition of Dedicated and Rideshare contract for future task orders, which have not yet been issued to Astra. As task orders are awarded, this represents a \$300 million opportunity over the next five years. In February, we conducted our first launch out of Cape Canaveral, our second spaceport, under the very first Federal Aviation Administration ("FAA") Part 450 license in history. And in March, we conducted our first successful orbital mission for our customer Spaceflight, Inc., delivering 22 payloads to their required orbit.

GOALS FOR 2022

We are still in the early stages of lowering the cost and increasing the frequency of space launch. We believe there are significant opportunities to further reduce the material, manufacturing, and operational costs of our launch system. This year we are developing the next version of our launch system (2.0) which will incorporate the next version of our rocket (4.0). Our goal is to increase our payload capacity by over 500% to deliver over 250kg to mid inclination orbits starting next year, while reducing our material, manufacturing, and operating costs. We believe there are opportunities to expand our footprint of spaceports worldwide. We are seeing strong customer interest in our first space product, the Astra Spacecraft Engine. We see significant opportunities to leverage our space launch capability to develop new space products that will provide value to our customers.

We recognize these are bold, audacious goals. And quite frankly, we wouldn't have it any other way, because this sort of ambition and drive is the only way to ignite truly impactful change. We also realize that a bold vision and strategy is



just the start. To be responsible stewards of the capital and trust you've placed in us, we must aggressively make progress against these goals, and never stop listening to our customers, learning, and innovating.

As I write this, we're preparing for a multi-launch campaign out of Cape Canaveral to deploy the NASA TROPICS constellation, which will observe cyclones so we can forecast storms better, improve disaster preparation, and ultimately save lives. As Adam and I reflect on why we founded Astra together, we can't imagine a more fitting first constellation to launch.

We are committed to staying focused on delivering against our near-term goals, without losing sight of our long-term vision and the opportunity ahead.

Thank you for believing in us and investing in our mission to improve life on Earth from space. Our mission has just begun.



Ad Astra,

Chris Kemp
Founder, Chairman and CEO
Astra

Photos by Brady Kenniston, John Kraus, Jason Cayabyab, and Astra



SAFE HARBOR STATEMENT

This Annual Report contains forward-looking statements within the meaning of the federal securities laws. These statements are indicated by words or phrases such as “anticipate,” “expect,” “estimate,” “seek,” “plan,” “project,” “aim,” “believe,” “could,” “should,” “intend,” “will,” and similar words or phrases. These forward-looking statements may include projections of financial information; statements about historical results that may suggest trends for our business; statements of the plans, strategies, and objectives of management for future operations; statements of expectation or belief regarding future events (including any acquisitions we may make), technology developments, our products, product sales, expenses, liquidity, cash flow and growth rates. Such statements are based on current expectations, estimates, forecasts and projections of our performance, our industry’s performance and macroeconomic conditions, based on management’s judgment, beliefs, current trends and market conditions, and involve risks and uncertainties that may

cause actual results to differ materially from those contained in the forward-looking statements. We derive most of our forward-looking statements from our operating budgets and forecasts, which are based upon many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results and undertake no obligation to update or revise publicly any forward-looking statements, whether because of new information, future events, or otherwise. Accordingly, we caution readers not to place undue reliance on these statements. Material factors that could cause actual results to differ materially from our expectations are summarized and disclosed under “Risk Factors” in Part I, Item 1A of our Form 10-K included within this Annual Report and also on file with the Securities and Exchange Commission.

Astra To Report First Quarter 2022 Financial Results on May 5th, 2022

ALAMEDA, Calif. – April 28, 2022-- Astra Space, Inc. (“Astra”) (Nasdaq: ASTR) will report financial results for its first quarter ended March 31, 2022, after the market close on Thursday, May 5, 2022.

Astra will host a webcast at 1:30pm PT (4:30pm ET) on Thursday, May 5, 2022, to discuss the results.

The news release containing the financial results with a link to the live webcast and the webcast replay will be accessible at Astra’s Investor Relations website (<https://investor.astra.com/investor-relations>).

About Astra

Astra’s mission is to improve life on Earth from space by creating a healthier and more connected planet. Today, Astra offers one of the lowest cost-per-launch dedicated orbital launch services of any operational launch provider in the world. Astra delivered its first commercial payload into earth orbit in 2021, making it the fastest company in history to reach this milestone, just five years after it was founded in 2016. Astra (NASDAQ: ASTR) was the first space launch company to be publicly traded on Nasdaq. Visit astra.com to learn more about Astra.

Safe Harbor Statement

Certain statements made in this press release are “forward-looking statements”. Forward-looking statements may be identified by the use of words such as “anticipate”, “believe”, “expect”, “estimate”, “plan”, “outlook”, and “project” and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements reflect the current analysis of existing information and are subject to various risks and uncertainties. As a result, caution must be exercised in relying on forward-looking statements.

Investor Contact:

investors@astra.com

Press Contact:

Kati Dahm

kati@astra.com
