

**Astra Holicity**  
**CONFERENCE CALL TRANSCRIPT**  
*February 2, 2021*

**Randy Russell (Holicity, CIO):**

Good morning, everyone. I would like to thank all of you for joining. I'm Randy Russell, the Chief Investment Officer of Holicity, our \$300 million SPAC sponsored by Pendrell Corporation. Joining me on the phone today are Craig McCaw, Holicity's Chairman and CEO, Chris Kemp, Astra's co-Founder and CEO, and Kelyn Brannon, Astra's CFO.

I would like to begin by reminding everyone that the discussion today may contain forward looking statements, including, but not limited to, with regards to the company's expectations or predictions of future financial, or business performance, or conditions. Forward looking statements are inherently subject to risks, uncertainties, assumptions, and they are not guarantees of performance. You should not put undue reliance on these statements. You should understand that such forward-looking statements involve risks and uncertainties, and such factors may be updated from time to time in our filings with the SEC and may cause actual events, results, or performance to differ materially from those indicated by such statements. The company is under no obligation, and expressly disclaims any obligation to update, alter, or otherwise revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law.

We are excited to share with you the proposed initial business combination between Holicity and Astra, a critical enabler of the space economy, and which will soon become the only publicly traded satellite launch company. Following Holicity's IPO in August, we worked through a rigorous targeting process that considered over 100 potential deals. And that ultimately led us to Astra. When Craig, our senior team, and I met with the founders, toured their incredible facility in Alameda, dug into the business model and saw the standup of their most recently flown rocket, we knew immediately that Astra was a very special company. Early in the process Craig raised an important insight, how do we get Astra to go faster, and how much capital do they need to execute and fully scale? We then worked with the Company to carefully outline the business plan presented today, which truly underlined the initial business combination as the optimal path forward.

We are convinced that the Holicity-Astra merger represents a singular opportunity to invest in a pioneering space services provider that we believe will scale to become a leading global platform. Our objective is that by the end of this conference call, it will be clear that Astra will be a critical enabler of the trillion dollar-plus space economy. They have the team and facilities to rapidly scale operations, revenue, and free cash flow, and they have proven technology, as evidenced by their successful December 15th launch, when Astra became the third privately funded US company to demonstrate orbital launch capability. And with that, I will hand it over to Craig McCaw, Chairman and CEO of Holicity.

**Craig McCaw (Holicity, Chairman and CEO):**

Thank you, Randy. I've long believed that there has been an amazing opportunity to provide communication satellites, essentially an internet in the sky, with the opportunity to provide the internet anywhere and everywhere, fulfilling one of humanity's great needs, and one very consistent with the needs represented by a pandemic, but frankly, growing every day, anywhere

on earth, at any speed. And we see all of that happening now with the Starlink and Kuiper constellations coming with thousands of satellites, when we used to think of one satellite as a big thing. The same time we recognize that humanity wants to see and know as much as it can. Essentially, how do we run the earth in the time of climate change and all the other challenges we face? What do we do to know and see as much as we need to know to do it right? And thus, the recognition that the low earth satellites that we believe are the right satellites, anywhere from the size of fingernails created with all the philosophy of tech, and to put those in service and to have them live very short lifetimes, in some cases, because technology is moving so quickly.

And thus has been created an amazing opportunity to bring this about. The missing element has been small launch, simple launch, cheap launch that is available on literally a day's notice, putting the satellites and the launch equipment in a Hercules with four containers and going anywhere in the world and launching virtually from a concrete or gravel path without all the government red tape, because it is so simple that it doesn't need it.

And thus, has created the opportunity of Astra. And Astra is ruthlessly simple in its philosophy. Do this with a satellite launch capability that fulfills the needs of those entrepreneurs with the speed and opportunities they want, and the simplicity to have it available on extremely short notice. And this is valuable, not only to businesses, but to governments whose needs are driven by factors, shall we say, on non-economic bases. Further to that, there's been a need to have a common platform for satellites, and part of the philosophy here of Astra is to have that common bus, the satellite bus, which is the platform for entrepreneurs to build on so that they are not recreating a custom satellite with all the failure opportunities out of their backyard. And this brings about the opportunity of this company, honed in the idea of simplicity, focused on space (they got to space faster than anyone in history for a private company, and they were the third in history to do it), and they did it in just four years. So an amazing company, amazing opportunity, and they have the path in front of them to change the world in very positive ways. And with that, I'll turn this over to my colleague, Chris Kemp, CEO of Astra.

### **Chris Kemp (Astra, Founder, Chairman and CEO):**

Thank you, Craig. And thank you all for your time. My name is Chris Kemp. I'm the Founder, Chairman and CEO of Astra. Today we'll walk you through how we're creating the first pure play public space company to build a platform in space to launch a new generation of services to improve life on earth. We'll talk about the market, our unique platform strategy, and take you through a quick tour of our facility. We'll talk about our customers and our pipeline, and then after introducing a few team members, I'll turn it over to Kelyn Brannon to walk you through Astra's unique opportunity through this transaction, to fund an operating plan that creates an engine of growing revenues, EBITDA, and free cash flow in the years ahead.

To start, I'd like to talk about our mission. Adam London and I founded Astra to launch a new generation of space services to improve life on earth. Adam London and I were first introduced by the founders of Planet, the first in a new generation of space companies that were starting here in Silicon Valley. In the summer of 2015, the only way they could get to space was hitching a ride on a large rocket, and they had lost a large number of their satellites after back-to-back launch failures of larger rockets. I was trying to figure out how to help them get their small satellites where they needed to go in space when they needed to get there. Out of a garage in San Francisco, Adam had pioneered some of the early technologies to make small rocket engines and small rockets. Together, we asked a basic question. Could we manufacture rockets

at scale, in much the same way that you could manufacture a car or small aircraft? We started looking in detail at what it would look like if we made hundreds or even thousands of rockets per year. Something became very obvious to us, which was that the unit economics of manufacturing rockets at scale meant the cost of rockets actually became competitive with the cost of large rockets.

We had a really unique opportunity here to change the fundamental economics of the space industry. So as we got to work building a new kind of space company over the past few years, and more and more companies started here in Silicon Valley building more and more small satellites, they were building services based on large constellations of small satellites operating in low earth orbit. In fact, if you look at the last decade, over 400 companies have formed. Morgan Stanley forecasts the space economy will grow to over a trillion dollars over the next decade or two. This is comprised of hundreds of billions of dollars of new services, hundreds of billions of dollars of new satellites being manufactured, and tens of billions of dollars of new government investment in space, including the creation of the new Space Force. By becoming the third privately funded US company in history to reach space and demonstrate orbital capability, Astra is now in a unique position to enable this new economy. And we believe that space is the next economic frontier, and that Astra is in a unique position to enable the trillion-dollar space economy.

The first application we're excited about is global broadband connectivity. We see, over the next few years, constellations that will provide internet access to everyone on the planet. And we see the number of companies that are racing to build these constellations increasing every year. We see opportunities to connect all the billions of devices on our planet from cars to ships, improving the way we manage our precious resources, fish our oceans, use our resources like water. It's a huge opportunity for things that don't need carrier grade, continuous connectivity. We see companies building constellations to observe our planet in every conceivable wavelength to help us optimize how we grow our crops, manage water and other natural resources. We see national security applications being developed that can protect our homeland. We see opportunities to develop new and better weather GPS and other services that we take for granted every day. The growth of this new economic frontier can be seen when you look at the exponential growth in the number of small satellites that are being launched. Over the last 10 years, the number of satellites launched grew from tens to hundreds to thousands. And now, over the next decade, we see those numbers continuing to increase from thousands to tens of thousands. And these are just the ones that have already registered with the FCC. The opportunity could well exceed these numbers as new constellations are announced and licenses are granted in the years ahead. This is an incredible shift in this industry, that from my background in the computer industry, really reminds me of the mainframe era decades ago, taking a giant leap to the cloud and mobile era of today.

If you look at the satellites that have been launching over the last few decades, they're the size of school buses and they operate tens of miles away from earth. They do this because they have to be in space for 10 or more years to pay for themselves because the satellites themselves cost hundreds of millions of dollars and they launched on rockets that costs tens, if not hundreds of millions of dollars to launch themselves. The satellites that operate in low earth orbit are so close to earth they can send data back with a fraction of the power and they can take images 10 times higher resolution because, obviously, if you're trying to take a picture of something, you can use a giant telephoto lens when you're thousands of miles away, or you can just get really close to your subject and use your smartphone. Both will take the same picture. So we're seeing these satellites proliferate, and they're, on the order of kilograms, maybe a few

hundred at most. And we're seeing companies have more and more need to launch more and more of these satellites in more locations in space, for more locations on earth, more frequently. So with a disruption this big, we see an opportunity to address the market differently.

And that leads me to Astra's platform strategy. At the foundation of our platform is the software that helps us optimize the cost structure of our business, from our supply chain to the materials and the labor that go into operating our launches and our company, to the systems that allow us to automate the manufacturing and the launch of our rockets. Astra fundamentally is a software company that is understanding and collecting data about every aspect of our business all the time, and that allows our engineers to focus on improving the efficiency, productivity, and cost structure of our space operations.

This provides Astra some unique structural advantages. By increasing the level of automation of space operations, we can operate spaceports with only a handful of people. Astra has, on several occasions, deployed an entire space port to a concrete pad with a fence around it effectively in a few days with less than 10 people. We currently have a con ops that involves deploying an entire spaceport with five people in five days. This is unprecedented and will allow Astra to both rapidly scale and operate a global footprint of spaceports with very little capital and very little overhead. This is enabled by a truly revolutionary mass-produced portable launch system. Astra's launch system packs into just four shipping containers where we can load it onto a train, a boat, a truck, or even a C130 Hercules airplane. We can deploy the entire system anywhere around the world, and we can launch rockets anywhere on earth, and put payloads anywhere into space in a matter of days. This allows Astra to operate and scale with a level of efficiency never seen in our industry. Finally, as we begin to leverage this platform by iterating faster and faster on an integrated and modular spacecraft platform, we see an opportunity to design a spacecraft that perfectly integrate with our launch system, and allow us to take our customers from concept to constellation in months, instead of years. By allowing them to plug their software and their peripherals into our spacecraft, they can be efficiently deployed and operated in space without having to develop all the core technology in the spacecraft like power management, solar panels, radios. Our customers can focus on what makes them unique, their particular sensor, camera, or radio that allows them to get their applications deployed in space without having to build everything from scratch. This allows us to address a larger market faster, which is key to a vertically integrated platform.

Finally, we can begin offering space services to further accelerate our mission to improve life on earth from space, offering complete constellation management services, solutions, spaceport services, and other turnkey services to our customers. What enables this innovation is a strategy that from day one at Astra was built on a fully vertically integrated company. From the design of almost every component on our rocket, and spaceport, and spacecraft system, we're able to design, manufacture, integrate, and test over 90% of our system in one building, in one facility, on one campus, just outside of San Francisco. We have a quarter of a million square foot facility where our engineers design everything from batteries to electric motors, and valves, and tanks on the rockets. We manufacturer almost all of these components here in the building from raw materials. We integrate and test on campus, this allows us to iterate, innovate, and learn faster than any company in our industry. Many companies have to go to a remote location and in other states and fly hardware and teams across the country to do testing, but because our system is based on a small launch vehicle, we can do all that testing here inside our facilities in the Bay Area. That has allowed Astra to achieve orbital capability faster than any company in history. From the founding of the company in a garage in late 2016, to the design development of our first rockets in 2017, to our first launches in 2018, to opening the facility

where we manufacture rockets, doubling the size of the rocket based on customer feedback in 2019, and then launches in 2020, where we first demonstrated orbital capability. This is twice as fast as SpaceX and over three times faster than Rocket Lab and Virgin Orbit since the formation of the company to demonstrating these milestones.

Customers have been watching. Throughout the development and the launch of these systems, we've been allowing our customers to follow the journey and they've rewarded us with contracts. We have now our first 50 launches under contract. Through a diverse group of customers ranging from commercial and government customers, highly reputable, well-funded, and all currently in orbital operation, we now have over \$150 million in contracted revenue representing over a hundred spacecrafts waiting to be launched into space. We recently have won a NASA contract awarded every five years for the launch of NASA CubeSats. And we're just getting started here because ahead of us, we have a pretty significant pipeline. We have over \$1.2 billion of active customer opportunities in broadband, earth observation, maritime, IOT, and other applications.

Before I introduce my Chief Financial Officer, Kelyn Brannon, to walk you through the operating plan and financials, I'd like to mention a few other key members of our team.

My co-Founder and CTO, Dr. Adam London are supported by Chris Thompson, who's running advanced projects, who after co-founding SpaceX, worked there for about 10 years on the early SpaceX rockets. Bryson Gentile, who leads rocket manufacturing and production, helped set up the production line for the rockets at SpaceX, also spent some time at NIO helping design a car production line. We have Martin Attiq, who, as our Chief Business Officer, formerly at BlackRock, is one of the smartest business deal makers I've ever met, he's putting all of our launch contracts together. I'd like to hand it over to Kelyn Brannon, who, before joining us here at Astra, was the first Chief Accounting Officer at Amazon, also ran finance before helping take Arista public as their CFO, and Calix public as their CFO. She's going to walk you through our operating plan and financials. Kelyn?

**Kelyn Brannon (Astra, CFO):**

Thank you, Chris. And I'd like to take everyone through Astra's business plan and elaborate on what makes us such a special company. We plan to reach what we'd like to call hyper-scale space operations in the next few years. Astra will commence our first commercial launch in mid-2021, and we'll begin to scale rapidly, and expect to achieve the key milestone of daily launches by 2025. To accomplish these goals, we will complete the build-out of the remainder of our manufacturing facility by the end of 2021. Along with the build-out of our facilities, we intend to ramp up spending on automation and equipment from 2022 to early 2024, in order to scale production capabilities for daily launch. In 2021, we also plan to build out our facility for satellite manufacturing. And by 2022, Astra will begin offering satellite services and spaceport services to customers. In 2024, we will complete the build-out of our facility with minimal capex requirements thereafter. As our launch cadence ramps to daily by 2025, and the capability of our launch vehicles increase to handle larger payloads, we expect robust revenue growth. Beyond the forecast, we believe further increases in launch cadence, combined with the ramp of our space platform offerings will continue to drive revenue growth. Our major investments in automation and equipment will enable mass production leading to attractive margins. We expect good margin expansion over the next few years, and we are projecting that we'll be profitable by 2024 and operating near run rate margins by 2025. On a run rate basis, we expect an adjusted gross margin of 70% and an adjusted EBITDA margin of 50%. Additionally, we expect strong

free cash flow conversion, our capital investments and facility upgrades, automation and equipment will be completed in 2024 leading to robust free cash flow thereafter. The committed PIPE of \$200 million, plus net cash proceeds from the de-SPAC with Holicity, will fully fund Astra from an equity perspective. We plan to deploy the proceeds of this transaction to accelerate our growth and operations to meet the demands of our customers and to fully support our capital needs as we continue to ramp. Finally, we expect continued robust growth in both revenue and adjusted EBITDA, leading to a strong and growing long-term free cash flow.

Now let's review the key drivers that will enable us to achieve this growth. As launch cadence ramps to daily by 2025, the capability of our launch vehicles will have also increased over time to handle larger payloads, resulting in strong launch revenue growth. Our investments in automation and equipment will enable the mass production, which leads to more favorable gross margins than traditional aerospace manufacturing techniques. Our high margin, satellite, and spaceport businesses begin to ramp in 2022 and grow as we increase the attachment rate to launch services. The full suite of services we introduced will make us even more sticky to customers and reflect Astra's space platform strategy. And finally, we believe growth will be robust beyond 2025, as we further increase launch cadence and our space platform offerings continue to ramp. In the long-term, that gives us the rare combination of attractive free cash flow margins and growth.

Now I'll briefly discuss the summary of the transaction. The transaction values Astra at a \$2 billion pre money equity valuation, and Holicity at \$10 per share, resulting in a proforma enterprise valuation of \$2.1 billion. Assuming no Holicity shareholder redemption, a \$200 million pipe, and \$30 million of new primary Series C proceeds results in approximately \$489 million of cash to Astra's balance sheet. Our concurrent Series C rates is that the deal valuation. Proforma for the initial business combination, existing shareholders, including Series C equity holders, will own approximately 78% of the company. Existing Holicity shareholders will own 12%. PIPE investors will own 8%, and Pendrell, as the sponsor, will own 3%. And now I'd like to hand it back over to Randy to touch on valuation and closing remarks. Randy?

**Randy Russell (Holicity, CIO):**

Thank you, Kelyn. We believe that at a \$2.1 billion enterprise value, Astra offers a very compelling opportunity for investors. Slide 34 in the investor presentation details this out. And I'd like to note that the implied 3.1x 2025 EBITDA multiple represents a highly attractive entry point given Astra's technology is proven, they compete in a supply constrained, high-growth market, and have all the elements in place to deliver confidently on their projections. Thank you all for your time today. We enjoyed talking you through Astra's story, as well as the details of the initial business combination. More information about the transaction can be found in our public filings as well as the investor presentation that we have publicly filed with the SEC. Please feel free to contact us or the advisors, Deutsche Bank, Bank of America, or PJT Partners for further information. That concludes today's call and thank you again for joining.