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ASTR.OQ - Q2 2022 Astra Space Inc Earnings Call

EVENT DATE/TIME: AUGUST 04, 2022 / 8:30PM GMT

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PRESENTATION

Operator

Good afternoon, and welcome to Astra's Second Quarter 2022 Earnings Conference Call. (Operator Instructions)

I would now like to turn the call over to Andrew Hsiung, Vice President of Strategic Finance and Capital Markets for introductory remarks. Please go ahead, Andrew.

Andrew Hsiung

Thank you, operator. Good afternoon, everyone, and thank you for joining us for Astra's second quarter 2022 quarterly results call. After the market closed, we released our financial results. The results release is available on the SEC's website and our Investor Relations page at investor.astra.com. This teleconference is also being broadcast over the Internet and will be archived and available on our Investor Relations website.

During our call today, we will reference non-GAAP financial measures, which we believe to be useful to investors as our management team uses these non-GAAP financial measures to plan, monitor and evaluate our financial performance. These non-GAAP financial measures exclude certain items and should not be considered as a substitute for comparable GAAP financial measures. Astra's method of computing these non-GAAP financial measures may differ from similar non-GAAP financial measures used by other companies. A description of these items, along with the reconciliation of our non-GAAP financial measures to their most comparable GAAP financial measures can be found in our release.

Today's call will also contain forward-looking statements. These forward-looking statements refer to future events, including Astra's future financial outlook. When used in this call, the words anticipate, could, enable, estimate, intend, expect, believe, potential, will, should, project and similar sessions as they relate to Astra are as such, a forward-looking statement. These forward-looking statements are subject to a number of risks and uncertainties. And as a result, Astra's actual future results and performance may differ materially from those discussed in this call. We encourage you to review our filings with the SEC in which we described the factors that could cause actual results to differ materially from our current expectations, including those updated risk factors included in our quarterly report on Form 10-Q.

We will also refer to commercial launches during this call. When we use the phrases commercial launch, commercial revenue launch or commercial orbital launch, we mean a launch conducted under an FAA commercial launch license. Our commercial launches may be paid or unpaid.

Finally, I'd like to remind everybody that this call will be recorded and will also be made available for replay via link available on our Investor Relations section of our website.

With that, I would now like to turn the call over to Chris Kemp, Astra's Founder, Chairman and Chief Executive Officer. Chris?

Chris C. Kemp - Astra Space, Inc. - Founder, President, Chairman & CEO

Thank you, Andrew. Good afternoon, everyone, and thank you for joining us today. Today, in addition to my Co-Founder and our CEO, Dr. Adam London; and our Chief Financial Officer, Kelyn Brannon, I've asked Benjamin Lyon, our Chief Engineer and Executive Vice President of Engineering and Operations, to join us today to share some additional details about the progress we're making on the new version of our Launch System.

Our mission, improving life on Earth from space continues to inspire our team to relentlessly push forward, learning, growing and pioneering the rapidly growing commercial space industry. Even with the headwinds we have experienced in the market, it remains more clear than ever that we can expect space products and services to unlock tremendous societal and economic value as we believe that investments made by the U.S. government and other large commercial companies will continue to drive growth in the space tech industry. The long-term focus that guides our strategy, product road maps and investments remains unchanged.

Before I dive in, I'd like to add a few words on the macro environment. We're in a period of global uncertainty driven by geopolitical tensions, supply chain constraints and elevated inflation. Yet in the midst of all this, we see space as a bright spot. The global space economy, currently estimated at \$469 billion by the Space Foundation, grew 9% last year. We remain focused on ensuring Astra is positioned to seize this opportunity to become an end-to-end provider of space products and services.

Reflecting on the last year as a public company, in addition to building out a world-class team and systems to operate as a public company and tripling the size of our increasingly diverse workforce, Astra has acquired Apollo Fusion and launched and started shipping our first space product, the Astra Spacecraft Engine, completed the expansion of our 25 million square foot rocket factory, new test facilities and established a new space port in Cape Canaveral, Florida. We're also working with the SaxVord-U.K. Spaceport to evaluate an opportunity to launch in the U.K. This opportunity is subject to the entry into definitive agreements and regulatory approval before we can launch.

Astra has recruited dedicated teams to support concurrent R&D, test, manufacturing and launch operations, including a new VP to run launch operations, [Doug Koopman]. We've started development of Launch System 2.0, with the largest and most talented engineering team we've ever assembled. And we've done all this while conducting four commercial orbital launches of launches in 1.0, 2 of them successful and 2 of them unsuccessful.

And it is this last point that our leadership team has taken to heart this last quarter, and we've never been more rigorous in our analysis or more focused on making the changes necessary to ensure Astra delivers a service that is reliable, cost-effective and meets the needs of our customers. So we'll spend the majority of today's call discussing this focus.

So turning to this quarter. It's been a quarter of continued investment, customer adoption of our space technology products and growth in our customer pipeline. But on June 12, when we launched the first of three intended NASA TROPICS missions from Cape Canaveral, we failed to deliver NASA's payload to orbit. We're going to spend a bit more time on this in a moment.

Second, given the increasing demand from large constellation operators for higher capacity, lower costs and more reliable launch services, our discussions with NASA and other customers and a significant resources that have been required to support launching our 1.0 system, we've made a few key decisions.

First, we've increased the payload capacity target for Launch System 2.0 from 300 kilograms to 600 kilograms. Second, we're working with all of our launch service customers to re-manifest on Launch System 2.0. Thus, we will not have any additional flights in 2022. And third, we're increasing investments in testing and qualification, which will add additional time and test light to our schedule prior to resuming commercial launch operations, meaning that whether we'll be able to commence commercial launches in 2023 will depend on the success of our test flights. So we'll spend more time on this in a moment as well.

And third, in the area of space products. It's been just over a year since our acquisition of Apollo Fusion and demand continues to increase for the Astra Spacecraft Engine. By the end of the second quarter, we received a total of 103 committed orders for Spacecraft Engines, up 69% since the

end of last quarter. And today, we're also announcing that we've secured a lease for an additional 60,000 square foot facility to support the production of the Astra Spacecraft Engine, which we believe will become the industry standard in space propulsion.

Fourth, on our financials, we ended the quarter with approximately \$200 million in cash and cash equivalents and marketable securities. We've honed our operating plan to live within our means and focus our human and capital resources to bring a more reliable and higher capacity launch service to market and develop and grow our space products business. We've entered into a \$100 million committed equity facility with B. Riley Capital, which provides us improved financial flexibility as we continue the development of Launch System 2 and our space products and services. Kelyn will provide additional detail on our plan in a few minutes.

On TROPICS, as I mentioned on June 12, we launched the NASA TROPICS 1 from Cape Canaveral. The investigation into the anomaly continues, and we expect to share findings once the root cause has been determined. However, we do know several things. First, we had a nominal first stage flight followed by a nominal main engine cost. Second, we had a nominal faring and stage separation. And third, during upper stage flight, the upper stage experienced anomaly that caused the upper stage engine to run out of fuel and shut down before reaching the velocity required to deliver NASA's payload to orbit.

To be clear, we are deeply disappointed by this outcome. We've been working closely with NASA and the FAA to investigate the failure, and we will share all of our findings once the investigation is concluded.

Furthermore, we're in discussion with NASA to proceed with TROPICS on Launch System 2.0. On behalf of the entire team, I want to thank NASA for their continued partnership and we remain committed to successfully completing this mission.

Now turning to Launch System 2.0. As I mentioned before, Astra has now concluded 4 commercial orbital launches for our customers. 2 of them were successful delivering a total of 23 satellites to orbit, two of them were not. Space is a tough business, and we tackle some of the hardest engineering challenges, and achievements have also come failures. Both have taught us a great deal. And us isn't the us that we were when we took the company public just over a year ago.

Since our first successful flight on the leadership of Benjamin Lyon, Astra's Chief Engineer and Executive Vice President of Engineering and Operations, Astra has more than tripled the size of its development team, completed the build-out of a new rocket factory facility, new test facilities, and have made significant progress in the development of Launch System 2.0.

Since we unveiled Launch System 2.0 at our Space Tech Day, we have increased the design point to deliver up to 600 kilograms to an inclination lower orbit over the course of the life cycle, which we believe will allow us to serve over 75% of the total addressable market of small satellites, including many mega constellations. Finally, we continue to target a base bulk launch price for dedicated launches under \$5 million.

To provide additional detail on the development of this system, I'd like you to hear directly from Benjamin. Benjamin?

Benjamin Lyon - Astra Space, Inc. - Chief Engineer & EVP of Engineering and Operations

Thank you, Chris. As Chris mentioned, since I joined Astra, we've made significant investments in our engineering and operations. Now we are focused on taking all of our talent, our manufacturing and test facilities and the time required to do two things: develop the next release of the Launch System; and expand the production and test of our Astra Spacecraft Engines.

The team has been diligently working on the Launch System 2.0 design. Forward to this effort are key capabilities that we built out over the last year, for example, establishing dedicated mission management and assurance teams, investing in state-of-the-art metrology, failure analysis and reliability labs, developing, installing and commissioning new automated assembly equipment on our new Rocket 4 production in [Tesla]. For example, we've installed automated tank section welding and stacking systems that are central to our development work in future scale, and we baseline the laser well processes for subassembly attachments like baffles and brackets.

We've also developed a scalable dome forming process that reduces fabrication time. We can now make many Rocket 4 domes in the time it took us to make a single Rocket 3 dome. We completed a number of engine hot fires at our new castle test facility, enabling us to tune the operation of our higher thrust first stage engine.

Lastly, we continue to introduce new analysis processes, documentation systems and procedures that align engineering, manufacturing and operations to enable quality and reliability at scale. These are important milestones in our development process. Thank you.

And now I'll turn it over to Chris to provide additional detail on Astra Spacecraft Engines.

Chris C. Kemp - Astra Space, Inc. - Founder, President, Chairman & CEO

Thanks, Benjamin. As we discussed in our shareholder letter and our 2021 annual report, while building a scalable and profitable launch services business is very strategic to Astra, launch is just 1 of the 3 pillars of our strategy. So I wanted to take a few minutes to highlight the progress we're making in our space products business where we are seeking to leverage our launch and manufacturing capabilities to develop and productize key technologies needed by our customers to build next-generation satellites and space services.

As we mentioned earlier, to accelerate our space products business, we completed the acquisition of Apollo Fusion just over a year ago. Our team identified the most significant investments that our customers were making as they develop space services outside of launch, and satellite propulsion was one of the most sizable costs. Base propulsion systems are one of the first decisions satellite manufacturers make before determining launch options as in-space propulsion is often used in concert with launch to position satellites into their final orbits.

Since we completed the acquisition of Apollo Fusion, we successfully ignited the engine in space on our very first attempt. We've since performed hundreds of successful missions. We've demonstrated industry-leading performance that exceeded the expectations that we set in ground tests. We're scaling engine production, and we've qualified our engine to use (inaudible). And our leading competitor was Russian, and is now sanctioned.

We continue to see strong demand. And as I mentioned, we've sold 103 Spacecraft Engines through Q2. This demonstrates that we can productize core space products and is evidence of our successful post-acquisition integration of Apollo Fusion.

We recently signed a new lease for a 60,000 square foot facility to increase our Spacecraft Engine production capabilities. We continue to evaluate new space product opportunities based on feedback from customers. So more to come on this in the future.

Now I'll turn things over to Kelyn to review our financials and guidance. Kelyn?

Kelyn Brannon - Astra Space, Inc. - CFO

Thank you, Chris, and good afternoon, everyone. Let me first review our Q2 results. As Chris mentioned, we continue to see increased customer adoption of our space products and are pleased with the gross margin associated with that business. As a reminder, all non-revenue financial figures I will discuss today are adjusted, unless I state them as a GAAP measure. You will find a reconciliation from GAAP to non-GAAP results in today's press release.

Revenues in Q2 were \$2.7 million with approximately \$2 million derived from launch services and \$0.7 million from space products as we commenced delivery of our first after space truck engine to customers. Cost of revenues were \$17.4 million for the 3 months ended June 30, 2022. This includes \$4.1 million of cost of launch services and space products and \$13.3 million of inventory write-downs, \$10.2 million of which was attributed to inventory write-downs related to the discontinuation of Launch System 1.0.

Second quarter adjusted net loss was \$53 million. Q2 adjusted EBITDA was a loss of \$48.4 million, well below the low end of our guidance range of a loss of \$58 million. On a GAAP basis, our second quarter net loss was \$82.3 million. The sequential decrease in net loss was primarily related to a decline in loss on change in fair value of contingent consideration and partially offset by increased inventory write-downs.

Second quarter addition for capital expenditures was \$12.9 million and primarily related to finalizing the expansion of our Alameda manufacturing facility. We now fully occupy the entire facility and have begun installing production equipment for rocket manufacturing.

We ended the quarter with cash, cash equivalents and marketable securities of \$200.7 million and no debt outstanding. The company expects that -- sources of liquidity will be sufficient to fund operating and capital expenditure requirements through at least 12 months from the date of issuance of these financial statements.

On August 2, Astra entered into a \$100 million committed equity facility with B. Riley Principal Capital LLC. The facility provides Astra the right, but not the obligation to issue up to \$100 million of Class A common stock over 24 months to be acquired by B. Riley. The facility provides increased financial flexibility as Astra continues to scale manufacturing, invest in R&D and deliver launch services and space products to customers. Any activity by Astra under this facility will be done systematically and opportunistically as we progress against our refreshed operating plan.

In addition to the B. Riley facility, we continue to evaluate various financing strategies and the overall capital markets as we carefully manage our financial profile.

Next, I'll provide an outlook for our third quarter ending September 30, 2022. Our third quarter guidance and the remainder of 2022 and 2023 is subject to various important cautionary factors referenced in the section entitled Forward-Looking Statements below and our Form 10-K, including risks and uncertainties associated with ongoing COVID-19 pandemic and the decision to discontinue the production of launch vehicles supported by our Launch System 1.0.

As Chris mentioned, there is also a risk associated with elevated levels of inflation and our supply chain when it comes to a dynamic shared across many companies and industries. However, we believe our investments in our factory and vertically integrated manufacturing processes are one of the factors that help mitigate this risk.

For the third quarter, we currently expect adjusted EBITDA loss to be between \$45 million and \$51 million, depreciation and amortization to be between \$5.5 million and \$6.5 million, stock-based compensation to be between \$12 million and \$15 million. Cash taxes are forecasted to be \$0. Basic shares outstanding to be between 256 million and 270 million shares, and capital additions to be between \$6 million and \$8 million.

Let me provide some additional color on guidance through 2023. As noted earlier, we've discontinued the production of launch vehicles supported by our current Launch System, and we have focused all of our launch services resources towards the development of Launch System 2.0. As such, we 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 2023 but are not yet certain whether we'll be able to conduct paid commercial launches in 2023 using this new Launch System. We also expect continued adoption of our space products business and to continue focusing resources on executing on this part of the strategy. Therefore, you will see a significant reduction in capital expenditures and slowing growth in headcount as we move through the second half of 2022 and 2023.

Capital expenditures will be required for our Spacecraft Engine facilities, additional production equipment for Launch System 2.0 production and launcher upgrades for the new Launch System 2.0 in 2022, after which we expect it to flatten out in 2023.

On the Astra Spacecraft Engine, you should expect quarterly variability in shipments until we ramp production by mid-2023. Please note that the ASP for our Spacecraft Engine are much lower than launch services, but will have a higher volume with positive gross margin.

We continue to expect calendar 2022 to be a transformative year as Astra continues expanding on our product road map and scaling production. As Chris outlined, we will focus all launch resources on Rocket 4, our Launch System 2.0, which we unveiled on May 12 at the Astra Space Tech Day, and we will also expand our space product offering led by Astra Spacecraft Engine.

Lastly, we will continue to focus on ensuring these investments deliver value to our shareholders and set us on the path for long-term success.

Additionally, during the current quarter, we will provide some specifics related to the nonfinancial operating metrics, which we will be using to measure our progress towards achieving the strategic objective previously mentioned. This will allow you to understand the progress we are making towards developing Launch System 2.0 and our increased capacity for building and delivering our space products. To confirm, we intend to achieve these milestones within the financial guidance previously provided.

Before I turn the call back over to Chris, I want to add thanks to our entire Astra team and growing roster of customers who trust us to deliver for them. Chris?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Thanks, Kelyn. In addition to sharing the operating metrics you just mentioned, I'm looking forward to sharing the milestones along the path to our next flight.

So in summary, our progress over the next year will be measured by progress towards Launch System 2.0, orders and shipments of our space products, including the Astra Spacecraft Engine, and the disciplined execution of our operating plan.

With that, will you please open the call for questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Your first question comes from the line of Edison Yu of Deutsche Bank.

Xin Yu - *Deutsche Bank AG, Research Division - Research Analyst*

I have a couple. So to start off, it seems as if the transition to Rocket 4 is going to take meaningfully longer than what the previous outlook may have been. First of all, is that the case? And if so, what is kind of driving that longer transition time to Rocket 4?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Yes, I'll take the first part of that. I think there's two things. I think that as we learned more about operating Rocket 3.3 with Launch System 1.1 as we built out this incredible team we've built, as we continue to build out our new factory, the market continued to evolve as well. And the feedback we were getting from some of the larger constellation operators was the satellites were getting larger.

And so we saw really two things happening. One, an incredible team that we assembled making a lot of great progress. And frankly, a lot of changes to the new rocket and the new Launch System and all the software that powers in it and investing in all these new test equipment and labs and we were investing a lot of that in the new Rocket. And continuing to operate Launch System 1.1 or 1.0 with the existing rocket was operating a Rocket that threw 50 kilograms to orbit.

We felt we had an opportunity to do two things. Really focus all of our resources and energy on a rocket that frankly had the benefit of all the people we brought in this year. And secondly, we had an opportunity to further increase the capacity of the vehicle with an upgrade to the upper stage engine.

And so the combination of those factors and also our desire to really build the highest quality, most reliable product that met the needs of the majority of the market, chat with Benjamin and I asked Benjamin, what's the one thing we could do to allow you to focus our resources to make that happen, not only as fast as possible, but with all of the focus and energy that it requires.

And then we started talking to our customers, and it was pretty clear that after 2 out of the 4 flights that we had flown were not successful, the opportunity to fly on a vehicle that has received all of this attention and energy from our team over the past year was also favorable to them.

And in the end, we kind of did what our customers wanted us to do, which is to focus all of our energy on a system that takes advantage of all of the investments that we've made since we took the company public, both capital, people, facilities and otherwise. And we did that very soon after this last flight, frankly. So we could kind of get everyone focused on the next system as soon as possible.

Xin Yu - *Deutsche Bank AG, Research Division - Research Analyst*

And I guess taking that into context, I know you said you're not flying anything for the rest of this year. What sort of rough targets can you share with us? Because I think -- I don't want to -- purely on a certain month or a necessary date, but is there some like rough target to test -- the first test fly? And then if that goes successfully, the first commercial launch, is there something you can share with us?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

I think what I'll share is, as you look at 2023, what we're looking at in terms of revenue forecast will largely be Spacecraft Engines. In 2023, I want to give Benjamin the time and the team the time to really get this right and do the work that is required to build the highest quality, most reliable -- so we want to do several test flights. We want to test every component of the system. We want to test the engines. We want to test the stages. We want to test the software. We want to test the electronics.

And really, as we looked at this thing, we built a plan that we believe gives them more time and also fits the needs of the customers that we can put on manifest as we talk to all of our customers. So there's a lot of uncertainty because we want to give the time to the team to do all that testing before we do another commercial launch.

So I think what we've decided is, let's just focus on giving the team the time to accomplish these milestones and then we're going to share all these milestones with all of you as we accomplish them. So with each of these major milestones, you're going to see Astra give everybody an update. Here's what we've accomplished. Here's what's next. We've accomplished that one. Here's what's next. Then there'll be some test lights. And I think that as we continue to do this, we'll continue to get closer to an answer to your question.

Xin Yu - *Deutsche Bank AG, Research Division - Research Analyst*

Understood. Last one for me. You said you're still going to stick, I think, with the sub-\$5 million pricing. Given that there is so much demand, given that it could be a bit of a crunch post Russia, Ukraine everything, why not charge more? It seems as if there's actually pretty decent pricing power, you have inflation, SpaceX raised price earlier this year. Why not try to actually charge more and make the economics a little bit easier?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

It's a great question. I think at a higher price point, it's a different product. So we're really -- we're not building this service for one-off launches for a couple of small sats here and there. And I think there is a market for that. And I think that you've seen some of our peers focus on that market with expensive launches that are infrequently performed for this segment of the market.

The market that we're really excited about -- is the mega constellations. And in order to win contracts with the larger constellation operators, the economics that we're competing with are not some of our peers with small launch vehicles. They're SpaceX. And so I think we offer a position -- we offer a product that has price as a primary characteristic and scale as a primary characteristic.

So we've invested in building this factory not to do a small number of launches at a high price, but to do a higher number of launches at a lower price. And so that's why we really led with price because we believe that some of these mega constellation operators need choices. And we want to give them another choice that isn't a large launch vehicle that's economically viable for these operators.

Operator

Your next question comes from the line of Andre Madrid of Bank of America.

Andre Madrid - *BofA Securities, Research Division - Analyst*

So glad to see you guys are focusing a little bit more on the engine side of things. Unfortunately, though, you're not the only player out there doing that. RocketLab has their own HyperCurie. How do you guys see yourselves differentiating from that? And just some of the key points as to where you see your products is different and better than what they're doing over there with HyperCurie?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Well, I mean, I can tell you what our customers tell us. And what they tell us is that our product performs better. So we have a higher ASP. I can tell you that we've operated our product successfully in space. It's now ignited hundreds of times. And I can tell you that it's very cost competitive. And I think that as we work with our customers, we're trying to strike that balance of offering a product that is higher performance, lower cost and we're going to obviously continue to invest heavily in making sure that we could scale the production to meet the demand that we're seeing out there.

And that's why you've seen us release in today's earnings announcement, the detail around the new facility we're building out 60,000 square feet of facility dedicated to scaling the production of those Spacecraft Engines.

Operator

(Operator Instructions) You have a follow-up question from the line of Edison Yu at Deutsche Bank.

Xin Yu - *Deutsche Bank AG, Research Division - Research Analyst*

Actually, just one more follow-up for me, and it was actually about the engine. Is there any way you can break down the composition of those orders, as in are those -- what type of spacecraft or what type of use case? Is there any way we can kind of break that down a little bit more?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

I mean one thing is that the way the product is sold is it's very modular. So it's a true product in the sense that there's a thruster, there's electronics, there's a feed system and tank, and we can actually configure it in a lot of different ways. So we're selling them to a lot of different customers that have different size satellites with different mission parameters. And we do that by taking that product and configuring it differently. You can have 1 engine, 2 engine -- 1 thruster, 2 thrusters or 3 thrusters. And we've actually seen our customers deploy in a lot of different configurations.

So it's very flexible. And it really doesn't target just one segment of the satellite market. Being adopted by a lot of different types of satellites.

Xin Yu - *Deutsche Bank AG, Research Division - Research Analyst*

Understood. And would you be going after a pretty -- are you going after pretty big constellations there since it is, I think you mentioned it's a haul thruster. Would that be something that you could sell to a fairly large constellation?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Yes. Ones that don't have their own already developed. So I would look at the -- and if you're trying to forecast the size of the market, I would just look at the folks that are building their own and then everyone else is how we consider the tail.

Operator

Your next question as a follow-up from the line of Andre Madrid of Bank of America.

Andre Madrid - *BofA Securities, Research Division - Analyst*

Just to give a little context, I guess, to everybody listening. Could you explain a little bit more why it's important to have an engine on the system itself as opposed to relying on a space to source, maybe like a user? What's stopping one customer from going with a more tailored approach than just using the services of the space [hub]?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Well, I think that all satellites that are, for example, communication satellites or operational satellites require propulsion if they're large and if they're meant to station keep or if they're meant to be positioned in a particular orbit unless they're like small cube sats. And I think where these transfer vehicles, they actually use these propulsion systems to do the work of the final or positioning for the satellites that don't have propulsion before they're deployed. But these are typically small satellites that are cube sats that just aren't large enough and have the amount of power onboard to really keep the satellite loss. So they're very small satellites.

Also, if you want to be able to deorbit your satellite, these systems are very useful. So I think as we see more pressure on operators to really remove the satellites from orbit once their life is over, all satellites are going to start to need some form of propulsion system or other systems to assist with the orbiting.

Andre Madrid - *BofA Securities, Research Division - Analyst*

Understood. And is there a large difference in price point, would you say?

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Well, I think, again, comparing a propulsion system that almost every satellite has to one of these delivery systems is -- you're comparing apples and oranges. The systems that are offered by the companies that do final positioning are -- they're positioning typically very small satellites, cube sats in particular places. And these satellites are being sold to -- excuse me, the propulsion -- the Astra Spacecraft Engine is being sold to the kind of, call it, several hundred kilogram to 1,000 kilogram class of mega communication satellite type applications or applications that involve the satellite leaving lower orbit and going to higher orbits or other places.

Andre Madrid - *BofA Securities, Research Division - Analyst*

Okay. That's the color I wanted because I feel like sometimes the distinction isn't always as clear. So appreciate you've given the breakdown.

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Yes. You're welcome, again. And I think we announced we sold 103 of these so far. And really, we're expecting the production to start to ramp up in 2023 and with that revenues from that product line.

Operator

This concludes the question-and-answer session of today's call. I will now turn the floor back over to Chris Kemp, Chairman and CEO of Astra.

Chris C. Kemp - *Astra Space, Inc. - Founder, President, Chairman & CEO*

Thanks everyone for your time today. And I just want to let you all know that we appreciate your support, and we look forward to providing you updates, both quarterly and also frequently as we make progress towards delivering the new Launch System 2.0 and continuing to announce new contracts for space products and services. Thanks, all.

Operator

Thank you. This does conclude today's call. Thank you for your participation on today's event. You may now disconnect.

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