

# AST SpaceMobile (ASTS) / 1 Apr 22 / 2021 Q4 Earnings call transcript

## Company Profile

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Scott Wisniewski	Chief Strategy Officer
Abel Avellan	Chairman and Chief Executive Officer
Tom Severson	Chief Financial Officer
Bryan Kraft	Deutsche Bank
Griffin Boss	B. Riley Securities

## Operator

Good day, and thank you for standing by. Welcome to the AST SpaceMobile Fourth Quarter 2021 Business Update Call. At this time, all participants are in a listen-only mode. After the speakers' presentation, there will be a question-and-answer session. [Operator Instructions] Please be advised that today's conference is being recorded. [Operator Instructions] I would now like to hand the conference over to your speaker today, Scott Wisniewski, Chief Strategy Officer of AST SpaceMobile. Please go ahead.

## Scott Wisniewski

Thank you, and good afternoon, everyone. This is Scott Wisniewski, Chief Strategy Officer of AST SpaceMobile.

Let me refer you to Slide 2 of the presentation, which contains our Safe Harbor disclaimer.

During today's call, we may make certain forward-looking statements. These statements are based on current expectations and assumptions, and as a result are subject to risks and uncertainties. Many factors could cause actual events to differ materially from the forward-looking statements on this call.

For more information about these risks and uncertainties, please refer to the Risk Factors section of AST SpaceMobile's Form 10-K for the year-ended December 31, 2021 and other documents filed by AST SpaceMobile with the SEC from time-to-time. Readers are cautioned not to put undue reliance on forward-looking statements, and the Company specifically disclaims any obligation to update the forward-looking statements that may be discussed during this call. Also after our initial remarks, we will be starting our Q&A session with questions submitted in advance by our shareholders. With that, I would like to introduce Chairman and CEO, Abel Avellan; and Chief Financial Officer, Tom Severson, to the call as well. Abel, over to you.

## Abel Avellan

Thanks, Scott. This business update marks our first year as a public company.

For those new to AST SpaceMobile, I would like to summarize some key achievements and remind you about some of our fundamentals.

We're chasing a huge market opportunity to connect people everywhere at airline at SEA using our patented space based cellular broadband technology. There are approximately 5.3 billion mobile phones worldwide, and the wireless service market generates over \$1 trillion of our annual revenue. And according to GCMA, approximately half of the world population do not have cellular broadband.

Our partners are industry-leading global companies like Vodafone, American Tower and Rakuten indisputable leaders in the industry where we participate. We believe that our service is going to be indispensable. And we think that broadband connectivity is a human right that allows access to knowledge and information to the masses on a global scale. By the way of a quick update, we are on a schedule for the plan launch of Blue Walker 3 this summer. We now have agreements and MOUs with mobile network operators, which represent over 1.8 billion subscribers. We now have over 2,100 patent and patent pending claims. And over the last few months, we had achieved major milestones for the industrialization of our technology, including the acquisition and development of our 100,000 of square feet second facility in Texas. Together with our current 85,000 square foot headquarter. This facility increases our overall manufacturing space in Texas for a total of 185,000 square feet.

We are now on a mission to industrialize our technology to allow the space based cellular broadband connectivity to be available everywhere.

Now, moving on into Blue Walker 3 update.

Let's start with a little more detail on Blue Walker 3. The satellite is on a schedule for our plan summer launch and all the testing and integration are near completion. What is left for us is to store and pack the satellite into this final configuration. After the final RS testing is completed at our Midland facility. What you see in this picture is Blue Walker 3 fly microns preparing to enter final RS compatibility test.

First, to launch of Blue Walker 3. Turn into Page 5, prior to the final environmental test, we will need to store and pack this spacecraft for the last time. This process involved a storing a 693 square feet phased array into our launch vehicle adapter, which is then mounted into the Falcon 9. The process of storing our satellite is an engineering challenge that have taken the company over two years to solve and test. After the last environmental test is completed, a process that we expect will take approximately four weeks we plan to perform the final inspection on the spacecraft prior to moving it to Florida for launch. After two years of hard work and over 2,100 patent and patent pending claims, the company is confident. It have created many of the key process designed to enable our seller broadband distant from the space. Included by no limited to the following, the ability to decide, build and produce the items that are the building block of our spacecraft. The technology to enable our Phased Array to connect directly from space to regular and modified mobile phones. The ability to control our system that can deploy a satellite with an aperture of 693 square feet into a cubic volume capable of use with multiple launch partners. And last but not least, we have developed the knowledge to vertically integrate the key major components of the build and construction of our spacecraft.

While we continue to spend our IP portfolio.

Now moving to industry update – industrialization update. In parallel with our technology development efforts, we have also been taking steps in the industrialization of our technology. Extension facility update, in December, we purchased a second facility in Texas, a short drive from our current headquarters in Midland. The property offers several buildings with high quality shells.

So we can build out our a 100,000 square feet of manufacturing space. We pre-install high capacity grids and additional land for more built out if required. This facility will help to grow our potential monthly satellite production from two satellites to six satellites per month or possibly more. And we are also been aligning our supply chain to this target.

We have earmarked approximately \$20 million of additional investment for extension facility and are making great progress on the renovation. This facility will be highly automated and will focus on micron assembly and related solar panels assembly for our spacecraft. We consider the purchase and planning around the extension facility as a major step for the industrialization of our technology.

Now, I would pass it off to Scott to provide a additional business update.

Scott Wisniewski

Thank you, Abel. Starting on Page 9, in addition to the great technology and industrialization progress to-date, the AST team also continues to advance the ball on the business side.

We're building out the commercial opportunity, enhancing our organization.

On the commercial side, we recently announced a new MOU with Orange group an operator with over 220 million subscribers globally. This MOU will facilitate additional Blue Walker 3 testing in one African country, and will also explore opportunities for further collaboration to serve their subscribers. With this signing, there are now 1.8 billion subscribers represented by mobile network operators with whom we have agreements in MOU. And I will talk a little bit more about this opportunity in a moment.

We also signed a multi launch agreement covering Blue Walker 3, the first BlueBird satellite and a framework for future launches. This is an important milestone that brings increased certainty for our business beyond Blue Walker 3.

Lastly, despite it being early days on the regulatory front, we remain active globally, both independently and together with the mobile network operators, targeting approvals for testing and commercial service. Supporting our base of initial regulatory approvals for the use of V band and 3GPP frequencies in six countries.

On the organizational side, we increased our employee count by 30 during Q4, which brings our full team to 566 comprised of 386 full-time employees and consultants, and 180 dedicated third-party engineering staff as of December 31, 2021. And as Abel mentioned, we also continue to actively protect our IP and increase our total patent and patent pending claims to 2,100. This IP portfolio continues to expand and provides us a competitive advantage.

Moving to Page 10, given the recent activity here, we wanted to take a moment to highlight our mobile network operator relationships as they are critical to our business and our go to market strategy. These agreements and understandings that support the 1.8 billion subscriber number have been put in place starting in 2018 to facilitate the development of our Direct-to-Cell technology and lay out the key commercial elements of our MNO relationships. Many of the key terms of these agreements are intended to mirror agreements with our strategic partner Vodafone. And they leverage the spectrum and technology found in the over 5 billion mobile phones in use today. Ultimately, there are a few factors that we expect will drive success with our commercial relationships.

First MNOs like the solution, because it will fix a real network problem amidst insatiable demand. It will improve their service, will drive new revenue and could support churn reduction goals. Users will like the solution because it will fix a real network problem. And it will be easy with no new hardware or software required. They just need to click yes, when they receive a text message offering service. And the solution is a good one for AST SpaceMobile because the super wholesale model where the MNO is our customer is designed to limit our operating expenses. MNO agreements with revenue share will let us participate in the upside. And the easy signup process allows us to grow subscribers quickly. And with limited friction costs once our network is operational.

Now with that, it is my pleasure to hand it off to Tom for the financial update.

Tom Severson

Thank you, Scott. Since our last business update, our team has been preparing the BlueWalker 3 test satellite for our summer launch, and we've been executing on the setup of the company's industrial infrastructure to be able to meet our goal of producing six satellites per month during 2023. To this end, we are laser focused on the build out and preparation of our facilities at our new Midland AIT facility.

We expect to complete the first phase of the clean room build out during Q2 and are making other investments to construct what will be a state-of-the-art satellite production line with automated machining processes.

We are also working on the build out of our network operation center and satellite operation center, which will be located at our 16,000 square foot engineering office located in Lanham, Maryland. Simultaneously, we are also integrating our ERP and enterprise systems, which will support the industrial manufacturing environment for the production of our BlueBird satellites. Also in preparation for production, our supply chain team continues to make solid progress with the procurement of long lead time subsystems and componentry for our BlueBird satellites. Based on our progress to date, we continue to reaffirm our cost estimates to build and launch the first 20 satellites with an average cost in the \$13 million to \$15 million range per satellite. And for the full constellation, we are still targeting to be able to build and launch 168 satellites for an average cost for satellite of approximately \$11 million.

Now to move on to the Q4 financials and current operating expense trends. We ended 2021 with \$321.8 million of cash and \$5 million of total debt, which was incurred in connection with the Q4 purchase of our new AIT facility in Midland, Texas.

During the fourth quarter, our cash operating expenses, including engineering services, R&D and G&A increased to \$28.5 million, an increase of \$7.5 million compared to the prior quarter. This was due to increases across R&D engineering and G&A. These increases resulted from the company's efforts relating to the completion of the Blue Walker 3 satellite and in preparation for the BlueBird satellite production, investments in our engineering team, expenses relating to the set up of our supply chain for our BlueBird satellites and other improvements to our operating infrastructure.

During the fourth quarter, our cash G&A costs were \$10.7 million, and we expected our quarterly G&A costs will remain roughly in this range through the end of 2022.

During the fourth quarter, our cash engineering costs were \$9.9 million, and we expect to continue to see these costs continue to ramp during 2022 as our AIT team prepares for the manufacturer of our BlueBird satellites.

We will also continue to invest in our in-house electronics, design development team focused on our BlueBird satellites and ground infrastructure. To give you a sense of scale, our engineering and AIT employees and consultants grew from 241 at the end of Q3 to 287 at the end of Q4. We plan to continue to build this team to approximately 350 by the end of 2022.

In terms of our CapEx, the date, we've invested approximately 80 million for the build and launch of the Blue Walker 3 satellite and our capital investments for Blue Walker 3 are substantially complete. Total investments in our property and equipment were \$31.9 million through the end of the fourth quarter. And this includes the \$8 million purchase of our new AIT facility in Midland, Texas. The company now has approximately 185,000 square feet of industrial space in Midland. And once the clean room build out of the new AIT facilities complete, we will have approximately 100,000 square feet of ISO 8 clean room manufacturing capacity. We believe these facilities will be sufficient to support our manufacturing target to complete six production satellites per month during 2023.

Finally, as we ready Blue Walker 3 for its plan launched this summer and prepare the company for full scale manufacturing, we are confident in the ability of our amazing team to execute our plans and deliver our game changing technology. And with that, I'll turn it back to Scott.

Scott Wisniewski

Before we go to the queue of analyst questions, we'd like to address a few of the questions submitted ahead of the call by our investors. Operator, could you please start us off with the first question?

Operator

We have a question from Steve from Arizona asked the dates for both BlueBird 1 and BlueBird 2 were redacted from the launch services agreement. Will you be sharing those dates during the earnings report?

Abel Avellan

Hi, Steve, thank you for your question. Well, let me start by saying that we plan to stop production of BlueBird 1 satellite later this year. And we seek to ramp up our production capacity during 2023 towards our goal of producing six satellites per month. And then the multi launch agreement recently signed it was designed to provide us the flexibility and we begin to launch our BlueBird production satellites in 2023.

Operator

We have a question from Kevin from California asked retail investors seem confused on whether or not it's possible to launch BW3 without FCC approval. Can you clarify whether or not FCC approval is required for the planned summer launch?

Abel Avellan

Thank you, Kevin, for the question.

First of all, we believe the FCC will come through on time for our summer launch.

However, if it's necessary, we don't think that will be necessary, but if it's necessary, we can start testing outside United States. And we do not think that the FCC is a prerequisite for our summer launch.

Operator

We have a question from Brian from Toronto asked, will you be competing directly with LEO constellation providers like SpaceX, Starlink and rural undeserved markets?

Abel Avellan

Hi, Brian, thank you for the question. No, we don't see SpaceX one with other legal systems as a competition to our system. The way that we like to explain it is we see ourself as a cellular, broadband cellular system to provide connectivity directly to handsets where we see the other systems as Wi-Fi or broadband connectivity using terminals to connect home.

So all the type of locations.

So we do not see us in direct competition with the other LEO systems.

Operator

We have a question from Chan from Nevada asked, can you give an updated all in cost for building a single BlueBird?

Tom Severson

I'll take that one. This is Tom. Thanks for your question, Chan.

We continue to reaffirm our current cost estimate to build and launch the first 20 BlueBirds to be in the \$13 million to \$15 million per satellite range. We take materials and componentry into cost into consideration during the design process and approach is more akin to an automotive manufacturer where we benefit from the scale production rather than a legacy satellite manufacturing model. Since our last business update, we've made solid progress in the

supply chain negotiations. And based on our progress to date, we are currently on track to meet our targeted costs. Thank you, Chan.

Operator

Thank you.

We have a question from Chan from Nevada asked is phase one fully funded, if yes or no, what are your plans for raising capital beyond calling warrants?

Tom Severson

I'll take this one as well. Mr. Chan, thank you again for your question.

Let me start by saying that our balance sheet has a strong cash position with \$322 million on the balance sheet at year end. And one of our core corporate finance principles is to always maintain a strong balance sheet with a strong cash position. But we currently estimate the capital asset investments required to manufacture and launch the first 20 BlueBird satellites to be between approximately 260 million and 300 million, which is expected to be incurred during 2022 and 2023. Also let me point out that until we are self-funding through operating cash flow, we will be monitoring market conditions. And our goal is to opportunistically raise additional capital with the most advantageous terms possible. And we are continuously assessing various financing options.

Our current expectation is that we will seek to raise additional capital before we launch the space mobile service commercially.

Scott Wisniewski

And with that, I'd like to thank our shareholders for submitting these questions. Operator, let's open the call to analyst questions now.

Operator

[Operator Instructions] Our first question comes from the line of Bryan Kraft from Deutsche Bank.

Your line is now open.

Bryan Kraft

Hi, thanks. Good afternoon. Can you talk about how much certainty the SpaceX agreement gives you as it relates to securing launch capacity for the BlueBird satellites in Phase 1? And then a couple other related to that with some of the launch capacity seemingly coming out of the industry due to the war in Ukraine, how can you be so confident in your satellite build plus launch costs staying on plan? I think Tom, you reiterated the cost that you had previously disclosed. And then lastly, will there be any additional payments due this year related to the Blue Walker 3 launch beyond the \$23 million that you already paid? Thank you.

Abel Avellan

Hey, Bryan, how are you? Well, regarding the launch – the multi-launch agreement with the SpaceX that was done to secure the initial launches of our BB1, our operational production spacecrafts. And also they were also addressing the Blue Walker 3 launch at the same time.

So we had a Blue Walker 3, BB1, and the first multi-launch on the – on this agreement with the SpaceX that that's something that we tried to do six months to a year ahead of time. And that's what we had addressed with the agreement with the SpaceX.

Bryan Kraft

How far – how much of the BlueBird launches are sort of covered in the agreement. And I think that the – when you announce the agreement, it alluded to a framework for future launches.

So I was just wondering what kind of certainty or confidence that gives you in the availability of launch capacity. I don't know if you could say anything there, but I was just curious about that.

Scott Wisniewski

Yes. This is Scott here. We can't say much more than was disclosed, but SpaceX is currently doing more launches than to anyone in the world, right? So they offer the most rides to space and this agreement gave us flexibility around timing and rebooking and those sorts of things, as well as making an early payment for the first satellite and then a reservation payment for another launch.

So it gave us increased flexibility at the end of the day.

Bryan Kraft

Okay. Thanks. And can you answer the last part of the question that I had asked about the additional payments on Blue Walker 3 just curious from a cash flow perspective.

Tom Severson

Yes. Sure, Bryan. This is Tom.

We're substantially complete with all the payments with Blue Walker 3. Currently, we have about \$80 million invested. There may be a few million more to finish up, but nothing material.

Bryan Kraft

Okay. And Tom, I know you reiterated the costs on the build and launch costs for your satellites. Do you view there being any more risk to that just given the fall – the falling out of some of the industry capacity because of the Russia, Ukraine war or you still have a lot of confidence in that at this point?

Tom Severson



Well, at the moment we don't. That's the reason why we address this disagreement in advance. And also we see all the significant amount of launch capacity coming into the market for a multitude of sources. And this agreement is a good bridge into that.

Bryan Kraft

Great.

Okay. Thank you very much.

Operator

Thank you.

Our next question comes from the line of Griffin Boss from B. Riley Securities.

Your line is now open.

Griffin Boss

Hi. Yeah, thanks for taking my questions.

First off, so given the recent 3GPP release 17 standard and related to that the focus of 5G supporting non-terrestrial networks. I was hoping you guys could help us understand how, if at all this affects your technology.

Abel Avellan

Well, I think all the advances in 3GPP are really supportive of our technology. At the end of the day, in order to have broadband connectivity direct-to-handset you need a large satellite with all the patents and IP that we own around 2,100 patents and patent claims.

So we see it something that is actually beneficial for us. It help us to source ENOV[ph] from more vendors. But we think that our IP and our unique capability to connect directly to a handset, it directly from the space is something that is unique for us and all this is approved that our technology, it is the way to go when you want to connect directly from a handset.

Griffin Boss

Got it. Thanks, Abel, appreciate that color. And then I was curious with the rise in LEO satellite deployments, there's obviously a lot of talk and concern in the industry about the implications of orbital debris and Kessler syndrome. I'm wondering if you could help us understand how you are thinking about this and whether or not you anticipate any issues down the line from a regulatory perspective, as it relates to your timeline for deploying the full constellation of 177 odd satellites?

Abel Avellan

Yeah. I mean the first thing that I will say different than any other proposed technology, we don't need thousands of satellites. We need only few hundreds of them and also a feature on our satellite it is that we had a very thin profile in the direction of movement that really do not make us more prone to any collisions than any other regular LEO satellite.

So that had been incorporated in the design by, a, reducing the number of required satellite to provide global service, broadband space based global service. And also the profile of the spacecraft in order to be very thin in the vitals of crack in order to basically not be prone to collisions.

Griffin Boss

Got it.

Okay, great. Thanks. That's it for me guys. Thanks again. Appreciate it.

Operator

Thank you. [Operator Instructions] At this time I'm showing no further questions. I would like to turn the call back over to AST SpaceMobile for closing remarks.

Scott Wisniewski

Thank you operator.

Our company's building a space based cellular broadband network design for use with the phone in your pocket today. I want to thank everyone for joining both the shareholders and the analysts for the questions. And hope everybody has a great rest of the week.

Abel Avellan

Thank you. See you next time.

Tom Severson

Thank you.

Operator

This concludes today's conference call. Thank you for participating.

You may now disconnect.