AST SpaceMobile

Transforming how
the world connects

Nasdaq
NASDAQ: ASTS

Investor Presentation
May 2023

Forward Looking Statements

The information in this presentation and the oral statements made in connection therewith includes “forward-looking statements” for the purposes of federal securities laws that are not historical facts and involve risks and uncertainties that could cause actual results to differ materially from those expected and projected. All statements, other than statements of historical fact in this presentation and the oral statements made in connection therewith regarding AST SpaceMobile, Inc.’s, collectively with its subsidiaries (“SpaceMobile” or the “Company”), financial position, business strategy and the plans and objectives of management for future operations, are forward-looking statements. Words such as “expect,” “believe,” “anticipate,” “intend,” “estimate,” “seek” and variations and similar words and expressions are intended to identify such forward-looking statements. Such forward-looking statements relate to future events or future performance, but reflect management’s current beliefs, based on information currently available. A number of factors could cause actual events, performance or results to differ materially from the events, performance and results discussed in the forward-looking statements. For information identifying important factors that could cause actual results to differ materially from those anticipated in the forward-looking statements, please refer to the Risk Factors contained in AST SpaceMobile’s Annual Report on Form 10-K, filed with the SEC on March 31, 2023. The Company’s securities filings can be accessed on the EDGAR section of the SEC’s website at www.sec.gov. Except as expressly required by applicable securities law, the Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Use of Non-GAAP Financial Measures (UNAUDITED)

This presentation contains certain non-GAAP measures, including cash operating expense. Cash operating expense is equal to total operating expense less non-cash operating expense such as depreciation and amortization and stock-based compensation expense. The Company believes that these non-GAAP measures, when presented in conjunction with comparable GAAP measures, provide useful information about the Company’s operating results and liquidity and enhance the overall ability to assess the Company’s financial performance. The Company uses these measures, together with other measures of performance under GAAP, to compare the relative performance of operations in planning, budgeting and reviewing the performance of its business.

Industry and Market Data

This presentation includes market data and other statistical information from sources believed to be reliable, including independent industry publications, governmental publications or other published independent sources. Although AST SpaceMobile believes these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy and completeness.

Trademarks and Trade Names

AST SpaceMobile owns or has rights to various trademarks, service marks and trade names that they use in connection with the operation of their respective businesses. This presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective owners. The use or display of third parties’ trademarks, service marks, trade names or products in this presentation is not intended to, and does not imply, a relationship with AST SpaceMobile, or an endorsement or sponsorship by or of AST SpaceMobile. Solely for convenience, the trademarks, service marks and trade names referred to in this presentation may appear without the ®, TM or SM symbols, but such references are not intended to indicate, in any way, that AST SpaceMobile will not assert, to the fullest extent under applicable law, their rights or the right of the applicable licensor to these trademarks, service marks and trade names.

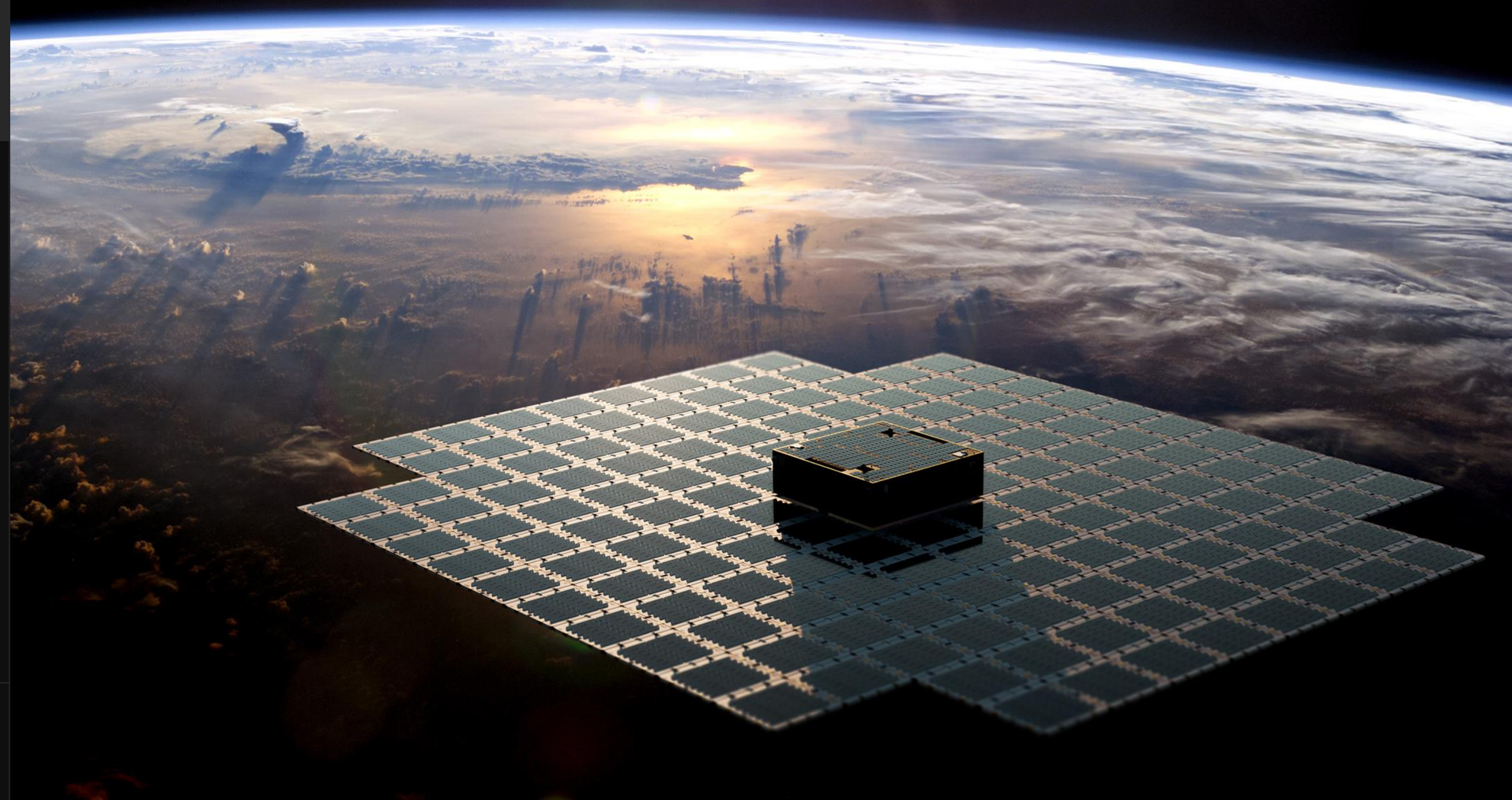
AST SpaceMobile is building the first & only space-based cellular broadband network

Raised ~$725 million to date to fund network build and technology with **2,600+ patent and patent-pending claims**

Signed agreements and understandings with **35+ mobile network operators** with **2+ billion existing subscribers**

Completed first-ever space-based voice calls using everyday unmodified smartphones

Funded for production and launch of first phase of commercial satellites to offer **initial cellular broadband** service

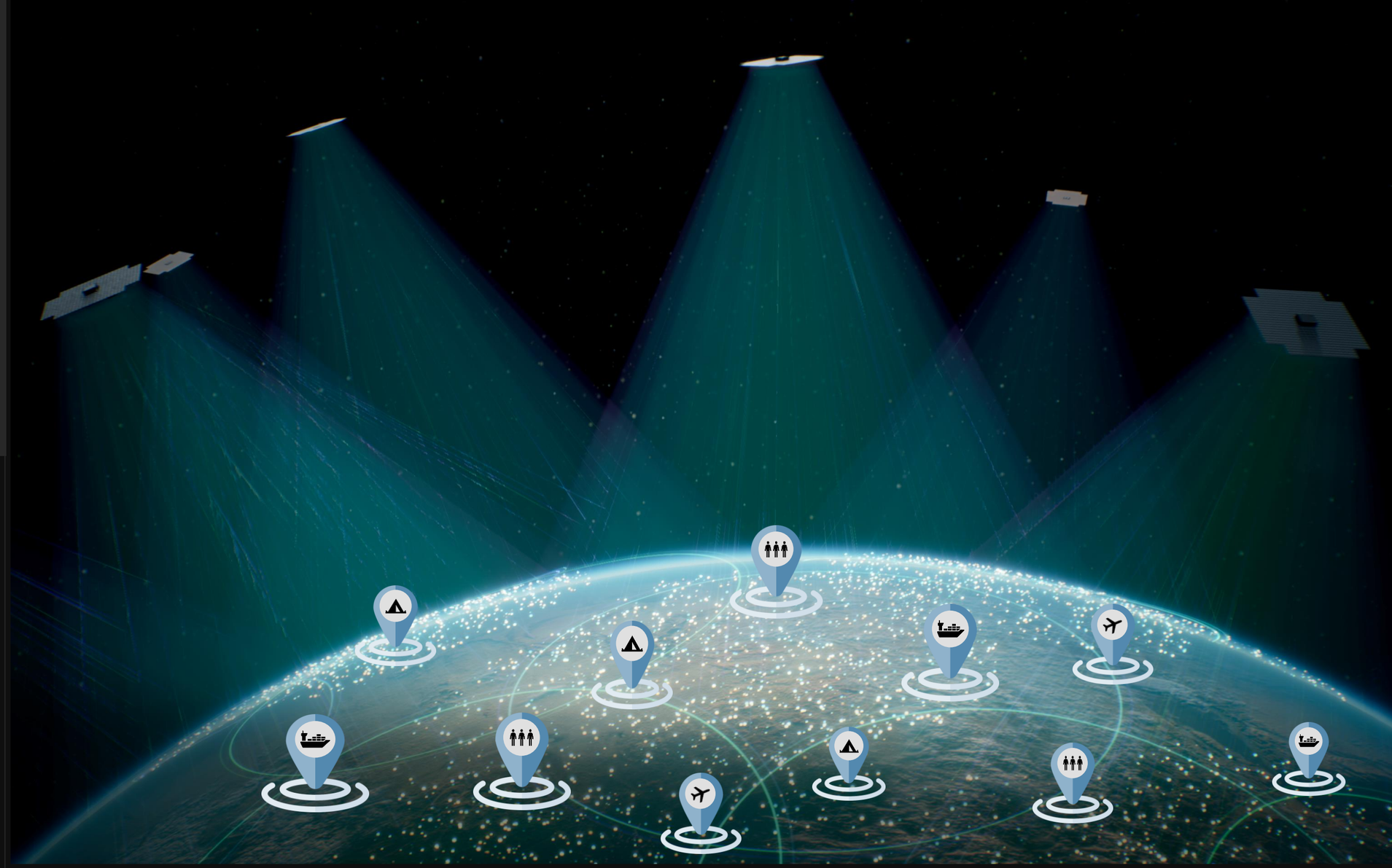


Transforming connectivity with direct-to-cell technology (5G + 4G LTE)

"Eliminating the friction of specialized equipment and spectrum bands from direct-to-cellular satellite coverage, at broadband speeds, is a transformational event for the communications industry"

"Not only do we expect to provide essential, affordable broadband connectivity to everyone everywhere, we are working to expand the market to billions of individuals and devices"

- Abel Avellan
Chairman and CEO



Phones ■ **Devices** DIRECT-TO-DEVICE **Wearables** ■ **IoT**

UNMODIFIED ■ ***STANDARD*** ■ ***EXISTING SPECTRUM***

Market opportunity is deep, untapped and expanding

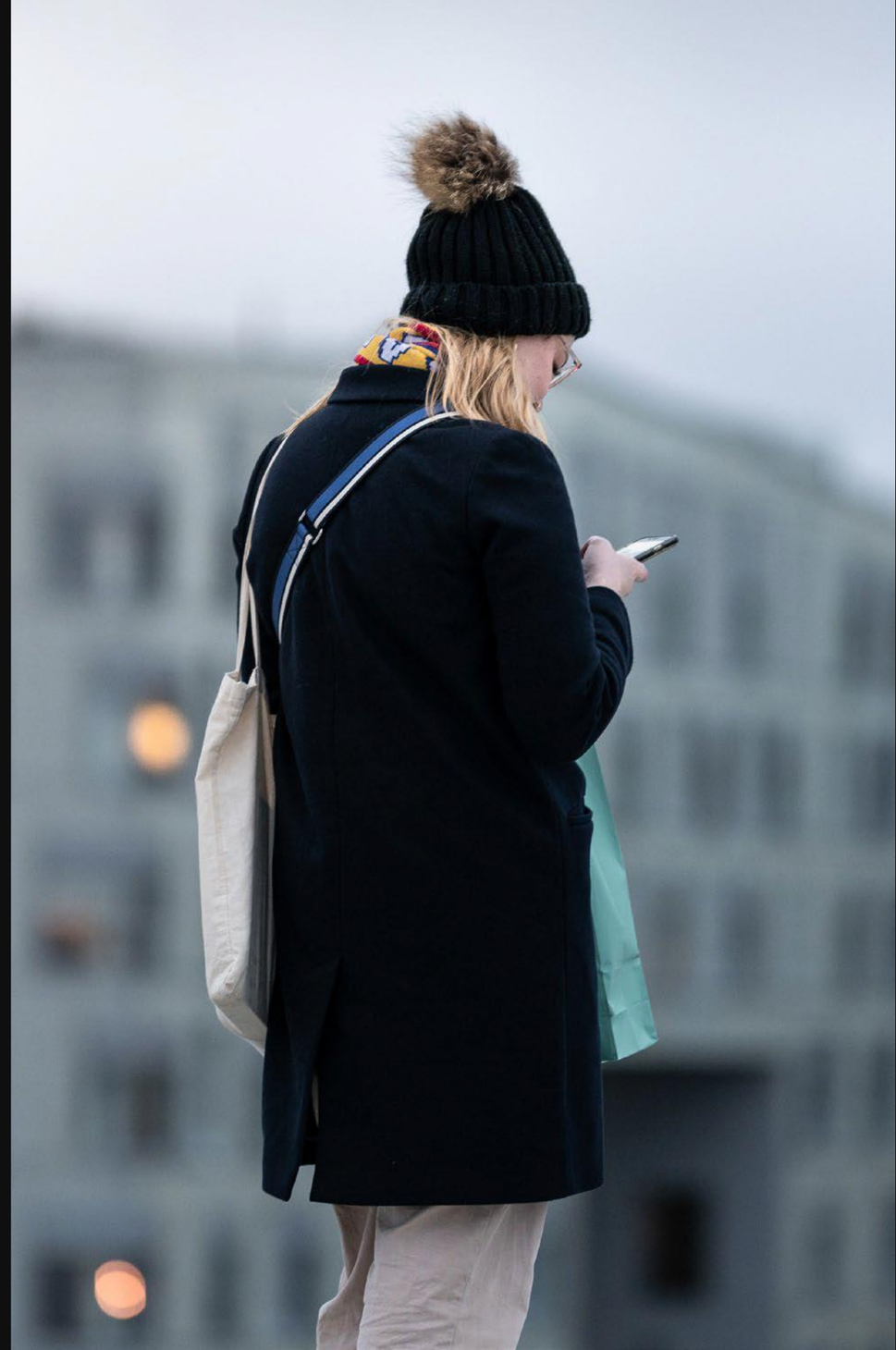
$1.1 Trillion
global mobile wireless services market

5.5 Billion
mobile phones and devices moving in and out of coverage

44%
global population without cellular broadband

~90%
of Earth's surface without cellular coverage

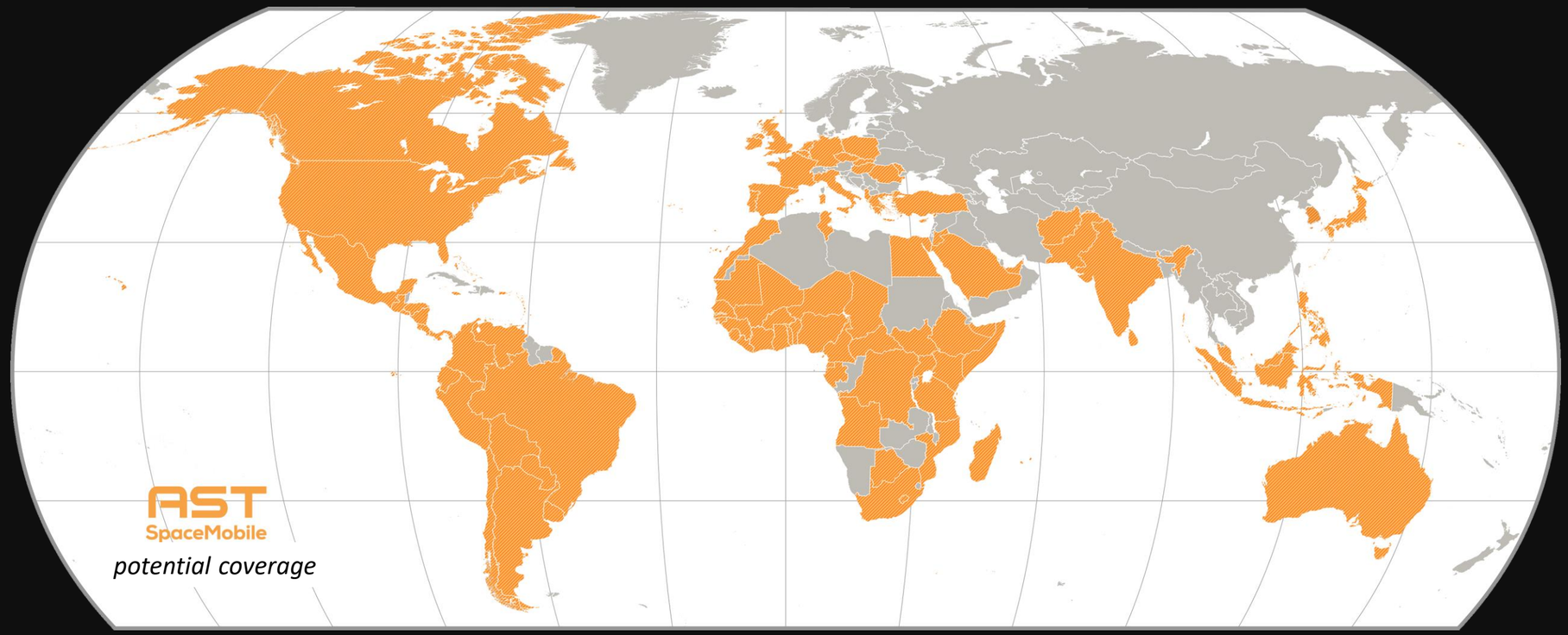
$67 Billion
8-yr expected demand for satellite direct-to-device communications [1]



Source: GSMA market data as of December 31, 2022.
1. Represents 2023-2030 cumulative estimated demand, per Northern Sky Research.

Top Mobile Network Operators (MNOs) are AST investors, partners *and* customers

When operational, SpaceMobile service will be available to MNOs on a wholesale basis, with existing relationships spanning nearly all large countries (ex. China/Russia)



Strategic Investors

vodafone · American Tower · Rakuten · Samsung Next · Bell

Select MNO Partners

vodafone · AT&T · Bell · Rakuten · orange · Telefónica · MTN · Smart · Liberty Latin America · africell · Indosat ooredoo · Telecom · Telstra · smartfren. · TIM · tigo · etisalat by e& · Globe · zain · stc

BlueWalker 3 Test Satellite

History made:
First-ever space-based voice calls using everyday unmodified smartphones

The first voice call was made from the Midland, Texas area to Rakuten in Japan over AT&T spectrum using a Samsung Galaxy S22 smartphone

vodafone

"Today, we have taken another major step in mobile communications. 30 years after Vodafone sent the world's first text message, we supported AST SpaceMobile in successfully making the first ever direct-to-smartphone test call using satellite communications. This is just the start. As a lead investor in AST SpaceMobile, we will continue to break technological boundaries by connecting many more millions of people across the planet when the service becomes commercially available."

—Margherita Della Valle, CEO

AT&T

"AT&T's heritage began with the birth of the telephone 147 years ago and has continued with many other firsts including: trans-continental call, overseas call, call from the moon, and partnering to deliver the only network built with and for America's first responders. We connect people to greater possibility, and this important milestone with AST SpaceMobile is a big step and we can't wait to see what's next in our space-based journey."

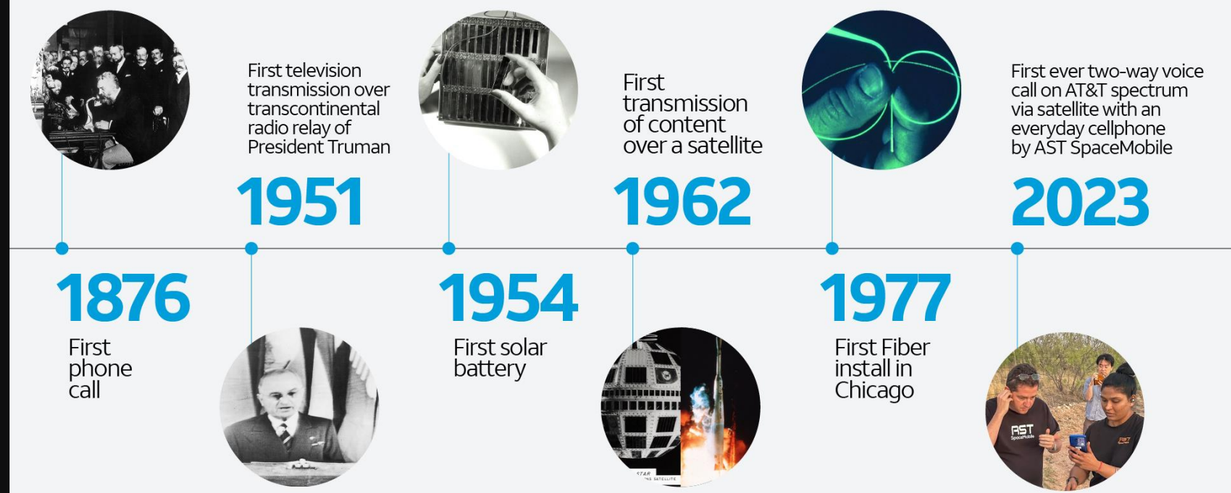
—Chris Sambar, Head of AT&T Network

Rakuten

"It was a unique thrill and honor to have the Rakuten team talk with Abel in a world-first direct-to-satellite experience. Congratulations to AST SpaceMobile and all of its strategic collaborators on this groundbreaking event. As technological advancements like space connectivity become possible with pioneers like AST SpaceMobile, Rakuten will also progress even further along the road to democratizing connectivity for all."

—Mickey Mikitani, Chairman & CEO

AT&T Milestones

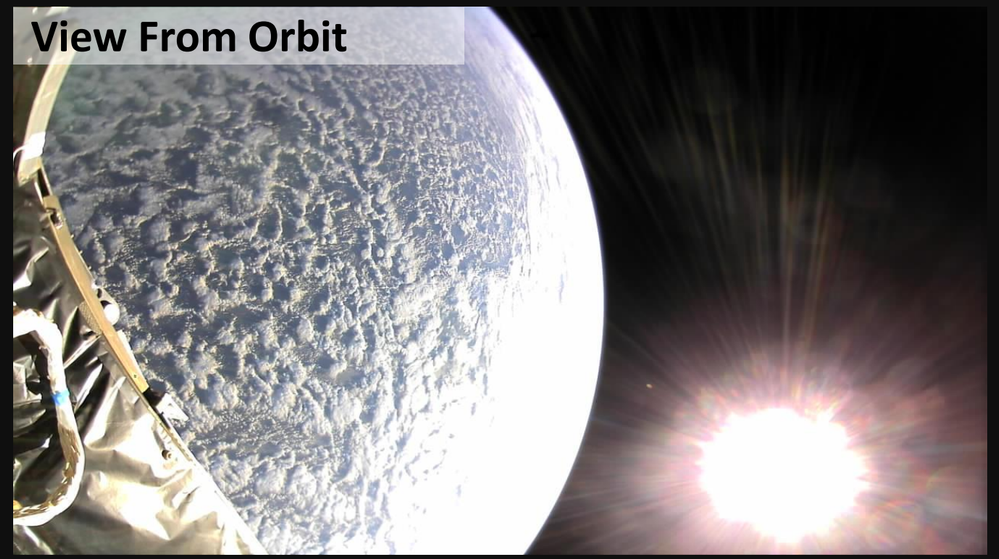


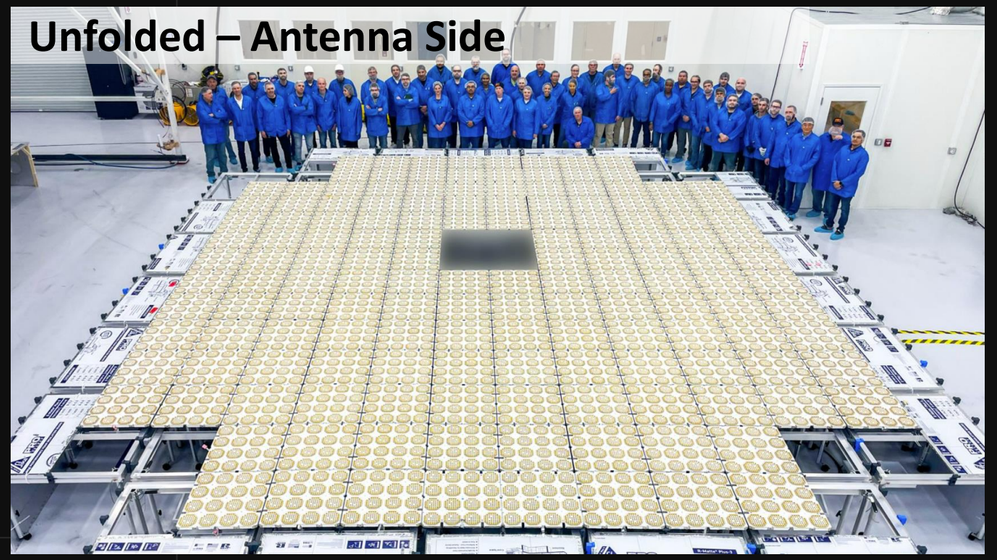
Source: AT&T.

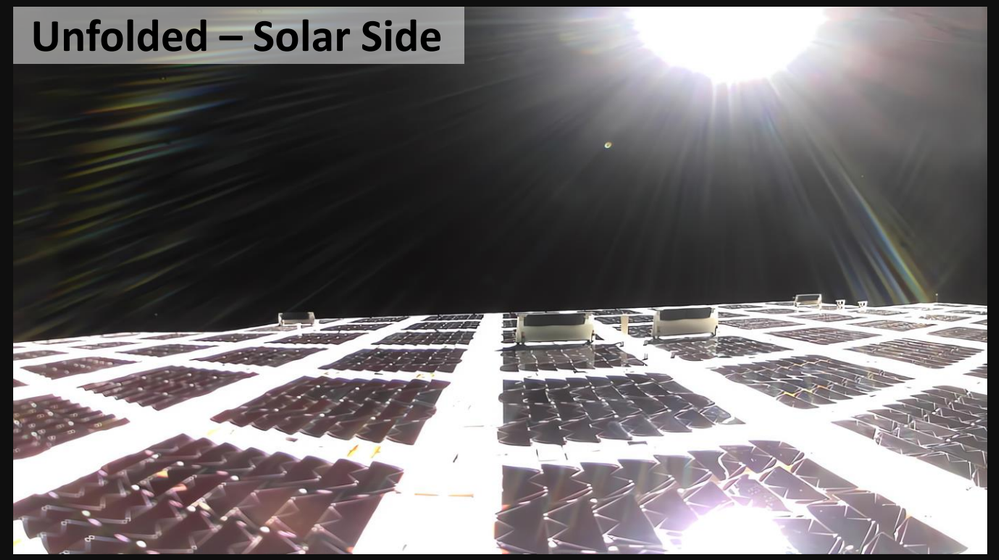
Critical technology milestone achieved with deployment of 693 sqft comms array in low Earth orbit

Click here to see how we assembled, launched and deployed BW3, and click here for an overview of the mission

BlueWalker 3 is the largest-ever commercial communications array deployed in LEO





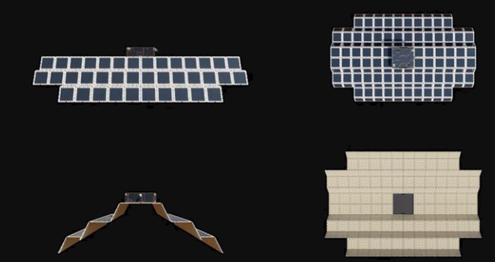


BlueWalker 3 test satellite update

First voice call has been completed, and test results confirm signal strength necessary to reach 4G / 5G cellular broadband speeds

Satellite Deployment

✓ Deployed the largest-ever commercial communications array in low Earth orbit

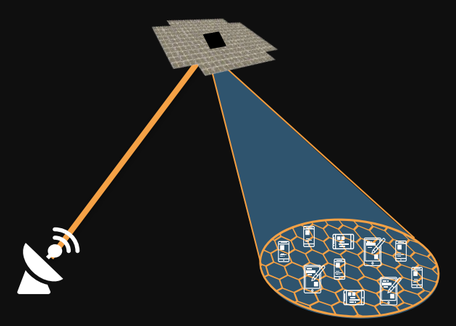


Satellite Flight Control

✓ Proven ability to fly and control BW3 with fully deployed array (693 sq ft)

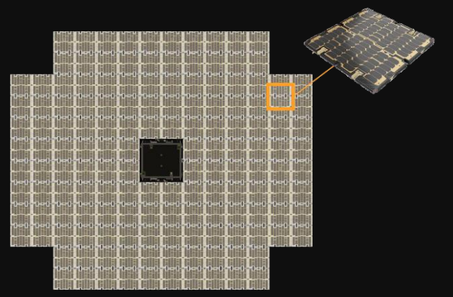
Patented Technology

✓ Validated our patented doppler and delay compensation



End-to-End Testing

✓ First space-based mobile phone call using everyday smartphone

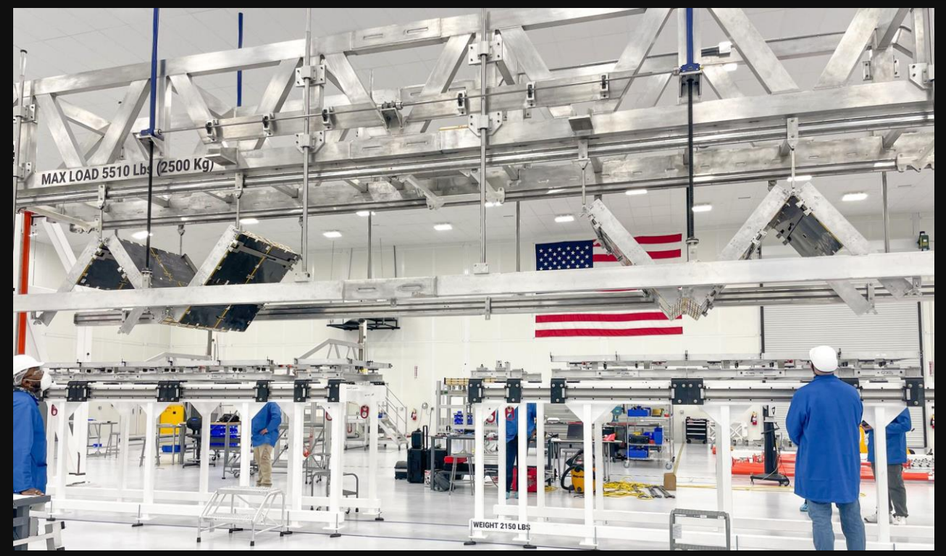


Vertically integrated manufacturing to support rapid constellation build

Two locations in Texas with combined 185,000 sq ft and potential capacity to produce up to 6 satellites per month using automated processes

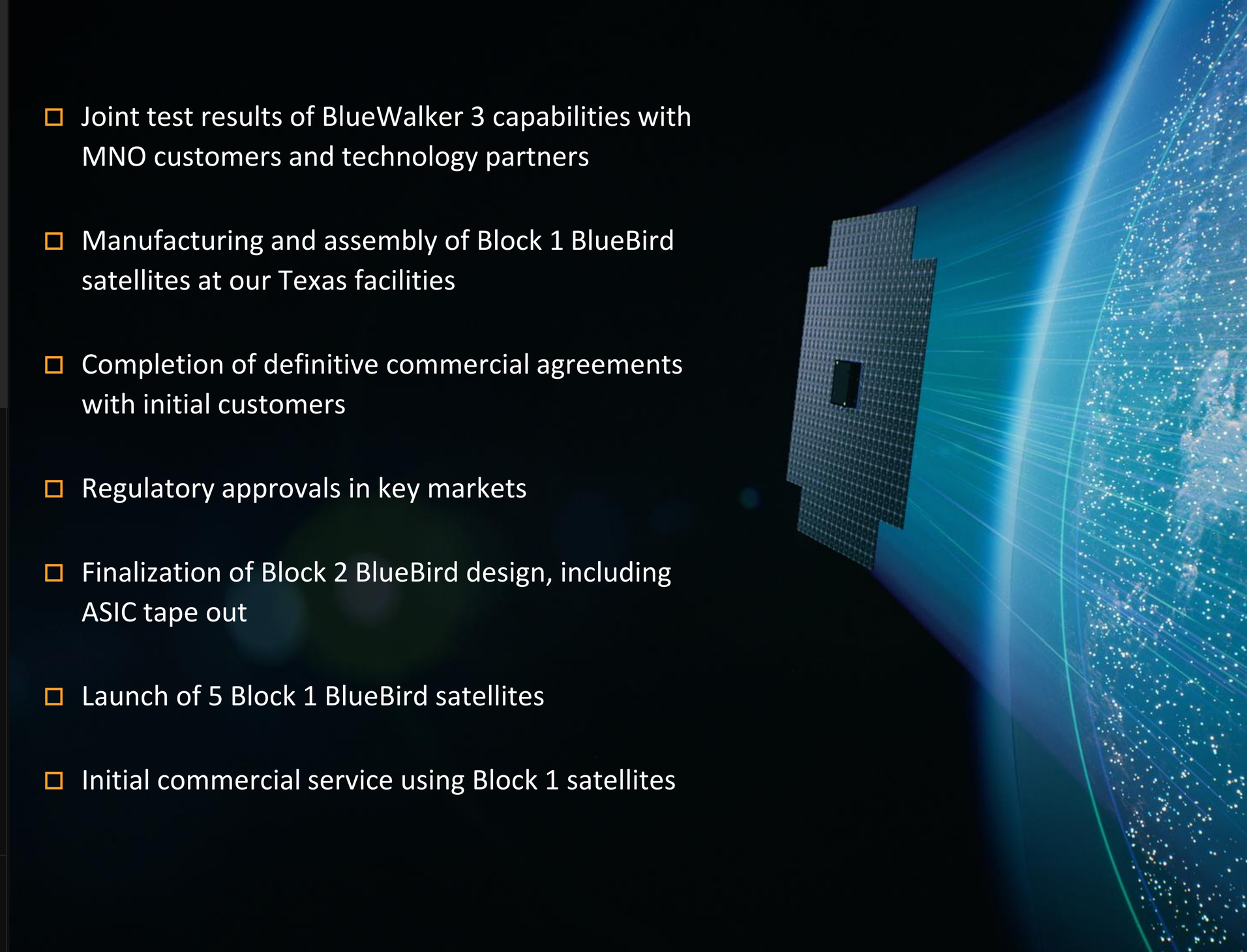
Headquarters

Site 2



Key future milestones to reach initial space-based cellular broadband commercial service

- Joint test results of BlueWalker 3 capabilities with MNO customers and technology partners
- Manufacturing and assembly of Block 1 BlueBird satellites at our Texas facilities
- Completion of definitive commercial agreements with initial customers
- Regulatory approvals in key markets
- Finalization of Block 2 BlueBird design, including ASIC tape out
- Launch of 5 Block 1 BlueBird satellites
- Initial commercial service using Block 1 satellites



AST SpaceMobile differentiation

- Only pure play, low Earth orbit (LEO) broadband communications company that is publicly-traded
- Novel technology solution applicable to a market of 5.5 billion mobile phones and devices and the related $1.1+ trillion TAM [1]
- Jointly going to market, not competing, with mobile network operators with hundreds of millions of subscribers
- Revenue share business model designed to allow users to sign up with a simple text message
- Approximately $186 million cash and cash equivalents to fund business operations and initial production satellites [2]

1. AST SpaceMobile market size based on GSMA Intelligence estimate of total cellular wireless market spend. As of December 31, 2022.
2. Cash and cash equivalents as of March 31, 2023.

Appendix

Company snapshot

Founder-led leadership and deep team with decades of successful execution

Global Infrastructure

Midland HQ / Manufacturing Facilities

Maryland Satellite Operations and Network Operations Center / Space Assembly Lab

Israel RF/Hardware Design

Spain Mechanical Design

United Kingdom Manufacturing/ Support

India Research & Development

Abel Avellan

Chairman and CEO

- 25+ years space industry experience
- Co-inventor of 21 U.S. Patents
- Former Founder and CEO of EMC (Emerging Markets Comms.) until $550mm sale in 2016
- Provided initial seed capital for AST SpaceMobile

Sean Wallace

Chief Financial Officer

- 25+ years senior management and banking experience
- Prior CFO and Treasurer of Cogent Communications
- Former banking leadership positions at Standard Chartered Bank and J.P. Morgan

Scott Wisniewski

Chief Strategy Officer

- 15+ years of M&A / financing experience
- Previously Managing Director, TMT Investment Banking at Barclays
- Advised AST on its $110mm Series B in 2019 and the SPAC merger / PIPE financing in 2021

Brian Heller

General Counsel and Secretary

- 20+ years of public company legal experience
- Prior General Counsel of Castle Brands Inc.
- Former Partner practicing Corporate and IP law

Chris Ivory

Chief Commercial Officer

- 25+ years in satcom, business development and government / regulatory affairs
- Led Commercial Business Unit as EVP Globecomm
- Former SVP of Satellite Land Services at EMC

Dr. Huiwen Yao

Chief Technology Officer

- 30+ years RF engineering + satcom
- Prior: Northrop Grumman Innovation Systems (Orbital ATK)
- 40+ GEO satellites built

Dr. Ray Sedwick

Chief Space Scientist

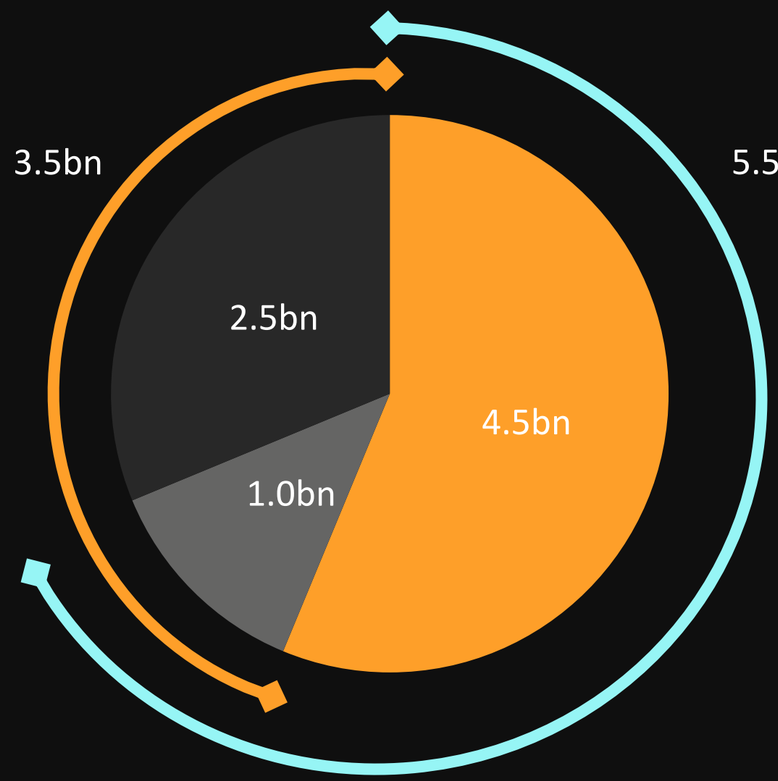
- Director, Space Power and Propulsion Lab at University of Maryland
- NASA Innovative Advanced Concepts Fellow

5.5 billion mobile phones and devices globally

Source: GSMA Intelligence (data as of December 31, 2022).

Global wireless services market generates over $1.1 trillion in annual revenue, with a backdrop of evolving and imperfect networks

Global Population – 8.0 billion



5.5 billion unique cellular subscribers → *move in and out of coverage as they live, work and travel*

3.5 billion not subscribed to cellular broadband
- → *0.4 billion have no coverage*
- → *3.1 billion usage gap*

AST SpaceMobile technology solution

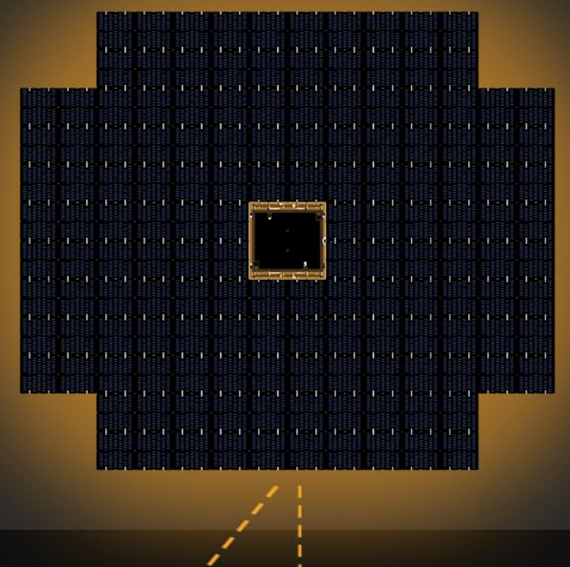
Differentiated approach compared to existing space-based communications

	First & Only Broadband Direct To Mobile Phones	**Direct via Proprietary Mobile Phones**	**Indirect via Complex, Expensive Hardware**
	AST SpaceMobile 		
	Any standard mobile phone	Provider-specific satphones (~$1K)	Provider-specific antennas mounted on planes, ships, vehicles, buildings (~$1K-$200K+)
End Users	Mass market mobility and the unconnected	Narrowband service on satphones	Enterprise, Maritime, Aviation, Government, Residential
Market Size [1]	**> $1 trillion**	**< $2 billion**	**< $20 billion**

1. Market size based on the sum of 2020A revenues of included providers, AST SpaceMobile market size based on GSMA estimate of total cellular wireless market spend.

Satellite-to-cellular architecture is transparent to end-user

SpaceMobile network designed to closely mirror terrestrial cellular architecture



Satellites in low Earth orbit to offer low-latency and attractive look angles

Large satellites designed to create over 1 million fixed terrestrial cells globally with broadband capacity

Low- and mid-band frequencies shared with wireless operators on non-interference basis

High-throughput Q/V-band feeder links for backhaul

Direct link to unmodified mobile phones and other cellular devices

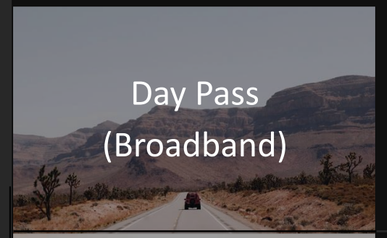
Gateways / Partner Network

Terrestrial Telecom Network

How subscribers are expected to use SpaceMobile

Service designed to be compatible with the 5.5 billion existing mobile phones and devices in use globally today

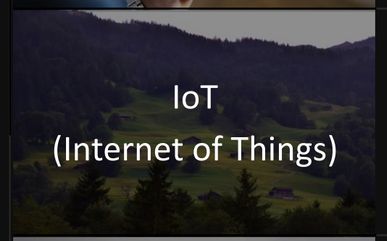
Significant flexibility in go-to-market strategy, with multiple potential ways for cellular subscribers to access more and better connectivity



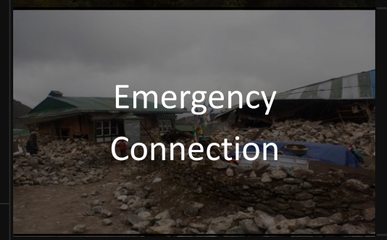
- Subscribers receive a text on their phone asking if they would like to turn on SpaceMobile service

- A fixed monthly rate to add SpaceMobile as a supplemental service to existing cellular plan
- Automatically connect with SpaceMobile's network upon entering an area without cell tower coverage

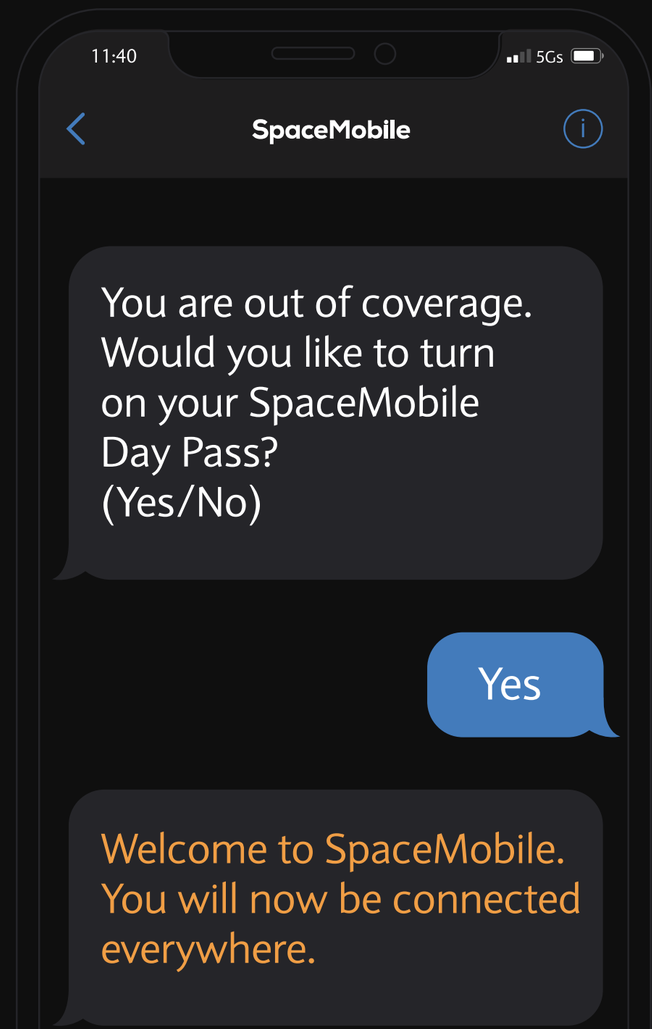
- Same as consumer, but with more data targeting power users



- Uplink / downlink for cellular compatible IoT devices, for areas with poor terrestrial connectivity



- Subscribers would use SpaceMobile during emergencies and natural disasters when terrestrial networks are not nearby or have failed



Track record of attracting strategic investment

Milestone driven, value-creating financing approach with validation from a high-profile strategic investor base across the wireless ecosystem

Select Investors	Rounds Participated	Investment ($mm)
Rakuten	2	$104
Vodafone	2	$35
American Tower	2	$31
Cisneros	2	$12
Bell Canada	1	$10
Samsung	1	$1

1. Representative of $75 million of gross proceeds from November 2022 follow-on offering, $13.4 million of net proceeds from committed equity facility ("CEF") as of December 31, 2022 and $20.0 million of net proceeds from at-the-market offering program as of December 31, 2022.
2. On September 6, 2022, AST SpaceMobile completed the sale of its 51% interest in its former subsidiary, NanoAvionika UAB ("Nano") for net proceeds of approximately $26.6 million

AST

SpaceMobile