

FACTS

SITUATION OVERVIEW

• New Providence Acquisition (“NPA”) entered into an agreement to buy AST & Science (“ASTS”) on December 16, 2020; at the \$10 deal price, the pro-forma EV is \$1.4BN after giving effect to \$232MM in Trust Proceeds and a \$230MM PIPE – there is **no debt** • Cash proceeds will fund Phase 1 of ASTS’s constellation • ASTS is embarking on an ambitious plan to deploy its patented technology that allows direct-to-device 5G mobile service from its constellation of low-earth-orbit (“LEO”) satellites • With a large global market opportunity, ASTS is positioned as a “tower company in the sky” and benefits from partnerships and investment from customers, device manufacturers, and would-be competitors

PRODUCT

• ASTS is building the first-of-a kind and **only** space-based cellular broadband network that is **direct-to-device**; a consumer’s existing handset will work with ASTS’s service in tandem with traditional terrestrial mobile service - ASTS also works with IoT enabled devices • The constellation utilizes low and mid-band frequencies shared with partners on a non-interference basis; ASTS does not use mobile satellite spectrum but instead delivers service over spectrum allocated for terrestrial mobile use • ASTS utilizes high throughput backhaul to terrestrial networks • The service will eliminate coverage gaps, is compatible with all phones, provides broadband data speeds, and is accessible via one-click on a user’s device

MARKET

• ASTS is targeting the large mobile 5G market, specifically in markets where terrestrial infrastructure (e.g. towers) is less developed • ASTS is a beneficiary of the following secular trends: i) falling launch costs, ii) high smartphone penetration, iii) broadband demand iv) 5G IoT proliferation • ASTS cites 3.3BN people who are covered but not connected to cellular broadband and another 700MM people who are not covered by existing networks and not connected • Key regional opportunities include India, Africa, and Equatorial regions • The service is well-suited for low/medium density sites as well as for emergency back-up during natural disasters

MANAGEMENT

• CEO Avellan holds 18 patents and was the founder of Emerging Markets Communications (sold for \$550MM in 2016) • The deep executive ranks include executives from Orbital ATK, Globecom, NASA, and Maxar • The team has 161 scientists and engineers, 34 of whom are PhDs

COMPETITORS

ASTS competes with high-cost legacy providers, including Iridium • Legacy satellite providers require unique handsets for users to connect • ASTS also competes with the build-out of standard terrestrial 5G mobile equipment • Competitor Lynk advertises a similar product but appears significantly behind both with respect to commercial, financial and technical milestones

PRIMARY INFO

• [Investor Presentation](#) • [FCC Docket](#) • [Interview with Cisneros Capital](#) • [CEO Interview](#) • [Rakuten Interview](#)

OTHER

• Investors include Vodafone, Rakuten, American Tower, and Samsung; all are re-upping in the PIPE • ASTS owns 51% of NanoAvionics

TIMELINE

• April 2019 – BW 1 was launched, validating system architecture • 2H 2021E will launch BW3 • 2H 2022E/1H 2023E first commercial launches of 20 satellites for Equatorial coverage, with 110 satellites by YE 2023 and 168 satellites by YE 2024

OPINIONS

SUMMARY

• ASTS is an exciting event-driven story stock with open-ended upside that is cemented in reality by proven entrepreneurs, significant industry backing, and *bone fide* strategic agreements in place that address key commercial aspects of the business • Management funded the seed capital for the business, highlighting their confidence and ‘skin in the game’ • Targeting mobile 5G is a ‘**big idea**’ that augments that excitement generated by fixed-broadband players such as Starlink while addressing the cost accessibility issues that are likely to be present in developing markets • The stock benefits from a dynamic where it cannot be disproven, leaving investors free to speculate and discount key assumptions, including service penetration among partner carriers and ARPU • The investment set-up is favorable since a high capital intensity space venture is poorly suited for private markets, yet requires the capital available in the SPAC market – the set-up is not a ‘foist’ by private market investors onto unsuspecting retail investors but instead a legitimate capital raising exercise that harnessed the SPAC market instead of exploiting it • With 1-year lock-ups on existing investors and PIPE investors, there will be limited free float on account of the small trust size (\$232MM) coupled with the statement of confidence from pre-deal and PIPE investors that rolled over in what amounted to a “public Series C” financing • Given future CAPEX, Wall Street banks will see a large future banking opportunity and likely initiate favorable coverage on the Company

RISKS

• While the *BlueWalker* satellite provided proof-of-concept, there are questions around whether ASTS will work at scale when the constellation is deployed • Users might experience significant battery drain on their devices when using the service, reducing appeal for full tower placement • Realized user penetration and ARPU remain uncertain as well as the ability to raise future capital for full system deployment at prices that avoid excessive dilution • ASTS will depend on capital markets to fully fund its growth and is susceptible to potential funding risk

CHECKLIST

BUSINESS MODEL

• ASTS will receive a 50/50 revenue split with its carrier partners including Vodafone and AT&T; given its large, fixed cost base, the Company expects to generate 90% asset-level EBITDA margins that provide significant operating leverage and cash flow

GO-TO-MARKET

• In-place binding agreements with carriers provide ASTS with access to >1.3BN existing customers without having to independently market to or acquire customers (or directly bear the cost of churn) • Phase 1 will target key Equatorial regions and cover 1.6BN people; subsequent phases expand into Europe and N. America – the total system will require 168 satellites by 2024

DEFENSIBILITY

• ASTS has 750+ patents as well as a first-mover advantage • Commercial progress reinforces the Company’s technical lead in the market

CAPITAL

• ASTS is capital intensive and subject to capital availability to complete its full system • Once the constellation is complete, the Company benefits from extreme operating leverage and should have extremely high cash flow conversation

TRACTION

• ASTS appears to have extraordinary commercial partnership traction, however, it is yet unclear what end-user uptake the usage will be • Technical traction was ‘proved’ by the April 2019 launch of the *BlueWalker 1* test satellite

FINANCIALS

• Phase 1 will cost \$510MM (20 satellites) while the total global network will cost \$1.7BN (168 satellites) • ASTS’s projections are based on having ~375MM subscribers by YE 2027 • ASTS has previously raised \$128MM • Company projections are below

Existing Owners	Class	As-Converted Shares
Abel Avellan	Class C	78,363,076
American Tower	Class B	2,170,657
Oscar Garcia	Class B	12,181
Inverat	Class B	3,332,521
Rakuten	Class B	28,520,955
Samsung Next	Class B	361,769
Thomas Severson	Class B	1,535,165
Vodafone	Class B	3,044,454
Subtotal		129,795,390
SPAC Ownership		
NPA Class A	Class A	23,000,000
NPA Class B	Class A	5,750,000
NPA A Warrants	Class A	11,500,000
NPA PP Warrants	Class A	5,300,000
PIPE	Class A	23,000,000
Subtotal		68,350,000
Total SOS		199,145,390
ESOP Outstanding		
SpaceMobile Warrants		11,858,354
ESOP Available		8,300,000
		12,812,357
Fully-Diluted		229,321,291

\$MM except ARPU	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Cumulative Satellites Deployed		20	110	168	168	168	233
Subscribers (Equatorial)			5	17	41	81	115
Monthly ARPU			\$1.03	\$1.03	\$1.03	\$1.03	\$1.03
Equatorial Revenue			\$62	\$210	\$507	\$1,001	\$1,421
Subscribers (Global)			4	27	67	153	258
Monthly ARPU			\$2.67	\$2.62	\$2.62	\$2.62	\$2.66
Global Revenue			\$128	\$849	\$2,106	\$4,810	\$8,235
Total Subscribers			9	44	108	234	373
Monthly ARPU			\$1.76	\$2.01	\$2.02	\$2.07	\$2.16
Total Revenue			\$190	\$1,059	\$2,613	\$5,811	\$9,657
Less: OpEx		(\$36)	(\$47)	(\$51)	(\$56)	(\$81)	(\$102)
EBITDA		(\$36)	(\$47)	\$139	\$2,548	\$5,730	\$9,555
Less: Equatorial CAPEX		(\$114)	(\$132)	(\$3)		(\$76)	(\$184)
Less: Global CAPEX		(\$9)	(\$458)	(\$925)		(\$4)	(\$448)
Unlevered FCF		(\$159)	(\$697)	(\$789)	\$1,003	\$2,548	\$5,650

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