

Data last reviewed 06-Sep-17

## Audacy

Audacy is headquartered in Mountain View, California. Audacy was launched in 2015 by a team of Stanford graduates, a SpaceX veteran, and NASA award winners. The company seeks to provide highly operable connectivity via satellites in space. Audacy is a space communications service provider. Their space-based data relay system will go live in 2019, with initial ground-based services launching in 2017. Audacy provides spacecraft and launch operators with continuous space communications access and latency under 1 second.

## Audacy makes money by

charging businesses per bit (e.g. \$4/gigabit) with dynamic pricing discounts.

#### **Founder Profile**

Audacy was founded by  $\underline{Ralph\ Ewig}^{[1]}$ ,  $\underline{Sam\ Avery}^{[2]}$ , and  $\underline{James\ Spicer}^{[3]}$  in 2015 in Mountain View, California.

- Ralph Ewig has served as co-founder and CEO of Audacy Corporation since April 2015. He was previously the VP of Avionics at Aerojet Rocketdyne, VP Engineering of Aerojet, Mission Operations Engineer at Space Exploration Technologies, Partner and Chief Engineer at Holder Aerospace, Senior Engineer at AirLaunch, and Principal Engineer and Project Manager at Andrews Space. He was additionally a Project Manager and System Engineer at the university of Washington. He has over 20 years of work experience. He was a MSx/Sloan Fellow at the Stanford Graduate School of Business from 2014-2015. He holds a BS, MS, and PhD in Aeonautics and Astronautics.
- James Spicer has served as co-founder and Chief Engineer at Audacy since September 2014. He holds a BS and MS in Aeronatuics and Astronautics from Stanford University (2011-2015).
- **Sam Avery** has served as co-founder and Head of Spacecraft Integration at Audacy Corporation since March 2015. He previously was a Plasma Propulsion Research at Stanford University (2014-2015), a Propulsion System Intern at Lockheed Martin, a Project Manager on the UCSD Microgravity Team at NASA. He held internships at San Diego Composites, Inc. and Ground Floor Prototypes, was a Speaker Relations Chair at

TEDxUCSD at TEDx Conferences, was a Researcher at Calit2 Summer Scholars at The Qualcomm Institute, and a Section Leader in Engineering and Graphics Design at UC San Diego. He holds a BS in Aerospace, Aeronatuical, and Astronautical Engineering from the University of California at San Diego, and studied **Aerospace Engineering at Stanford University (2014-2016)**.

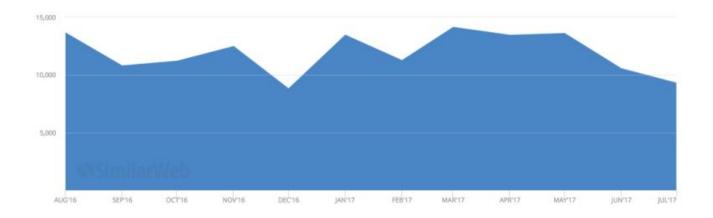
- 1. Ralph Ewig https://www.linkedin.com/in/ralphewig
- 2. Sam Avery https://www.linkedin.com/in/savery2
- 3. James Spicer https://www.linkedin.com/in/jpwspicer

### HR Situation and Reviews

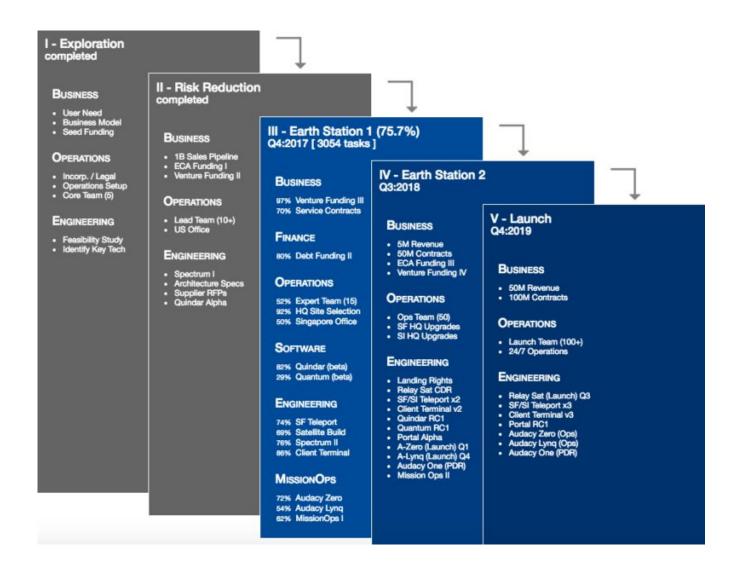
- Audacy has 10 employees, 4 of whom are in executive positions. All employees are based in the US.
- From their staff, 70% is dedicated to research and development, while no employees are focused on sales and/or marketing.
- Audacy is  $\underline{currently\ hiring}^{[1]}$  for 3 positions, including International Development Lead, Signal Processing and Flight Software Engineer, and Head of Business Development. The company has not hired any new employees in the past 4 months.
- There are 7 reviews available about Audacy on employee review website <u>Glassdoor</u> [2], with an average rating of 4.7/5.0. The rating for the CEO, in particular, is 79% approval of them and their job performance. Examples from a positive review include "Working with a team of such motivated and brilliant thinkers has truly been motivating. The natural passion this group has for the work we are doing is something not seen very often, and its been an amazing opportunity to be a part of this journey." Another employee has stated:
  - "No intellectual property partly because core business is neither hardware nor software (i.e. high risks for growth)."
  - "High infrastructure investment with weak revenue or ROI model (i.e. high risks for job security)."
  - "Inexperience in satellite manufacturing/design and vendor management (i.e. high risks for skills development)."
  - "CEO micro-manages everything from purchasing trash can, defining logo design/font width, floor plan to farewell gift."
- 1. currently hiring https://audacy.space/careers
- 2. Glassdoor https://www.glassdoor.com/Overview/Working-at-Audacy-EI\_IE1187505.11,17.htm

## **Business and Marketing Strategy**

- Audacy is targeting companies with satellites in orbit who are seeking to receive data updates continuously instead of every few days.
- The company bills their customers similar to a mobile phone operator billing for a prepaid phone plan. customers pre-purchase network use and repurchase additional use after they run out. Pricing is per bit (e.g. \$4/gigabit) with dynamic pricing discounts on three axis: (1) the number of platforms in their fleet, (2) the amount of data purchased in one transaction, and (3) the capacity remaining on the Audacy network at the time of purchase.
- Ewig's goal is <u>reportedly</u><sup>[1]</sup> to provide a network similar to NASA's Tracking and Data Relay Satellite (TDRS) system, which was built for the space shuttle and is now used for the International Space Station (ISS) and for supporting robotic cargo ships, such as SpaceX's Dragon capsule.
- Audacy has partnered with NASA and Center for the Advancement of Science in Space (CASIS), which manages the commercial use of the International Space Station (ISS). In August 2017 CASIS <u>awarded</u><sup>[2]</sup> Audacy a grant to test radio on space station.
- Potential customers include 6 primary segments driven by applications: (1) non-geostationary (NGSO) satellites primarily used for Earth Imaging, (2) launch vehicles which can be both orbital and suborbital, (3) deep space users who operate beyond Low Earth Orbit (LEO), (4) smallsats based on the CubeSat form factor, (5) constellations of LEO satellites, and (6) Human occupied vehicles.
- Audacy won the top prize out of 200+ entrants in the Stanford University BASES startup competition in 2015. The startup received \$25K from this competition.
- The company has not yet expanded from their home country of the US.
- The company has one employee dedicated to BD, the CEO, and no employees working in marketing or sales. However, 2 of 3 open positions are for BD related positions.
- Audacy. Space has seen 142,956 visits over the past 12 months, from August 2016 through July 2017. The majority of web traffic is coming from the US (93%), France (1%), and Germany (1%). The image below is taken from Similar Web.



- Below you can see the company's roadmap for their vision for product's timeline.



- $1.\ reportedly-https://www.space.com/33555-audacy-space-communications-satellites-moon.html$
- 2. awarded http://spacenews.com/casis-awards-audacy-grant-to-test-radio-on-space-station/

### **Investor Positions**

- According to Space.com[1], around August 1, 2016, California-based Audacy planed to close a Series A fundraising round of at least \$15 million to begin creating three satellites and two Earth stations. The goal is to raise four major rounds of funding, build the ground stations and get the satellites launched by 2019. All told, the plan will cost about \$750 million — \$250 million in funding and \$500 million more in government-backed debt. Audacy representatives said. However, the company has not disclosed raising these funds. It is unclear whether or not Audacy raised \$15M in a 2016 round.
- In August 2015 the company raised \$2 million last August in seed funding from several investors, led by Europe's Metatron Global Fund and StartX (a Stanford accelerator fund).
- According to the company, Audacy has secured funding from 8 investors across Europe, Asia, the United States, and South America.
- Audacy has disclosed that they only have \$142K in cash remaining as of May 31, 2017, representing less than one month of runway.
- The company is currently raising funds on  $\underline{\mathit{SeedInvest}}^{[2]}$ , with the goal of raising \$3M in a Series A round, with a minimum investment of \$10,000. As of September 6. 2017 the company has raised \$352,328 Raised and there are 25 days left to invest.
- 1. Space.com https://www.space.com/33555-audacy-space-communications-satellites-moon.html
- 2. SeedInvest https://www.seedinvest.com/audacy

### Market Forecast and Exit Indicators

- Audacy is operating in the growing market of satellite networking and communications. According to  $\underbrace{Research\ and\ Markets}^{[I]}$  the US government is the single largest purchaser of commercial satellite services in the world, and accounted for \$1.34 billion in 2015. With a compound annual growth rate (CAGR) of 3.6%, this market is stable but is expected to average \$53.78 million per year through 2022.
  - Market Watch [2] reports that the small satellite market is estimated to be \$2.92 billion in 2017 and will reach \$7.53 billion by 2022, at a CAGR of 20.83%. Based on

type, mini satellite segment and Based on end user, the commercial segment is expected to lead the market while North America account for the largest share.

- <u>Fortune</u><sup>[3]</sup> reports that **venture capital firms invested \$1.8 billion in commercial space startups in 2015**, nearly doubling the amount of venture cash invested in the industry in all of the previous 15 years combined.
  - These investments included a \$1 billion investment in Elon Musk's SpaceX from Google and Fidelity, a \$500 million funding round by satellite communications company OneWeb, and significant investments by Amazon founder Jeff Bezos in space launch startup Blue Origin.
  - The study also found that more than 50 venture capital firms invested in space companies in 2015, signaling that venture capital has warmed to a space industry it has long considered both too risky and too slow to yield returns.
  - From 2000 through 2015, space startups reeled in \$13.3 billion in investment cash, including \$2.9 billion in venture capital. A full \$1.8 billion—or roughly two-thirds—of that venture capital was invested last year alone. The influx of all that VC cash suggests a shifting perception among investors.
- There are not currently indications that the company is preparing for an exit.
- 1. Research and Markets http://www.researchandmarkets.com/research/6m6gjk/us\_government\_and
- 2. Market Watch http://www.marketwatch.com/story/small-satellite-market-growing-at-a-cagr-of-2083-during-2017-to-2022---reportsnreportscom-2017-06-07-1220318
- 3. Fortune http://fortune.com/2016/02/22/vcs-invested-more-in-space-startups-last-year/

## **Competitive Position**

Audacy is operating in a crowded space with many companies offering similar solutions. While there are many companies providing similar services, many of these companies provide services to a niche market or are much bigger and/or established with a much larger product offering and much more monetary backing. Among the potential competitors, we have identified the most direct as  $\underbrace{Kepler\ Communications}^{[1]}$ .

- **Kepler Communications** was founded in 2015, is headquartered in Toronto, Canada, and has 14 employees according to LinkedIn. Their staff is spread between Canada (14) and the US (1), and 50% is dedicated to R&D while 14% is dedicated to Sales/Marketing. Kepler Communications is a satellite communications company that is working towards establishing an in-space telecommunications network for space-borne assets. This infrastructure will resolve the problem of intermittent connectivity for non-geostationary

satellites, will open new business opportunities that necessitate real-time connectivity to satellites, and will reduce reliance on costly and difficult to deploy ground infrastructure.

The company has raised \$5.1M across 2 rounds from 8 investors. The below graph, taken from SimilarWeb, shows the comparative web traffic between  $\underbrace{Audacy.Space}^{[2]}$  and  $\underbrace{KeplerCommunications.com}^{[3]}$  from August 2016 through July 2017.



- Indirect competitors include SpaceX, Boeing, ViaSat, Telesat, Theia Holdings, Leosat, Space Norway, OneWeb, and Karousel LLC.
  - Both SpaceX and OneWeb have said they intend to start getting their satellites launched within the next year or so, with the first phase of operations due to begin in 2019.
- 1. Kepler Communications https://www.zirra.com/spotlight-report/kepler-communications
- 2. Audacy.Space https://audacy.space
- 3. KeplerCommunications.com http://www.keplercommunications.com/

#### In a Nutshell

- Audacy is a provider of spacecraft communications services. Their space-based relay system provides continuous connectivity for spacecraft and launch operators.
- The company has raised an undisclosed amount of funding in one funding round in August 2015. Audacy raised funds from DHVC (Danhua Capital), InnoSpring Seed Fund, Metatron Global, and Scrum Ventures.
- Audacy won the top prize out of 200+ entrants in the Stanford University BASES startup competition in 2015. The startup received \$25K from this competition.

- In June 2017 Audacy applied to the FCC granted OneWeb regulatory approval to operate in the United States and is reportedly planning low-Earth-orbit constellations to provide broadband internet service. Other applicants included SpaceX, SES/O3b and Intelsat, the applicants are said to include Boeing, ViaSat, Telesat, Karousel LLC, Space Norway, Theia Holdings, and LeoSat.
- Audacy charges business per bit (e.g. \$4/gigabit) with dynamic pricing discounts on three axis: (1) the number of platforms in their fleet, (2) the amount of data purchased in one transaction, and (3) the capacity remaining on the Audacy network at the time of purchase.

## Zirra's Ratings

Product	8.2
Team	8.3
Momentum	8.8
Execution	8.7
Vision	8.2
Market	8.4
Overall	8.4

## Pros & Cons

#### Success Factors

Audacy is in an industry which is predicted to grow rapidly within the next few years.

Audacy has invested in bringing team members with extensive experience and expertise on board.

One or more founders of Audacy have extensive, successful experience in the relevant professional field.

#### Possible Risks

► The company's final product hasn't been launched yet. Therefore, it may be difficult to

assess the extent of market fit and user adoption.

- There are many existing companies already in the market space. Audacy must display a strong differentiating factor in order to surpass the clutter.
- Competitors in the space have a significantly higher quantity of relevant patents registered. The company claims to have IP, but has not yet registered any patents.

## Competitors

Direct Competitors
Kepler Communications
Indirect Competitors
SpaceX
Boeing
ViaSat
Telesat
Theia Holdings
Leosat
OneWeb
ViaLight Communications
Spidersat Communications

# **Investment History**



\$2M 09/30/2015 DHVC (Danhua Capital) InnoSpring Seed Fund Metatron Global Scrum Ventures



Raised: \$2M

# Zirra Insights

## **Benchmarked Metrics**

### **Benchmarked Valuation**

#### \$20M-\$25M







Standard

High

Outstandin

#### Benchmarked Exit Valuation

#### \$25M-\$30M







Solid

Strong

Exceptional

## Exit Window of Opportunity

#### 4-6 Years









Long haul

Norma

Ouick

Very quick

### **Exit Probability**

20-30%

## **Facts**



Keywords

Satellite Communications | Satellite-Servicing

Location

Mountain View, United States

Active

## 2-3 years (Founded in 2015)









ew

young

vetera

#### **Business Model**

## Transaction Fee, B2B

#### In the News



Monitoring LEO Assets with a MEO Relay Network http://www.satellitetoday.com/newspace/2017/08/23/monitoring-leo-assets-meo-relay-network/ 08/23/2017



CASIS awards Audacy grant to test radio on space station http://spacenews.com/casis-awards-audacy-grant-to-test-radio-on-space-station/ 08/17/2017



Clyde Space secures latest satellite contract award http://www.insider.co.uk/news/clyde-space-secures-latest-satellite-11005541 08/17/2017



SpaceX's broadband internet satellite plan reportedly runs into opposition https://www.geekwire.com/2017/spacexs-broadband-satellite-plan-reportedly-runs-opposition/ 07/17/2017



New Space Startup Audacy Shoots for the Moon https://www.space.com/33555-audacy-space-communications-satellitesmoon.html 07/26/2016

#### Links

- https://twitter.com/audacy
- https://www.crunchbase.com/organization/audacy-space
- https://www.facebook.com/audacyspace
- https://www.linkedin.com/company/6425513
- http://audacy.space

Ralph Ewig

#### The Team

#### **Founders**



James Spicer Co-Founder & Head of Engineering https://www.crunchbase.com/person/james-spicer https://www.linkedin.com/in/jpwspicer



Co-Founder & CEO https://www.crunchbase.com/person/ralph-ewing https://twitter.com/openaerospace https://www.linkedin.com/in/ralphewig



Sam Avery
Co-Founder, Head of Spacecraft Integration
https://www.crunchbase.com/person/sam-avery
https://www.linkedin.com/in/savery2

## Key management



Heather Orsi VP Operations & Finance https://www.linkedin.com/in/heatherorsi/



0-10 Employees

### **Product Stage**



## Geographic markets

## World-Wide

## Company's video

www.youtube.com/embed/PAJj6SkR0-o