



GLOBALSTAR

Dear Fellow Stockholders.

In 2018, we achieved significant milestones as a Company, better positioning us to realize value from our satellite constellation and terrestrial spectrum assets. Focusing first on the satellite business, we significantly improved financial results this year as we grew our total subscriber base to over 750,000 and increased ARPU across all product categories. This growth drove a 15% increase in total revenue, while contributing to a reduction in net loss and an increase in Adjusted EBITDA¹. The 26% increase in Adjusted EBITDA to \$40.6 million marked not only another consecutive year of significant Adjusted EBITDA growth, but also the highest annual amount ever recorded by our Company. We achieved these results in part by expanding our product portfolio with the release of three feature-rich devices in 2018, including one for each major product category. These products included our first Duplex device to operate on our second-generation ground infrastructure, our first two-way SPOT device and our most successful commercial IoT device to date measured by the number of units sold in the months following its launch.

We also made certain changes to our corporate governance structure, including the addition of a Strategic Review Committee and changes at the executive leadership level. The new members of the Strategic Review Committee have substantial operating, spectrum and capital structure experience. This Committee is laser-focused on helping to drive the Company to capitalize on the many opportunities in front of us and fortify our balance sheet. Also, in September, we were thrilled to announce the promotion of Dave Kagan to Chief Executive Officer. Dave has had an extraordinary career in the satellite industry and this success has clearly continued during his time at Globalstar. I remain in my capacity as Executive Chairman of the Board to manage the Company's strategic opportunities, including our efforts related to terrestrial spectrum.

Joining together with other stockholders, we raised \$60 million in a fully backstopped equity financing to secure funding for our December 2018 debt obligations and continue our ongoing compliance with the terms of our Facility Agreement. Thermo's participation continued, contributing over 80% of the net proceeds in the December offering. Placing the company in the best position to realize the substantial value we see in the assets guides our strategy every day. Further strengthening the Company's balance sheet is an integral component of that strategy which we hope to finish in the short-term.

In late 2018, we announced that the Third Generation Partnership Project ("3GPP") approved Globalstar's S-band spectrum at 2483.5-2495 MHz for terrestrial use. The 3GPP standardization approval represents the culmination of intensive standards work driven by our technical team and the wireless industry's support leading to Globalstar's newly designated 3GPP Band 53. On the regulatory front, we continue to make progress on our international plans to globally harmonize our spectrum for terrestrial services. In addition to the U.S., we have received terrestrial authority in several African countries and continue to engage in substantive discussions with numerous other international regulatory agencies. We remain confident in our unique spectrum position and our ability to successfully monetize this asset globally.

2019 OUTLOOK

Dave's vision, though broad and robust, generally centers around utilization of the Company's excess satellite capacity. We can achieve this goal through various initiatives, some of which are in the proof of concept stage, while others have been demonstrated by us for years and are expanding.

¹ See the reconciliation to GAAP net income (loss) following this letter.

Below are certain essential components to our overall strategy, which largely is to evolve into a leading provider of IoT connectivity and execute on various private LTE opportunities:

- We are growing our product and service offerings.
 - Creating a two-way reference design to enable customers to develop their own small bit data solutions, while reducing form factor and lowering product cost of existing devices.
 - Developing derivatives of our Sat-Fi2 device one designed for the maritime industry and another for fixed installation outside of cellular coverage.
 - Upgrading recently launched products to add functionality and improve performance. SPOT-X
 will now have Bluetooth and an enhanced keyboard; Sat-Fi2 is being streamlined to support
 usability; SmartOne-Solar feature sets are being enhanced to address specific customer use cases.
 - o Developing two-way emergency messaging and tracking solution for the automotive market.
 - o Developing a satellite-based wearable tracking device.
- We are expanding our partnership network.
 - Executing a contract with a tier 1 automotive value-added reseller, allowing our entry into the automotive supply chain through their commercial vehicles.
 - Leveraging recent success with a top four U.S. carrier as a value-added reseller of a recently launched industrial IoT product to further address use cases in industry applications, including in the oil and gas market.
 - Working with Nokia on new terrestrial infrastructure and user equipment for them to sell into their customer base.
 - Creating new infrastructure with global small cell leader Airspan for cost efficient access points to deploy in pLTE opportunities.
- We are strengthening our balance sheet.
 - Reducing leverage as evidenced by a significant decrease in our net debt to Adjusted EBITDA ratio in the last two years.
 - Leveraging the role of the Strategic Review Committee and the experience of its members, we are focused on improving our short and long-term liquidity forecast.

One of Dave's first initiatives when he joined Globalstar was ensuring that our service rates were commensurate with the quality of our solutions. His successful leadership of this effort is evidenced by the significant improvement in recurring service revenue over the past few years. My confidence in his ability to successfully execute on our vision for the Company couldn't be higher.

In 2018 we meaningfully enhanced the value of our terrestrial spectrum asset and MSS business. These assets provide solutions to our customers in building a connected world by supporting a variety of diverse use cases. Reflecting on the initiatives described above, each of which support the value prospects of our Company, our Board of Directors and management team are energized and focused on exploiting long-term asset value for our customers and stockholders.

Sincerely,

James Monroe III Executive Chairman Globalstar, Inc.

GLOBALSTAR, INC. RECONCILIATION OF GAAP NET INCOME (LOSS) TO NON-GAAP ADJUSTED EBITDA

(In thousands) (unaudited)

Year Ended
December 31

	December 31,			
		2018		2017
Net loss	\$	(6,516)	\$	(89,074)
Interest income and expense, net		43,612		34,771
Derivative gain		(81,120)		(21,182)
Income tax expense	125 190			
Depreciation, amortization and accretion		90,438		77,498
EBITDA		46,539		2,203
Reduction in the value of inventory		-		843
Reduction in the value of long-lived assets		-		17,040
Non-cash compensation		7,373		5,594
Foreign exchange and other	3,067 2,873			
Loss on extinguishment of debt	- 6,306			
Gain on equity issuance	- (2,670)			
Merger and shareholder litigation costs		10,831		-
Gain on legal settlement		(6,779)		-
Revision to contract termination charge		(20,478)		
Adjusted EBITDA (1)	\$	40,553	\$	32,189

(1) EBITDA represents earnings before interest, income taxes, depreciation, amortization, accretion and derivative (gains)/losses. Adjusted EBITDA excludes non-cash compensation expense, reduction in the value of assets, foreign exchange (gains)/losses, and certain other non-recurring charges as applicable. Management uses Adjusted EBITDA in order to manage the Company's business and to compare its results more closely to the results of its peers. EBITDA and Adjusted EBITDA do not represent and should not be considered as alternatives to GAAP measurements, such as net income/(loss). These terms, as defined by us, may not be comparable to similarly titled measures used by other companies. In connection with the adoption of ASU No. 2014-09, Revenue from Contracts with Customers, the Company has not recast Adjusted EBITDA in prior periods.

The Company uses Adjusted EBITDA as a supplemental measurement of its operating performance. The Company believes it best reflects changes across time in the Company's performance, including the effects of pricing, cost control and other operational decisions. The Company's management uses Adjusted EBITDA for planning purposes, including the preparation of its annual operating budget. The Company believes that Adjusted EBITDA also is useful to investors because it is frequently used by securities analysts, investors and other interested parties in their evaluation of companies in similar industries. As indicated, Adjusted EBITDA does not include interest expense on borrowed money or depreciation expense on our capital assets or the payment of income taxes, which are necessary elements of the Company's operations. Because Adjusted EBITDA does not account for these expenses, its utility as a measure of the Company's operating performance has material limitations. Because of these limitations, the Company's management does not view Adjusted EBITDA in isolation and also uses other measurements, such as revenue and operating profit, to measure operating performance.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION **WASHINGTON, DC 20549**

FOI	RM 10-K
(Mark One)	
	FION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Ended December 31, 2018 OR
☐ TRANSITION REPORT PURSUANT TO S 1934	SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
For the Transi	tion Period from to
Commission Fil	e Number 001-33117
	LSTAR, INC.
,	unt as Specified in Its Charter)
Delaware	41-2116508
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
	ay Square Blvd.
	Louisiana 70433
· · · · · · · · · · · · · · · · · · ·	ipal Executive Offices)
Registrant's Telephone Number,	Including Area Code (985) 335-1500
Securities registered pursuant to section 12(b) of the Act:	
Title of each class	Name of exchange on which registered
Voting Common Stock	NYSE American
	nant to section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer as	defined in Rule 405 of the Securities Act. Yes □ No ⊠
Indicate by check mark if the registrant is not required to file reports pursua	ant to Section 13 or Section 15(d) of the Act. Yes □ No ⊠
	red to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during red to file such reports), and (2) has been subject to such filing requirements for the
1	
	very Interactive Data File required to be submitted pursuant to Rule 405 of Regulation
S-T (\$232.405 of this chapter) during the preceding 12 months (or for such short	
• •	05 of Regulation S-K is not contained herein and will not be contained, to the best of
	d by reference in Part III of this Form 10-K or any amendment to this Form 10-K. □
	n accelerated filer, a non-accelerated filer, or a smaller reporting company. See the npany," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check
Large accelerated filer □	Accelerated filer ⊠
Non-accelerated filer □	Smaller reporting company □
	Emerging growth company □

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act) Yes □ No ☒

with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \square

The aggregate market value of the registrant's common stock held by non-affiliates at June 30, 2018, the last business day of the Registrant's most recently completed second fiscal quarter, was approximately \$283.0 million.

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying

As of February 22, 2019, 1,448,027,328 shares of voting common stock and no shares of nonvoting common stock were outstanding. Unless the context otherwise requires, references to common stock in this Report mean registrant's voting common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2019 Annual Meeting of Stockholders are incorporated by reference in Part III of this Report.

FORM 10-K

For the Fiscal Year Ended December 31, 2018

TABLE OF CONTENTS

		Page			
	PART I				
Item 1.	Business	3			
Item 1A.	Risk Factors				
Item 1B.	Unresolved Staff Comments				
Item 2.	Properties				
Item 3.	Legal Proceedings	34			
Item 4.	Mine Safety Disclosures	34			
	PART II				
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	35			
Item 6.	Selected Financial Data	36			
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations				
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk				
Item 8.	Financial Statements and Supplementary Data				
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure				
Item 9A.	Controls and Procedures				
Item 9B.	Other Information				
	PART III				
Item 10.	Directors, Executive Officers and Corporate Governance	122			
Item 11.	Executive Compensation	122			
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	122			
Item 13.	Certain Relationships and Related Transactions, and Director Independence				
Item 14.	Principal Accounting Fees and Services	123			
PART IV					
Item 15.	Exhibits, Financial Statement Schedules	123			
Item 16.	Form 10-K Summary	123			
Signatures	Signatures 12 ²				

PART I

Forward-Looking Statements

Certain statements contained in or incorporated by reference into this Annual Report on Form 10-K (the "Report"), other than purely historical information, including, but not limited to, estimates, projections, statements relating to our business plans, objectives and expected operating results, and the assumptions upon which those statements are based, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions, although not all forward-looking statements contain these identifying words. These forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties which may cause actual results to differ materially from the forward-looking statements. Forward-looking statements, such as the statements regarding our ability to develop and expand our business (including our ability to monetize our spectrum rights), our anticipated capital spending, our ability to manage costs, our ability to exploit and respond to technological innovation, the effects of laws and regulations (including tax laws and regulations) and legal and regulatory changes (including regulation related to the use of our spectrum), the opportunities for strategic business combinations and the effects of consolidation in our industry on us and our competitors, our anticipated future revenues, our anticipated financial resources, our expectations about the future operational performance of our satellites (including their projected operational lives), the expected strength of and growth prospects for our existing customers and the markets that we serve, commercial acceptance of new products, problems relating to the ground-based facilities operated by us or by independent gateway operators, worldwide economic, geopolitical and business conditions and risks associated with doing business on a global basis and other statements contained in this Report regarding matters that are not historical facts, involve predictions. Risks and uncertainties that could cause or contribute to such differences include, without limitation, those in Item 1A. Risk Factors of this Report. We do not intend, and undertake no obligation, to update any of our forward-looking statements after the date of this Report to reflect actual results or future events or circumstances.

Item 1. Business

Globalstar, Inc. ("we," "us" or the "Company") provides Mobile Satellite Services ("MSS") including voice and data communications services globally via satellite. By providing wireless communications services in areas not served or underserved by terrestrial wireless and wireline networks and in circumstances where terrestrial networks are not operational due to natural or man-made disasters, we seek to meet our customers' increasing desire for connectivity. We offer voice and data communication services over our network of in-orbit satellites and our active ground stations ("gateways"), which we refer to collectively as the Globalstar System.

We currently provide the following communications services via satellite. These services are available only with equipment designed to work on our network:

- two-way voice communication and data transmissions using mobile or fixed devices, including our GSP-1700 phone, our Globalstar 9600TM hotspot, two generations of our Sat-Fi, and other fixed and data-only devices ("Duplex");
- one-way or two-way communication and data transmissions using mobile devices, including our SPOT family of
 products, such as SPOT XTM, SPOT Gen3 and Trace, that transmit messages and the location of the device ("SPOT");
 and
- one-way data transmissions using a mobile or fixed device that transmits its location and other information to a central
 monitoring station, including our commercial Simplex products, such as our battery- and solar-powered SmartOne,
 STX-3 and STINGR ("Simplex").

Our constellation of Low Earth Orbit ("LEO") satellites includes second-generation satellites, which were launched and placed into service during the years 2010 through 2013 after a \$1.1 billion investment, and certain first-generation satellites. We designed our second-generation satellites to last twice as long in space, have 40% greater capacity and be built at a significantly lower cost compared to our first-generation satellites. We achieved this longer life by increasing the solar array and battery capacity, using a larger fuel tank, adding redundancy for key satellite equipment, and improving radiation specifications and additional lot level testing for all susceptible electronic components, in order to account for the accumulated dosage of radiation encountered during a 15-year mission at the operational altitude of the satellites. The second-generation satellites use passive S-band antennas on the body of the spacecraft providing additional shielding for the active amplifiers which are located inside the spacecraft, unlike the first-generation amplifiers that were located on the outside as part of the active antenna array. Each satellite has a high degree of on-board subsystem redundancy, an on-board fault detection system and isolation and recovery for safe and quick risk mitigation.

Due to the specific design of the Globalstar System (and based on customer input), we believe that our voice quality is the best among our peer group. We define a successful level of service for our customers by their ability to make uninterrupted calls of average duration for a system-wide average number of minutes per month. Our goal is to provide service levels and call success rates equal to or better than our MSS competitors so our products and services are attractive to potential customers. We define voice quality as the ability to easily hear, recognize and understand callers with imperceptible delay in the transmission. By this measure, we believe that our system outperforms geostationary ("GEO") satellites used by some of our competitors. Due to the difference in signal travel distance, GEO satellite signals must travel approximately 42,000 additional nautical miles, which introduces considerable delay and signal degradation to GEO calls. For our competitors using cross-linked satellite architectures, which require multiple inter-satellite connections to complete a call, signal degradation and delay can result in compromised call quality as compared to that experienced over the Globalstar System.

We designed our second-generation ground network, when combined with our second-generation products, to provide our customers with enhanced future services featuring initial services up to 72 kbps as well as increased capacity. The second-generation ground network is an Internet protocol multimedia subsystem ("IMS") based solution providing such industry standard services as voice, Internet, email and short message services ("SMS"). As technological advancements are made, we explore opportunities to provide new services over our network to meet the needs of our existing and prospective customers.

We compete aggressively on price. We offer a range of price-competitive products to the industrial, governmental and consumer markets. We expect to retain our position as a cost-effective, high quality leader in the MSS industry.

Our satellite communications business, by providing critical mobile communications to our subscribers, serves principally the following markets: recreation and personal; government; public safety and disaster relief; oil and gas; maritime and fishing; natural resources, mining and forestry; construction; utilities; and transportation.

Our products and services are sold through a variety of independent agents, dealers and resellers, and independent gateway operators ("IGOs"). We also have distribution relationships with a number of "Big Box" and other distribution channels.

Duplex Two-Way Voice and Data Products

Mobile Voice and Data Satellite Communications Services and Equipment

We provide mobile voice and data services to a wide variety of commercial, government and recreational customers for remote business continuity, recreational, emergency response and other applications. We offer our services for use only with equipment designed to work on our network. Subscribers typically pay an initial activation fee, a monthly usage fee for a fixed or unlimited number of minutes, and fees for additional services such as voicemail, call forwarding, short messaging, email, data compression and internet access. Extra fees may also apply for non-voice services, roaming and long-distance. We regularly monitor our service offerings in accordance with customer demands and market changes and offer pricing plans such as bundled minutes, annual plans and unlimited plans.

We offer the GSP-1700 phone, which includes a user-friendly color LCD screen and a variety of accessories. We believe that the GSP-1700 is among the smallest, lightest and least-expensive satellite phones. We are the only MSS provider using Qualcomm Incorporated's ("Qualcomm") patented CDMA technology that we believe provides superior voice quality when compared to competitive handsets. We no longer manufacture the GSP-1700 phone. Instead, we sell refurbished GSP-1700 phones to new subscribers through our existing distribution channels. These phones are generally obtained through a buyback program that we have in place to purchase devices from deactivated subscribers in order to address demand for handsets.

Our most recent voice and data solution is Sat-Fi2TM, which is the next-generation model of our original Sat-Fi. Sat-Fi2TM is the first product to operate using our second-generation ground infrastructure, resulting in higher data speeds, enhanced applications and improved performance. With Sat-Fi2TM, our customers can use their Wi-Fi enabled smartphones and tablets to send and receive communications via the Globalstar System when traveling beyond cellular service, achieving a level of seamless connectivity not offered before. We believe Sat-Fi2TM is superior to other competitors' products released to date, providing the fastest, most affordable, mobile satellite data speeds and the clearest voice communications in the MSS industry. Through a convenient smartphone app that enables connectivity between a Wi-Fi-enabled device and the Sat-Fi satellite hot spot, subscribers can easily send and receive email and SMS messages and make voice calls from their own device any time they are in range of a Sat-Fi2TM device. We believe Sat-Fi2TM represents a major step forward in our desire to integrate seamlessly our mobile satellite capabilities into the communications services that people use on a daily basis.

We also offer the Globalstar 9600TM, a first-generation Duplex accessory, that our customers can use with a smartphone app to pair seamlessly with their existing satellite phone to send and receive email over the Globalstar System. This affordable data hotspot is ideal for remote workforces in industries such as energy and construction to communicate via email, send status reports, download local weather and send pictures. Our marine customers also benefit from the ease of use and the ability to affordably send data and make voice calls beyond cellular.

Fixed Voice and Data Satellite Communications Services and Equipment

We provide fixed voice and data services in rural villages, at remote industrial, commercial and residential sites and on ships at sea, among other places, primarily with our GSP-2900 fixed phone. Fixed voice and data satellite communications services are in many cases an attractive alternative to mobile satellite communications services in environments where multiple users will access the service within a defined geographic area and cellular or ground phone service is not available. Our fixed units also may be mounted on vehicles, barges and construction equipment and benefit from the ability to have higher gain antennas. Our fixed voice and data service plans are similar to our mobile voice and data plans and offer similar flexibility.

Satellite Data Modem Services and Equipment

In addition to data utilization through fixed and mobile services described above, we offer data-only services through Duplex devices that have two-way transmission capabilities. Duplex asset-tracking applications enable customers to control directly their remote assets and perform complex monitoring activities. We offer asynchronous and packet data service in all of our Duplex territories. Customers can use our products to access the internet, corporate virtual private networks and other customer specific data centers. Our satellite data modems can be activated under any of our current pricing plans. Customers can access satellite data modems in every Duplex region we serve. We provide store-and-forward capabilities to customers who do not require real-time transmission and reception of data. Additionally, we offer a data acceleration and compression service to the satellite data modem market. This service increases web-browsing, email and other data transmission speeds without any special equipment or hardware.

Direct Sales, Dealers and Resellers

Our sales group is responsible for conducting direct sales with key accounts and for managing indirect agent, dealer and reseller relationships in assigned territories in the countries in which we operate.

The reseller channel for Duplex equipment and service is comprised primarily of communications equipment retailers and commercial communications equipment rental companies that retain and bill clients directly, outside of our billing system. Many of our resellers specialize in niche vertical markets where high-use customers are concentrated. We have sales arrangements with major resellers to market our services, including some value added resellers that integrate our products into their proprietary end products or applications.

Our typical dealer is a communications services business-to-business equipment retailer. We offer competitive service and equipment commissions to our network of dealers to encourage sales.

In addition to sales through our distribution managers, agents, dealers and resellers, customers can place orders through our existing sales force and through our direct e-commerce website.

SPOT Consumer Retail Products

The SPOT product family has initiated over 6,000 rescues since its launch in 2007. Averaging nearly two rescues per day, SPOT delivers affordable and reliable satellite-based connectivity and real-time GPS tracking to hundreds of thousands of users, completely independent of cellular coverage. We are not aware of any other competitive offering that can match the life-saving record of our SPOT family of products. As we continue to innovate and grow the SPOT family of products, we are committed to providing affordable life-saving products to an expanding target market of millions of people globally.

We have differentiated ourselves from other MSS providers by offering affordable, high utility mobile satellite products that appeal to the mainstream consumer market. With the 2009 acquisition of satellite asset tracking and consumer messaging products manufacturer Axonn LLC ("Axonn"), we believe we are the only vertically integrated mobile satellite company, which results in decreased pre-production costs, quality assurance and shorter time to market for our retail consumer products.

SPOT Satellite GPS Messenger

We began commercial sales of the first SPOT products and services when we introduced the SPOT Personal Tracker in 2007. Since 2007, we continue to innovate this product and have released another three generations of our SPOT Satellite GPS Messenger to the market. The most recent generations of SPOT devices which we currently sell include SPOT Gen3 and SPOT XTM. Compared to earlier generations of our SPOT Satellite GPS Messenger, SPOT Gen3 offers enhanced functionality with more tracking features, improved battery performance and more power options, including rechargeable and USB direct line power. The product also enables users to transmit messages to a specific preprogrammed email address, phone or data device, including a request for assistance and an "SOS" message in the event of an emergency. SPOT XTM, which was launched in May 2018, has new keyboard functionality to allow subscribers to send and receive SMS messages along with improved tracking and SOS functions.

We target our SPOT Satellite GPS Messenger to recreational and commercial markets that require personal tracking, emergency location and messaging solutions that operate beyond the reach of terrestrial wireless and wireline coverage. Using our network and web-based mapping software, this device provides consumers with the ability to trace a path geographically or map the location of individuals or equipment. SPOT Satellite GPS Messenger products and services are available virtually everywhere through our product distribution channels and through our direct e-commerce website.

SPOT Trace

SPOT Trace is a cost effective anti-theft and asset tracking device. SPOT Trace ensures cars, motorcycles, boats, ATVs, snowmobiles and other valuable assets are where they need to be, notifying owners via email or text when movement is detected anytime, using 100% satellite technology to provide location-based messaging and emergency notification for on or off the grid communications.

Product Distribution

We distribute and sell our SPOT products through a variety of distribution channels. We have distribution relationships with a number of "Big Box" retailers and other similar distribution channels, including Bass Pro Shops, Cabela's, Fry's Electronics, REI, Sportsman's Warehouse, West Marine and Amazon. We also sell SPOT products and services directly using our existing sales force and through our direct e-commerce website, www.findmespot.com, as well as through certain of our IGOs.

Commercial Simplex One-Way Transmission Products

Simplex service is a one-way data service from a commercial Simplex device over the Globalstar System that can be used to track and monitor assets. Our subscribers currently use our Simplex devices for tracking, such as cargo containers and rail cars; to monitor utility meters; and to monitor oil and gas assets, as well as a host of other applications. At the heart of the Simplex service is a demodulator and RF interface, called an appliqué, which is located at a gateway and an application server located in our facilities. The appliqué-equipped gateways provide coverage over vast areas of the globe. The small size of the devices makes them attractive for use in tracking asset shipments, monitoring unattended remote assets, trailer tracking and mobile security. Current users include various governmental agencies, including the Federal Emergency Management Agency ("FEMA"), the U.S. Army, the U.S. Air Force, the National Oceanic and Atmospheric Administration ("NOAA"), the U.S. Forest Service and the U.K. Ministry of Defence, as well as other organizations, including BP, Shell and The Salvation Army.

We designed our Simplex service to address the market for a small and cost-effective solution for sending data, such as geographic coordinates, from assets or individuals in remote locations to a central monitoring station. Customers are able to realize an efficiency advantage from tracking assets on a single global system as compared to several regional systems.

We offer small Satellite Transmitter chipsets, such as the STX-3 and STINGR, which enable an integrator's products to access our Simplex network. We also offer complete products that utilize these transmitters. Our Simplex units, including the enterprise-grade SmartOne family of asset-ready tracking units, are used worldwide by industrial, commercial and government customers. These products provide cost-effective, low power, ultra-reliable, secure monitoring that help solve a variety of security applications and asset tracking challenges. Partnering with existing third party technology providers, we are developing IoT-focused Simplex products to connect existing and new users and accelerate deployment of a Globalstar IoT product suite. Launched in March 2018, our SmartOne SolarTM device is the first of these IoT-focused products. It is solar-powered and supports similar functionality to our SmartOne suite of products without the need to recharge batteries or line power the device, with an expected life of up to eight years. These features will result in a longer field life than existing devices. Solar-powered devices are also expected to take advantage of our network's ability to support multiple billions of daily transmissions assuming an average message size of 90 characters. We are also developing M2M products that support two-way communications allowing for both tracking and control of assets in our coverage footprint.

The reseller channel for Simplex equipment and service is comprised primarily of value added resellers and commercial communications equipment companies that retain and bill clients directly, outside of our billing system. Many of our resellers specialize in niche vertical markets where high-use customers are concentrated. We have sales arrangements with major resellers to market our services, including some value added resellers that integrate our STX-3 and STINGR into their proprietary solutions designed to meet certain specialized niche market applications.

Other New Product Initiatives

We continue to explore opportunities to develop new products and provide new services over our network to meet the needs of our existing and prospective customers. New product initiatives are underway and expected to expand our satellite communications business by effectively leveraging our network capabilities and expanding distribution relationships. We are in the process of developing a two-way emergency messaging and tracking device for the automotive market, a derivative of Sat-Fi2TM specifically designed for the maritime industry and a miniaturized satellite-based tracking device.

Independent Gateway Operators

Our wholesale operations encompass primarily bulk sales of wholesale minutes to IGOs around the globe. IGOs maintain their own subscriber bases that are mostly exclusive to us and promote their own service plans. The IGO system allows us to expand in regions that hold significant growth potential but are harder to serve without sufficient operational scale or where local regulatory requirements do not permit us to operate directly.

Currently, 10 of the 23 gateways in our network are owned and operated by unaffiliated companies, some of whom operate more than one gateway. Except for Globalstar Asia Pacific, our joint venture in South Korea in which we hold a 49% equity interest, we have no financial interest in these IGOs and conduct business with them through arms' length contracts for wholesale minutes of service.

Set forth below is a list of IGOs as of December 31, 2018:

Location	Gateway	Independent Gateway Operators	
Argentina	Bosque Alegre	Tesacom	
Australia	Dubbo	Pivotel Group PTY Limited	
Australia	Mount Isa	Pivotel Group PTY Limited	
Australia	Meekatharra	Pivotel Group PTY Limited	
South Korea	Yeo Ju	Globalstar Asia Pacific	
Mexico	San Martin	Globalstar de Mexico	
Russia	Khabarovsk	GlobalTel	
Russia	Moscow	GlobalTel	
Russia	Novosibirsk	GlobalTel	
Turkey	Ogulbey	Globalstar Avrasya	

In December 2018, we entered into a binding asset purchase agreement with the owners of our IGO in Argentina whereby we will purchase certain fixed assets and related government authorizations in connection with the operation of this IGO. We expect the asset purchase to close in 2019, subject to the satisfaction of certain conditions. Accordingly, we have included our IGO in Argentina in the table above as of December 31, 2018.

Other Services

We also provide engineering services to assist our commercial and government customers in developing new applications related to our system and to engineer and install new gateways that use our system. These services include hardware and software designs to develop specific applications operating over our network, as well as the installation of gateways and antennas.

Our Spectrum and Regulatory Structure

We benefit from a world-wide allocation of radio frequency spectrum in the international radio frequency tables administered by the International Telecommunications Union ("ITU"). Access to this globally harmonized spectrum enables us to design satellites, networks and terrestrial infrastructure enhancements more cost effectively because the products and services can be deployed and sold worldwide. In addition, this broad spectrum assignment enhances our ability to capitalize on existing and emerging wireless and broadband applications.

First-Generation Constellation

In the United States, the Federal Communications Commission ("FCC") has authorized us to operate our first-generation satellites in 25.225 MHz of radio spectrum comprising two blocks of non-contiguous radio frequencies in the 1.6/2.4 GHz band commonly referred to as the "Big LEO" Spectrum Band. Specifically, the FCC has authorized us to operate between 1610-1618.725 MHz for "Uplink" communications from mobile earth terminals to our satellites and between 2483.5-2500 MHz for "Downlink" communications from our satellites to our mobile earth terminals. The FCC has also authorized us to operate our four domestic gateways with our first-generation satellites in the 5091-5250 and 6875-7055 MHz bands.

Three of our subsidiaries hold our FCC licenses. Globalstar Licensee LLC holds our MSS license. GUSA Licensee LLC ("GUSA") is authorized by the FCC to distribute mobile and fixed subscriber terminals and to operate gateways in the United States. GUSA holds the licenses for our gateways in Texas, Florida and Alaska. Another subsidiary, GCL Licensee LLC ("GCL"), holds an FCC license to operate a gateway in Puerto Rico. GCL is also subject to regulation by the Puerto Rican regulatory agency.

Our prior Non-Geostationary Satellite Orbit ("NGSO") satellite constellation license issued by the FCC is valid until October 2024. This license applies only to our continued use of our first-generation satellites.

Second-Generation Constellation

We licensed and registered our second-generation satellites in France. We also obtained all authorizations necessary from the FCC to operate our domestic gateways with our second-generation satellites. In accordance with this authorization to operate the second-generation satellites, in early 2014, we completed the enhancements to the existing gateway operations in Aussaguel, France to include satellite operations and control functions. We have redundant satellite operation control facilities in Covington, Louisiana, Milpitas, California and Aussaguel, France.

The French National Frequencies Agency ("ANFR") is representing us before the ITU for purposes of receiving assignments of orbital positions and conducting international coordination efforts to address any interference concerns. ANFR submitted the technical papers to the ITU on our behalf in July 2009. We have continued to pursue this process with the ITU through ANFR and have made significant progress in coordinating our spectrum assignments with other companies that use any portion of our spectrum bands. While we believe the coordination process is nearing completion, we are unable to predict when such process will be completed; however, we are able to use the frequencies during the coordination process in accordance with our national licenses.

Terrestrial Authority for Globalstar's Licensed 2.4 GHz Spectrum

In December 2016, the FCC unanimously adopted a Report and Order permitting us to seek modification of our existing MSS licenses to provide terrestrial broadband services over 11.5 MHz of our licensed Mobile Satellite Services spectrum at 2483.5 to 2495 MHz throughout the United States of America and its Territories, covering approximately 328 million people. In August 2017, the FCC modified Globalstar's MSS licenses, granting us authority to provide terrestrial broadband services over a portion of our satellite spectrum. Specifically, the FCC modified Globalstar's space station authorization and our blanket mobile earth station license to permit a network using 11.5 MHz of our authorized Big LEO mobile-satellite service spectrum. We will need to comply with certain conditions in order to provide terrestrial broadband service, including obtaining FCC certifications for our equipment that will utilize this spectrum authority.

We believe our MSS spectrum position provides potential for harmonized terrestrial authority across many international regulatory domains and have been seeking approvals in various international jurisdictions. To date, we have received terrestrial authorizations in certain countries. We expect this global effort to continue for the foreseeable future while we seek additional terrestrial approvals to internationally harmonize our S-band spectrum across the entire 16.5 MHz authority for terrestrial mobile broadband services.

We expect our terrestrial authority will allow future partners to develop high-density dedicated networks using the TD-LTE protocol for densification of cellular networks, as well as meeting the growing demand for stand-alone, private LTE networks by government and enterprise customers. We believe that our offering has competitive advantages over other conventional commercial spectrum allocations. Such other allocations must meet minimum population coverage requirements, which effectively prohibit the exclusive use of most carrier spectrum for dedicated small cell deployments. In addition, low frequency carrier spectrum is not physically well suited to high-density small cell topologies, and mmWave spectrum is subject to range and attenuation limitations. We believe that our licensed 2.4 GHz band holds physical, regulatory and ecosystem qualities that distinguish it from other current and anticipated allocations, and that it is well positioned to balance favorable range, capacity and attenuation characteristics.

In December 2018, we were successful in obtaining approval to create a new defined band class, Band 53, from the Third Generation Partnership Project (3GPP) for our 2.4 GHz terrestrial spectrum. Band 53 can now be utilized in the U.S. as a standalone resource providing a pathway for our terrestrial spectrum to be integrated into handset and infrastructure ecosystems. Additional follow-on 3GPP specifications and approvals are expected in the future.

National Regulation of Service Providers

In order to operate gateways, applicable laws and regulations require the IGOs and our affiliates in each country to obtain a license or licenses from that country's telecommunications regulatory authority. In addition, the gateway operator must enter into appropriate interconnection and financial settlement agreements with local and interexchange telecommunications providers. All gateways operated by us and the IGOs are licensed by the appropriate regulatory authority.

Our subscriber equipment generally must be type certified in countries in which it is sold or leased. The manufacturers of the equipment and our affiliates or IGOs are jointly responsible for securing type certification. We have received type certification in multiple countries for each of our products.

Ground Network

Our satellites communicate with a network of 23 gateways, each of which serves an area of approximately 700,000 to 1,000,000 square miles. We have designed the planes in which our satellites orbit so that generally at least one satellite is visible from any point on the earth's surface between 70° north latitude and 70° south latitude. A gateway must be within line-of-sight of a satellite and the satellite must be within line-of-sight of the subscriber to provide services. We have positioned our gateways to cover most of the world's land and population. We own 13 of these gateways and the rest are owned by IGOs. In addition, we have spare parts in storage, including antennas and gateway electronic equipment. We own and operate gateways in the United States, Canada, Venezuela, Puerto Rico, France, Brazil, Singapore and Botswana.

Each of our gateways has multiple antennas that communicate with our satellites and pass calls seamlessly between antenna beams and satellites as the satellites traverse the gateways, thereby reflecting the signals from our users' terminals to our gateways. Once a satellite acquires a signal from an end-user, the Globalstar System authenticates the user and establishes the voice or data channel to complete the call to the public switched telephone network ("PSTN"), to a cellular or another wireless network or to the internet (for a data call including Simplex).

We believe that our terrestrial gateways provide a number of advantages over the in-orbit switching used by our main competitor, including better call quality, reduced call latency and convenient regionalized local phone numbers for inbound and outbound calling. We also believe that our network's design enables faster and more cost-effective system maintenance and upgrades because the system's software and much of its hardware are located on the ground. Our multiple gateways allow us to reconfigure our system quickly to extend another gateway's coverage to make up some or all of the coverage of a disabled gateway or to handle increased call capacity resulting from surges in demand.

Our ground network includes both our first-generation and second-generation ground equipment. Both our first-generation and second-generation ground network use Qualcomm's patented CDMA technology to permit communication to multiple

satellites. Patented receivers in our handsets track the pilot channel or signaling channel as well as three additional communications channels simultaneously. Compared to other satellite and network architectures, we offer superior call clarity with virtually no discernible delay. Our system architecture provides full frequency re-use. This maximizes diversity (which maximizes quality) and capacity as we can reuse the assigned spectrum in every satellite beam in every satellite. In addition, we have developed a non-Qualcomm proprietary CDMA technology for our SPOT and Simplex services.

We have contracts with Hughes Network Systems, LLC ("Hughes") and Ericsson, Inc. ("Ericsson") for our second-generation ground network. Hughes designed, supplied and implemented the Radio Access Network ("RAN") network equipment and software upgrades for installation at a number of our gateways. Hughes also provided the satellite interface chips to be used in our various second-generation devices. Ericsson developed, implemented, and installed our ground interface, or core network, system at our gateways. The second-generation Ericsson core links our Hughes RANs to the PSTN, cellular networks and Internet. We have additional second-generation RANs that are not yet deployed; we will select locations for further deployment based on coverage optimization, including possible gateway acquisitions.

Industry

We compete in the MSS sector of the global communications industry. MSS operators provide voice and data services using a network of one or more satellites and associated ground facilities. Mobile satellite services are usually complementary to, and interconnected with, other forms of terrestrial communications services and infrastructure and are intended to respond to users' desires for connectivity at all times and locations. Customers typically use satellite voice and data communications in situations where existing terrestrial wireline and wireless communications networks are impaired or do not exist.

Worldwide, government organizations, military, natural disaster aid associations, event-driven response agencies and corporate security teams depend on mobile and fixed voice and data communications services on a regular basis. Global businesses with global operations require communications services when operating in remote locations around the world. MSS users span the forestry, maritime, government, oil and gas, mining, leisure, emergency services, construction and transportation sectors, among others.

Over the past two decades, the global MSS market has experienced significant growth. Increasingly, better-tailored, improved-technology products and services are creating new channels of demand for mobile satellite services. Growth in demand for mobile satellite voice services is driven by the declining cost of these services, the diminishing size and lower costs of the handsets, as well as heightened demand by governments, businesses and individuals for ubiquitous global voice and data coverage. Growth in mobile satellite data services is driven by the rollout of new applications requiring higher bandwidth, as well as low cost data collection and asset tracking devices and technological improvements permitting integration of mobile satellite services over smartphones and other Wi-Fi enabled devices.

Communications industry sectors that are relevant to our business include:

- MSS, which provide customers with connectivity to mobile and fixed devices using a network of satellites and ground facilities;
- fixed satellite services, which use geostationary satellites to provide customers with voice and broadband communications links between fixed points on the earth's surface; and
- terrestrial services, which use a terrestrial network to provide wireless or wireline connectivity and are complementary to satellite services.

Within the major satellite sectors, fixed and MSS operators differ significantly from each other. Fixed satellite services providers, such as Intelsat Ltd., Eutelsat Communications and SES S.A., and aperture terminal companies, such as Hughes and Gilat Satellite Networks, are characterized by large, often stationary or "fixed," ground terminals that send and receive high-bandwidth signals to and from the satellite network for video and high speed data customers and international telephone markets. On the other hand, MSS providers, such as Globalstar, Inmarsat PLC ("Inmarsat") and Iridium Communications Inc. ("Iridium"), focus more on voice and data services (including data services which track the location of remote assets such as shipping

containers), where mobility or small sized terminals are essential. As mobile satellite terminals begin to offer higher bandwidth to support a wider range of applications, we expect MSS operators will increasingly compete with fixed satellite services operators.

LEO systems reduce transmission delay compared to a geosynchronous system due to the shorter distance signals have to travel. In addition, LEO systems are less prone to signal blockage and, consequently, we believe provide a better overall quality of service.

Competition

The global communications industry is highly competitive. We currently face substantial competition from other service providers that offer a range of mobile and fixed communications options. Our most direct competition comes from other global MSS providers. Our two largest global competitors are Inmarsat and Iridium. We compete primarily on the basis of coverage, quality, portability and pricing of services and products. In recent years, advancements in technology have also encouraged non-traditional companies to enter the market and request consideration from the FCC and international regulators to provide satellite communication services through a variety of constellations.

Inmarsat owns and operates a fleet of geostationary satellites. Due to its multiple-satellite geostationary system, Inmarsat's coverage area extends to and covers most bodies of water more completely than we do. Accordingly, Inmarsat is the leading provider of satellite communications services to the maritime sector. Inmarsat also offers global land-based and aeronautical communications services. We compete with Inmarsat in several key areas, particularly in our maritime markets. Inmarsat markets mobile handsets designed to compete with both Iridium's mobile handset service and our GSP-1700 handset service.

Iridium owns and operates a fleet of low earth orbit satellites. Iridium provides voice and data communications to businesses, United States and foreign governments, non-governmental organizations and consumers. Iridium markets products and services that are similar to those marketed by us. Additionally, Garmin's inReach Explorer and inReach Mini devices provide two-way tracking with SOS capabilities, Honeywell Global Tracking has a personal tracking unit that enables a smartphone with satellite tracking and messaging capabilities and Somewear has a satellite hotspot; these products work on Iridium's satellite network.

We compete with regional mobile satellite communications services in several markets. In these cases, our competitors serve customers who require regional, not global, mobile voice and data services, so our competitors present a viable alternative to our services. All of these competitors operate geostationary satellites. Our principal regional MSS competitor in the Middle East and Africa is Thuraya.

In some of our markets, such as rural telephony, we compete directly or indirectly with very small aperture terminal ("VSAT") operators that offer communications services through private networks using very small aperture terminals or hybrid systems to target business users. VSAT operators have become increasingly competitive due to technological advances that have resulted in smaller, more flexible and cheaper terminals.

We compete indirectly with terrestrial wireline ("landline") and wireless communications networks. We provide service in areas that are inadequately covered by these ground systems. To the extent that terrestrial communications companies invest in underdeveloped areas, we will face increased competition in those areas.

Our SPOT products compete indirectly with Personal Locator Beacons ("PLB"s). A variety of manufacturers offer PLBs to an industry specification.

Our industry has significant barriers to entry, including the cost and difficulty associated with obtaining spectrum licenses and successfully building and launching a satellite network. In addition to cost, there is a significant amount of lead-time associated with obtaining the required licenses, designing and building the satellite constellation and synchronizing the network technology.

United States International Traffic in Arms Regulations and United States Export Administration Regulations

The United States International Traffic in Arms regulations under the United States Arms Export Control Act authorize the President of the United States to control the export and import of articles and services that can be used in the production of arms. The President has delegated this authority to the U.S. Department of State, Directorate of Defense Trade Controls. United States Export Administration Regulations enforced by the United States Bureau of Industry and Security, as well as regulations enforced by the United States Office of Foreign Assets Control regulate the export of certain products, services, and associated technical data. Among other things, these regulations limit the ability to export certain articles and related technical data to certain nations. Some information involved in the performance of our operations falls within the scope of these regulations. As a result, we may have to obtain an export authorization or restrict access to that information by international companies that are our vendors or service providers. We have received and expect to continue to receive export licenses for covered articles and technical data shared with approved parties outside the United States. We also are subject to restrictions related to transactions with persons subject to United States or foreign sanctions. These regulations, enforced by the United States Office of Foreign Assets Control, limit our ability to offer services and equipment to certain parties or in certain areas.

Environmental Matters

We are subject to various laws and regulations relating to the protection of the environment and human health and safety (including those governing the management, storage and disposal of hazardous materials). Some of our operations require continuous power supply. As a result, current and historical operations at our ground facilities, including our gateways, include storing fuel and batteries, which may contain hazardous materials, to power back-up generators. As an owner or operator of property and in connection with our current and historical operations, we could incur significant costs, including cleanup costs, fines, sanctions and third-party claims, as a result of violations of or in connection with liabilities under environmental laws and regulations.

Customers

The specialized needs of our global customers span many markets. Our system is able to offer our customers cost-effective communications solutions in areas unserved or underserved by existing telecommunications infrastructures. Although traditional users of wireless telephony and broadband data services have access to these services in developed locations, our targeted customers often operate, travel to or live in remote regions or regions with under-developed telecommunications infrastructure where these services are not readily available or are not provided on a reliable basis.

Our top revenue generating markets in the United States and Canada are government (including federal, state and local agencies), public safety and disaster relief, recreation and personal and telecommunications. We also serve customers in the maritime and fishing, oil and gas, natural resources (mining and forestry), construction, utilities and transportation markets.

No one customer was responsible for more than 10% of our revenue in 2018, 2017 or 2016.

Foreign Operations

We supply services and products to a number of foreign customers. Although most of our sales are denominated in U.S. dollars, we are exposed to currency risk for sales in Canada, Europe, Brazil, Venezuela and other countries. In 2018, approximately 31% of our sales were generated in foreign countries, which generally are denominated in local currencies. See Note 2: Revenue in the Consolidated Financial Statements for additional information regarding revenue by country. For more information about our exposure to risks related to foreign locations, see Item 1A: Risk Factors - We face special risks by doing business in international markets and developing markets, including currency and expropriation risks, which could increase our costs or reduce our revenues in these areas.

Intellectual Property

We hold various U.S. and foreign patents and patents pending that expire between 2019 and 2035. These patents cover many aspects of our satellite system, our global network and our user terminals. In recent years, we have reduced our foreign filings and allowed some previously-granted foreign patents to lapse based on (a) the significance of the patent, (b) our assessment of the likelihood that someone would infringe in the foreign country, and (c) the probability that we could or would enforce the patent in light of the expense of filing and maintaining the foreign patent which, in some countries, is quite substantial. We continue to maintain all of the patents in the United States, Canada and Europe that we believe are important to our business. Our intellectual property is pledged as security for our obligations under our senior secured credit facility agreement (the "Facility Agreement").

Employees

As of December 31, 2018, we had 353 employees, 24 of whom were located in Brazil and subject to collective bargaining agreements. We consider our relationship with our employees to be good.

Seasonality

Usage on the network and, to some extent, sales are subject to seasonal and situational changes. April through October are typically our peak months for service revenues and equipment sales. We also experience event-driven revenue fluctuations in our business. Most notably, emergencies, natural disasters and other sizable projects where satellite-based communications devices are the only solution may generate an increase in revenue. In the consumer area, SPOT devices are subject to outdoor and leisure activity opportunities, as well as our promotional efforts.

Services and Equipment

Sales of services accounted for approximately 85%, 87% and 86% of our total revenues for 2018, 2017, and 2016, respectively. We also sell the related voice and data equipment to our customers, which accounted for approximately 15%, 13% and 14% of our total revenues for 2018, 2017, and 2016, respectively.

Additional Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). The SEC maintains an internet site that contains annual, quarterly and current reports, proxy and information statements and other information that issuers (including Globalstar) file electronically with the SEC. Our electronic SEC filings are available to the public at the SEC's internet site, www.sec.gov.

We make available free of charge financial information, news releases, SEC filings, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports as soon as reasonably practical after we electronically file such material with, or furnish it to, the SEC on our website at *www.globalstar.com*. The documents available on, and the contents of, our website are not incorporated by reference into this Report.

Item 1A. Risk Factors

You should carefully consider the risks described below, as well as all of the information in this Report and all of the other reports we file from time to time with the SEC, in evaluating and understanding us and our business. Additional risks not presently known or that we currently deem immaterial may also impact our business operations and the risks identified in this Report may adversely affect our business in ways we do not currently anticipate. Our business, financial condition or results of operations could be materially adversely affected by any of these risks.

Risks Related to Our Business

The implementation of our business plan and our ability to generate income from operations assume we are able to maintain a healthy constellation and ground network capable of providing commercially acceptable levels of coverage and service quality, which are contingent on a number of factors.

Our products and services are subject to the risks inherent in a large-scale, complex telecommunications system employing advanced technology. Any disruption to our satellites, services, information systems or telecommunications infrastructure could result in degrading or disrupting services to our customers for an indeterminate period of time.

Since we launched our first satellites in the 1990's, most of our first-generation satellites have failed in orbit or have been retired, and we expect the remaining first-generation satellites to be retired in the future. Although we designed our second-generation satellites to provide commercial service over a 15-year life, we can provide no assurance as to whether any or all of them will continue in operation for their full 15-year design life. Satellites utilize highly complex technology and operate in the harsh environment of space and therefore are subject to significant operational risks while in orbit.

Further, our satellites may experience temporary outages or otherwise may not be fully functioning at any given time. There are some remote tools we use to remedy certain types of problems affecting the performance of our satellites, but the physical repair of satellites in space is not feasible. We do not insure our satellites against in-orbit failures after an initial period of six months, whether the failures are caused by internal or external factors. In-orbit failure may result from various causes, including component failure, solar array failures, telemetry transmitter failures, loss of power or fuel, inability to control positioning of the satellite, solar or other astronomical events, including solar radiation and flares, and collision with space debris or other satellites. These failures are commonly referred to as anomalies. Some of our satellites have had malfunctions and other anomalies in the past and may have anomalies in the future. Further, from time to time we move and relocate satellites within our constellation to improve coverage and service quality. Satellite repositioning may increase the risk of collision or damage to our satellites and may result in degraded service during the repositioning. Although we do not incur any direct cash costs related to the failure of a satellite, if a satellite fails, we record an impairment charge in our statement of operations to reduce the remaining net book value of that satellite, if any, to zero, and any such impairment charges could depress our net income (or increase our net loss) for the period in which the failure occurs. Additionally, human operators may execute improper implementation commands that may negatively impact a satellite's performance.

Prior to 2014 our ability to generate revenue and cash flow was impacted adversely by our inability to offer commercially acceptable levels of Duplex service due to the degradation of our first-generation constellation. As a result, we improved the design of our second-generation constellation to last twice as long in space and have 40% greater capacity compared to our first-generation constellation. Since we launched our first-generation satellites, most of our first-generation satellites have failed in orbit or have been retired, and we expect the remaining first-generation satellites to be retired in the future. Despite working closely with satellite manufacturers to determine the causes of anomalies and mitigate them in second-generation satellites and to provide for intrasatellite redundancies for certain critical components to minimize or eliminate service disruptions in the event of failure, anomalies are likely to be experienced in the future, whether due to the types of anomalies described above or arising from the failure of other systems or components, and intrasatellite redundancy may not be available upon the occurrence of such anomalies. There can be no assurance that, in these cases, it will be possible to restore normal operations. Where service cannot be restored, the failure could cause the satellite to have less capacity available for service, to suffer performance degradation, or to cease operating prematurely, either in whole or in part. We cannot guarantee that we could successfully develop and implement a solution to these anomalies.

In order to maintain commercially acceptable service long-term, we must obtain and launch additional satellites from time to time. We cannot provide any assurance that negotiations with satellite manufacturers will be successful or at commercially reasonable prices.

Our ground stations required upgrades to enable us to integrate our second-generation technology and services. We entered into various contracts to upgrade our ground network. During 2016 we completed this work according to the Hughes and Ericsson contracts. In connection with the 2018 launch of Sat-Fi2 TM, the first device to operate on our upgraded ground network, we placed into service the portion of the next-generation ground component (including associated developed technology and software upgrades), which represents the gateways currently capable of supporting commercial traffic. Certain other gateways around the

world are expected to be placed into service in the coming months. The installation of RANs at additional sites outside the scope of the core Hughes contract will occur over time, and the completion of these upgrades may not be successful.

If we experience operational disruptions with respect to our gateways or operations center, we may not be able to provide service to our customers.

Our satellite network traffic is supported by 23 gateways distributed around the globe. We operate our satellite constellation from our Network Operations Control Centers at three locations (France, California and Louisiana) to provide geo-redundancy and ongoing coverage. Our gateway facilities are subject to the risk of significant malfunctions or catastrophic loss due to unanticipated events and would be difficult to replace or repair and could require substantial lead-time to do so. In North America, we have implemented contingency coverage which allows neighboring gateways to provide services in the event of a gateway failure. Material changes in the operation of these facilities may be subject to prior FCC approval, and the FCC might not give such approval or may subject the approval to other conditions that could be unfavorable to our business. Our gateways and operations center may also experience service shutdowns or periods of reduced service in the future as a result of equipment failure, delays in deliveries or regulatory issues. Any such failure would impede our ability to provide service to our customers, which could have a material impact on our business.

The actual orbital lives of our satellites may be shorter than we anticipate and we may be required to reduce available capacity on our satellite network prior to the end of their orbital lives.

We anticipate that our second-generation satellites will have 15 year orbital lives. A number of factors will affect the actual commercial service lives of our satellites, including:

- the amount of propellant used in maintaining the satellite's orbital location or relocating the satellite to a new orbital location (and, for newly-launched satellites, the amount of propellant used during orbit raising following launch);
- the durability and quality of their construction;
- the performance of their components;
- conditions in space such as solar flares and space debris;
- operational considerations, including operational failures and other anomalies; and
- changes in technology which may make all or a portion of our satellite fleet obsolete.

It is possible that the actual orbital lives of one or more of our existing satellites may also be shorter than originally anticipated. Further, on some of our satellites it is possible that the total available payload capacity may need to be reduced prior to the satellite reaching its end-of-orbital life. We periodically review the expected orbital life of each of our satellites using current engineering data. A reduction in the orbital life of any of our satellites could result in a reduction of the revenues generated by that satellite, the recognition of an impairment loss and an acceleration of capital expenditures. To the extent we are required to reduce the available payload capacity prior to the end of a satellite's orbital life, our revenues from the satellite would be reduced. The potential impact on our revenues from a reduction in the orbital life of one or more satellites may also vary depending on the satellite's orbital location as well as the type of device and service a customer is using.

Replacing a satellite upon the end of its service life will require us to make significant expenditures.

To ensure no disruption in our business and to prevent loss of customers, we may be required to commence a multi-year process to construct and launch replacement satellites prior to the expected end of service life of the satellites then in orbit. There can be no assurance that we will have sufficient cash, cash flow or be able to obtain third party or shareholder financing to fund such expenditures on favorable terms, if at all. Should we not have sufficient funds available to replace our satellites, it could have a material adverse effect on our results of operations, business prospects and financial condition.

The implementation of our business plan depends on increased demand for wireless communications services via satellite (including IoT applications) as well as via terrestrial mobile broadband networks, both for our existing services and products and for new services and products. If this increased demand does not occur, our revenues and profitability may not increase as we expect.

Demand for wireless communication services may not grow, or may even shrink, either generally or in particular geographic markets, for particular types of services or during particular time periods. A lack of demand could impair our ability to sell our services and develop and successfully market new services, or could exert downward pressure on prices, or both. This, in turn, could decrease our revenues and profitability and adversely affect our ability to increase our revenues and profitability over time.

We plan to introduce additional Duplex, SPOT and Simplex products and services (including further expansion in the IoT market) as well as low-power terrestrial mobile broadband services. However, we cannot predict with certainty the potential longer-term demand for these products and services or the extent to which we will be able to meet demand. Our business plan assumes growing our subscriber base beyond levels achieved in the past.

The success of our business plan will depend on a number of factors, including but not limited to:

- our ability to maintain the health, capacity and control of our satellites;
- our ability to maintain the health of our ground network;
- our ability to influence the level of market acceptance and demand for our products and services;
- our ability to introduce new products and services that meet this market demand;
- our ability to retain current customers and obtain new customers;
- our ability to obtain additional business using our existing and future spectrum authority both in the United States and internationally;
- our ability to control the costs of developing an integrated network providing related products and services, as well as our future terrestrial mobile broadband services;
- our ability to market successfully our Duplex, SPOT and Simplex products and services;
- our ability to develop and deploy innovative network management techniques to permit mobile devices to transition between satellite and terrestrial modes;
- our ability to sell our current inventory;
- the cost and availability of user equipment that operates on our network;
- the effectiveness of our competitors in developing and offering similar products and services and in persuading our customers to switch service providers;
- our ability to successfully predict market trends;
- our ability to hire and retain qualified executives, managers and employees;
- · our ability to provide attractive service offerings at competitive prices to our target markets; and
- our ability to raise additional capital on acceptable terms when required.

We incurred operating losses in the past three years, and these losses are likely to continue.

We incurred operating losses of \$47.4 million, \$68.4 million and \$63.3 million in 2018, 2017, and 2016, respectively. These losses resulted, in part, from depreciation expense related to our second-generation satellites, which were placed into service in 2010, 2011 and 2013, and ground infrastructure, which began to be placed into service in 2018. We designed our second-generation network to have a 15-year life, and we expect that we will continue to recognize high levels of depreciation expense commensurate with its estimated useful life.

Rapid and significant technological changes in the satellite communications industry may impair our competitive position and require us to make significant capital expenditures, which may require additional capital that has not been arranged.

The space and communications industries are subject to rapid advances and innovations in technology. New technology could render our system obsolete or less competitive by satisfying consumer demand in more attractive ways or through the introduction of incompatible standards. Particular technological developments that could adversely affect us include the deployment by our competitors of new satellites with greater power, greater flexibility, greater efficiency or greater capabilities, as well as continuing improvements in terrestrial wireless technologies. We must continue to commit to make significant capital expenditures to keep up with technological changes and remain competitive. Customer acceptance of the services and products that we offer will continually be affected by technology-based differences in our product and service offerings. New technologies may be protected by patents and therefore may not be available to us. We expect to face competition in the future from companies using new technologies and new satellite systems.

The hardware and software we utilize in operating our first-generation gateways were designed and manufactured over 20 years ago and portions have deteriorated. This original equipment may become less reliable as it ages and will be more difficult and expensive to service. It may be difficult or impossible to obtain all necessary replacement parts for the hardware before the new equipment and software is fully deployed. Some of the hardware and software we use in operating our gateways are significantly customized and tailored to meet our requirements and specifications and could be difficult and expensive to service, upgrade or replace. Although we maintain inventories of some spare parts, it nonetheless may be difficult, expensive or impossible to obtain replacement parts for the hardware due to a limited number of those parts being manufactured to our requirements and specifications. In addition, our business plan contemplates updating or replacing some of the hardware and software in our network as technology advances, but the complexity of our requirements and specifications may present us with technical and operational challenges that complicate or otherwise make it expensive or infeasible to carry out such upgrades and replacements. If we are not able to suitably service, upgrade or replace our equipment, our ability to provide our services and therefore to generate revenue could be harmed.

Our business is capital intensive, and we may not be able to raise adequate capital to finance our business strategies, or we may be able to do so only on terms that significantly restrict our ability to operate our business.

Implementation of our business strategy requires a substantial outlay of capital. As we pursue business strategies and seek to respond to developments in our business and opportunities and trends in our industry, our actual capital expenditures may differ from our expected capital expenditures. There can be no assurance that we will be able to satisfy our capital requirements in the future. In addition, if one of our satellites failed unexpectedly, there can be no assurance of insurance recovery or the timing thereof and we may need to obtain additional financing to replace the satellite. If we determine that we need to obtain additional funds through external financing and are unable to do so, we may be prevented from fully implementing our business strategy.

We have substantial contractual obligations, which may require additional capital, the terms of which have not been arranged. The terms of our Facility Agreement could complicate raising this additional capital.

As of December 31, 2018, our current sources of liquidity include cash on hand (\$15.2 million), restricted cash (\$60.3 million) and future cash flows from operations. Our operating expenses for the twelve-month period ended December 31, 2018 were \$177.5 million, which include a non-recurring recovery of \$20.5 million related to the revision of our contract termination charge with Thales Alenia Space ("Thales") (see Note 9: Contingencies in our Consolidated Financial Statements in Part II, Item 8 of this Report for further discussion).

Our short-term and long-term liquidity requirements include primarily paying our debt service obligations and funding our operating costs. We may have other obligations of which the timing is unknown, including if any of our contingent liabilities crystallize, such as an award for plaintiffs' legal fees and expenses related to the shareholder action (described in Note 9: Contingencies in our Consolidated Financial Statements in Part II, Item 8 of this Report) and additional legal fees and expenses that we will incur in connection with this matter. We are working with our insurance provider with respect to coverage under our insurance policy with regard to this matter, but cannot guarantee that our insurance provider will cover any or all amounts in excess of the \$1.5 million retention under our insurance policy. We expect that our current sources of liquidity will be insufficient to meet our obligations for the next twelve months. Additionally, beyond the next twelve months, we expect that our future cash flows from operations may be insufficient to meet our longer-term obligations.

Restrictions in our Facility Agreement limit the types of financings we may undertake. In addition, the Facility Agreement provides that we must deposit at least 80% of the net cash proceeds received from equity issuances, subordinated indebtedness or any equity contribution to us or one of our subsidiaries through December 31, 2019 into a restricted deposit account which can be used only for paying down obligations under the Facility Agreement. This obligation significantly restricts our liquidity. See Note 5: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements in Part II, Item 8 of this Report for further discussion of our debt agreements. We cannot assure you that we will be able to obtain additional financing when required on reasonable terms or at all. If we cannot obtain it in a timely manner, we may be unable to execute our business plan and fulfill our financial commitments.

If we do not develop, acquire and maintain proprietary information and intellectual property rights, it could limit the growth of our business and reduce our market share.

Our business depends on technical knowledge, and we believe that our future success will be based, in part, on our ability to keep up with new technological developments and incorporate them in our products and services. We own or have the right to use our patents, work products, inventions, designs, software, systems and similar know-how. Although we have taken diligent steps to protect that information, the information may be disclosed to others or others may independently develop similar information, systems and know-how. Protection of our information, systems and know-how may result in litigation, the cost of which could be substantial. Third parties may assert claims that our products or services infringe on their proprietary rights. Any such claims, if made, may prevent or limit our sales of products or services or increase our cost of sales.

We license much of the software we require to support critical gateway operations from third parties, including Hughes, Ericsson and Qualcomm. This software was developed or customized specifically for our use. We also license technical information for the design, manufacture and sale of our products. This intellectual property is essential to our ability to continue to operate our constellation and sell our services and devices. We also license software to support customer service functions, such as billing, from third parties that developed or customized it specifically for our use. If the third party licensors were to cease to support and service the software, or the licenses were no longer to be available on commercially reasonable terms, it might be difficult, expensive or impossible for us to obtain such services from alternative vendors. Replacing such software could be difficult, time consuming and expensive, and might require us to obtain substitute technology with lower quality or performance standards or at a greater cost.

We may in the future become subject to claims that our products violate the patent or intellectual property rights of others, which could be costly and disruptive to us.

We may become subject to claims that our products violate the patent or intellectual property rights of others, which could be costly and disruptive to us.

We operate in an industry that is susceptible to significant intellectual property litigation. As a result, we or our products may become subject to intellectual property infringement claims or litigation. The defense of intellectual property suits is both costly and time-consuming, even if ultimately successful, and may divert management's attention from other business concerns. An adverse determination in litigation to which we may become a party could, among other things:

- subject us to significant liabilities to third parties, including treble damages;
- require disputed rights to be licensed from a third party for royalties that may be substantial;
- require us to cease using technology that is important to our business; or
- prohibit us from selling some or all of our products or offering some or all of our services.

We depend in large part on the efforts of third parties for the sale of our services and products. If these parties, including our IGOs, are unable to do this successfully, we will not be able to grow our business in those areas and our future revenue and profitability could decline.

We derive a large portion of our revenue from products and services sold through independent agents, dealers and resellers, including, outside the United States, IGOs. Although we derive most of our revenue from sales to end users in the United States, Canada, a portion of Western Europe, Central America and portions of South America, either directly or through agents, dealers and resellers, we depend on IGOs to purchase, install, operate and maintain gateway equipment, to sell our products, and to market our services in other regions where these IGOs hold exclusive or non-exclusive rights.

Our objective is to establish a worldwide service network, either directly or through IGOs, but to date we have been unable to do so in certain areas of the world, and we may not succeed in doing so in the future. We have been unable to establish our own gateways or to find capable IGOs for several important regions and countries, including India, China, and certain parts of Southeast Asia. In addition to the lack of global service availability, cost-effective roaming is not yet available in certain countries because the IGOs have been unable to reach business arrangements with one another. Further, our IGOs could fail to perform as expected or cease business operations. This could reduce overall demand for our products and services and undermine our value for potential users who require service in these areas.

Not all of the IGOs have been successful and, in some regions, they have not initiated service or sold as much usage as originally anticipated. Some of the IGOs are not earning revenues sufficient to fund their operating costs due to the operational issues we experienced with our first-generation satellites. Although we expect these IGOs to return to profitability, if they are unable to continue in business, we will lose the revenue we receive for selling equipment to them and providing services to their customers. Although we have implemented a strategy for the acquisition of certain IGOs when circumstances permit, we may not be able to continue to implement this strategy on favorable terms and may not be able to realize the additional efficiencies that we anticipate from this strategy. In some regions it is impracticable to acquire the IGOs either because local regulatory requirements or business or cultural norms do not permit an acquisition, because the expected revenue increase from an acquisition would be insufficient to justify the transaction, or because the IGO will not sell at a price acceptable to us. In those regions, our revenue and profits may be adversely affected if those IGOs do not fulfill their own business plans to increase substantially their sales of services and products. Any actions or failures to act by IGOs may result in liabilities for us.

We have a limited supply of remaining Duplex handsets and rely on a limited number of key vendors for timely supply of equipment and services. If our key vendors fail to provide equipment and services to us, we may face difficulties in finding alternative sources and may not be able to operate our business successfully.

We have a limited quantity of our Duplex handsets remaining in inventory and have not contracted with a manufacturer to produce additional phone inventory. We have initiated a "buy-back" program with former customers and we have seen meaningful success re-offering refurbished handsets into the market in an effort to mitigate the lack of new handset inventory. However, the number of devices received from the "buy-back" may not be sufficient to meet our customers' demand. Additionally, in some cases our contract manufacturers provide us with other equipment inventory and obtain FCC certification of the devices we sell. If these manufacturers do not take on future orders or fail to perform under our current contracts, we may be unable to continue to produce and sell this equipment to customers at a reasonable cost to us or there may be delays in production and sales.

Lack of availability of electronic components from the electronics industry, as needed in our retail products, our gateways and our satellites, could delay or adversely impact our operations.

We rely upon the availability of components, materials and component parts from the electronics industry. The electronics industry is subject to occasional shortages in parts availability depending on fluctuations in supply and demand. Industry shortages may result in delayed shipments of materials or increased prices, or both. As a consequence, elements of our operation which use electronic parts, such as our retail products, our gateways and our satellites, could be subject to delays or cost increases, or both.

We face special risks by doing business in international markets and developing markets, including currency and expropriation risks, which could increase our costs or reduce our revenues in these areas.

Although our most economically important geographic markets currently are the United States and Canada, we have substantial markets for our mobile satellite services in, and our business plan includes, developing countries or regions that are underserved by existing telecommunications systems, such as rural Venezuela, Brazil, Central America, Argentina and Africa. Developing countries are more likely than industrialized countries to experience market, currency and interest rate fluctuations and may have higher inflation. In addition, these countries present risks relating to government policy, price, wage and exchange controls, social instability, expropriation and other adverse economic, political and diplomatic conditions. For example, the Venezuelan government has frequently modified its currency laws over the past several years, resulting in significant devaluation of the bolivar, resulting in Venezuela being considered a highly inflationary economy.

Conducting operations outside the United States involves numerous special risks and, while expanding our international operations would advance our growth, it would also increase these risks. These risks include, but are not limited to:

- difficulties in penetrating new markets due to established and entrenched competitors;
- difficulties in developing products and services that are tailored to the needs of local customers;
- lack of local acceptance or knowledge of our products and services;
- lack of recognition of our products and services;
- unavailability of or difficulties in establishing relationships with distributors;
- significant investments, including the development and deployment of dedicated gateways, as some countries require physical gateways within their jurisdiction to connect the traffic coming to and from their territory;
- instability of international economies and governments;
- changes in laws and policies affecting trade and investment in other jurisdictions;
- noncompliance with the Foreign Corrupt Practices Act, the UK Bribery Act, sanctions laws and export controls;
- exposure to varying legal standards, including intellectual property protection in other jurisdictions, and other similar laws and regulations;
- difficulties in obtaining required regulatory authorizations;
- difficulties in enforcing legal rights in other jurisdictions;
- variations in local domestic ownership requirements;
- requirements that operational activities be performed in-country;
- changing and conflicting national and local regulatory requirements; and
- uncertainty in foreign currency exchange rates and exchange controls.

These risks could affect our ability to compete successfully and expand internationally. To the extent that the prices for our products and services are denominated in U.S. dollars, any appreciation of the U.S. dollar against other currencies will increase the cost of our products and services to our international customers and, as a result, may reduce the competitiveness of our international offerings and make it more difficult for us to grow internationally. Limited availability of U.S. currency in some local markets or governmental controls on the export of currency may prevent our customers from making payments in U.S. dollars or delay the availability of payment due to foreign bank currency processing and approval. In addition, exchange rate fluctuations may affect our ability to control the prices charged for our independent gateway operators' services.

Our operations involve transactions in a variety of currencies. Sales denominated in foreign currencies involve primarily the Canadian dollar, the euro, and the Brazilian real. Accordingly, our operating results may be significantly affected by fluctuations in the exchange rates for these currencies. Approximately 31% and 32% of our total sales were to customers primarily located in Canada, Europe, Central America, and South America during 2018 and 2017, respectively. Our results of operations for 2018 and 2017 included net losses of \$3.1 million and \$2.2 million, respectively, on foreign currency transactions. We may be unable to offset unfavorable currency movements as they adversely affect our revenue and expenses. Our inability to do so could have a substantial negative impact on our operating results and cash flows.

Our global operations expose us to trade and economic sanctions and other restrictions imposed by the United States, the European Union and other governments and organizations.

The U.S. Departments of Justice, Commerce, State and Treasury and other federal agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of economic sanctions laws, export control laws, the Foreign Corrupt Practices Act (the "FCPA") and other federal statutes and regulations, including those established by the Office of Foreign Assets Control ("OFAC"). Under these laws and regulations, as well as other anti-corruption laws, anti-money-laundering laws, export control laws, customs laws, sanctions laws and other laws governing our operations, various government agencies require export licenses, may seek to impose modifications to business practices, including cessation of business activities in sanctioned countries or with sanctioned persons or entities and modifications to compliance programs, which may increase compliance costs, and may subject us to fines, penalties and other sanctions. A violation of these laws or regulations could adversely impact our business, results of operations and financial condition.

Although we have implemented policies and procedures in these areas, we cannot assure you that our policies and procedures are sufficient or that directors, officers, employees, representatives, distributors, consultants, IGOs, dealers and resellers, JV partners, independent agents, vendors, customers or subscribers, have not engaged and will not engage in conduct for which we may be held responsible, nor can we assure you that our business partners have not engaged and will not engage in conduct that could materially affect their ability to perform their contractual obligations to us or even result in us being held liable for such conduct. Violations of the FCPA, OFAC restrictions or other export control, anti-corruption, anti-money-laundering and anti-terrorism laws or regulations may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could have a material adverse effect on our business, financial condition, cash flows and results of operations.

The United Kingdom's vote to leave the European Union could adversely impact our business, results of operations and financial condition.

We sell our products and services in the United Kingdom (the "UK") and throughout Europe. In particular, the United Kingdom is the largest market in Europe for our SPOT product family. On June 23, 2016, the UK voted in an advisory referendum for the UK to leave the European Union (the "EU") and, subsequently, on March 29, 2017, the UK government began the formal process of leaving the EU. The exit process (commonly referred to as "Brexit") will involve the negotiation of new trade and other agreements.

Brexit creates legal, regulatory, and economic uncertainty that could have a negative impact on our business. If the UK changes the regulatory structure for telecommunications products, it is possible that we would not be able to comply or compliance would become cost prohibitive. Similarly, post-Brexit trade agreements could impose import taxes or other expenses on our products, which may increase the price of our products sold in the UK.

We also have currency exchange risk as a result of the Brexit vote. Although most of our sales are denominated in U.S. dollars, we also receive payments in international currencies, including the pound and the euro. We therefore incur currency translation risk when currency values fluctuate and the U.S. dollar is strong relative to other currencies. Furthermore, a strong U.S. dollar increases the price of our products in international markets, which could reduce demand in those markets for our products.

Although the future impacts of Brexit are unknown at this time, the UK's vote to leave the EU has created legal, regulatory, and currency risk that may have a materially adverse impact on our business. Furthermore, this uncertainty could negatively impact the economies of other countries in which we operate.

We face intense competition in all of our markets, which could result in a loss of customers, lower revenues and difficulty entering new markets.

Satellite-based Competitors

There are currently three other MSS operators providing services similar to ours on a global or regional basis: Iridium, Thuraya, and Inmarsat. ORBCOMM Inc. is also a competitor in the M2M market. The provision of satellite-based products and services is subject to downward price pressure when the capacity exceeds demand or as new competitors enter the marketplace with particular competitive pricing strategies. We also face competition on the basis of coverage and specialized industries, such as maritime and governmental.

Other providers of satellite-based products could introduce their own products similar to our SPOT, Simplex or Duplex products, which may materially adversely affect our business plan. In addition, we may face competition from new competitors or new technologies. With so many companies targeting many of the same customers, we may not be able to retain successfully our existing customers and attract new customers and as a result may not grow our customer base and revenue.

Terrestrial Competitors

In addition to our satellite-based competitors, terrestrial wireless voice and data service providers are continuing to expand into rural and remote areas, particularly in less developed countries, and providing the same general types of services and products that we provide through our satellite-based system. Many of these companies have greater resources, greater name recognition and newer technologies than we do. Industry consolidation could adversely affect us by increasing the scale or scope of our competitors and thereby making it more difficult for us to compete. We could lose market share and revenue as a result of increasing competition from the extension of land-based communication services.

Although satellite communications services and ground-based communications services are not perfect substitutes, the two compete in certain markets and for certain services. Consumers generally perceive cellular voice communication products and services as cheaper as and more convenient than satellite-based products and services.

Terrestrial Broadband Network Competitors

We also expect to compete with a number of other satellite companies that plan to develop terrestrial networks that utilize their MSS spectrum. DISH Network received FCC approval to offer terrestrial wireless services over the MSS spectrum that previously belonged to TerreStar and ICO Global. Further, Ligado Networks (formerly LightSquared) continues its regulatory initiative to receive final FCC approval to build out a wireless network utilizing its MSS spectrum. Any of these competitors could deploy terrestrial mobile broadband networks before we do, could combine with existing terrestrial networks that provide them with greater financial or operational flexibility than we have, or could offer wireless services, including mobile broadband services, that customers prefer over ours.

We have a substantial amount of indebtedness, which may adversely affect our cash flow and our ability to operate our business, including our ability to incur additional indebtedness.

As of December 31, 2018, the principal balance of our debt obligations was \$510.5 million, consisting of \$389.4 million under the Facility Agreement, \$119.7 million outstanding under the Loan Agreement with Thermo and \$1.4 million under the 8.00% Convertible Senior Notes Issued in 2013 (the "2013 8.00% Notes"). Our significant indebtedness could have several consequences, including: increasing our vulnerability to adverse economic, industry or competitive developments; requiring a substantial portion of cash flow from operations to be dedicated to the payment of principal and interest on our indebtedness, therefore reducing our ability to use our cash flow to fund our operations, capital expenditures, return of capital to shareholders, and future business opportunities; restricting us from making strategic acquisitions; limiting our ability to obtain additional financing for working capital, capital expenditures, product development, debt service requirements, acquisitions and general corporate or other purposes; restricting us from paying dividends to our shareholders and limiting our flexibility in planning for, or reacting to, changes in our business or the industry in which we operate, placing us at a competitive disadvantage compared to our competitors who are not as highly leveraged as us and who, therefore, may be able to take advantage of opportunities that our leverage prevents us from exploiting. Additionally, even though our debt agreements place limits on our ability to incur additional debt, we may incur additional debt in the future which could further exacerbate these risks.

Restrictive covenants in our Facility Agreement may limit our operating and financial flexibility and our inability to comply with these covenants could have significant implications.

Our Facility Agreement contains a number of significant restrictions and covenants. See Note 5: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements in Part II, Item 8 of this Report for further discussion of our debt covenants. Complying with these restrictive covenants, as well as the financial and other non-financial covenants in the Facility Agreement and certain of our other debt obligations, as well as those that may be contained in any agreements governing future indebtedness, may impair our ability to finance our operations or capital needs or to take advantage of other favorable business opportunities. The Facility Agreement includes a limitation on capital expenditures at any time in connection with spectrum rights to the lesser of (1) \$20 million and (2) 20% of proceeds from equity raises from January 1, 2017 through December 31, 2019, which may prohibit us from making certain capital expenditures that we consider accretive to our business and would otherwise make. In addition, we needed an Equity Cure Contribution to maintain compliance with financial covenants under the Facility Agreement for the measurement period ended December 31, 2018. We anticipate that we will also need Equity Cure Contributions for periods thereafter, subject to the provisions of the Facility Agreement. The source of funds for these Equity Cure Contributions has not yet been arranged. Our ability to comply with these covenants will depend on our future performance. which may be affected by events beyond our control. Our failure to comply with these covenants would be an event of default. An event of default under the Facility Agreement would permit the lenders to accelerate the indebtedness under the Facility Agreement. That acceleration would permit holders of our obligations under other agreements that contain cross-acceleration provisions to accelerate that indebtedness. See Part II, Item 7. Managements' Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources of this Report for further discussion.

Pursuing strategic transactions may cause us to incur additional risks.

We may pursue acquisitions, joint ventures, partnerships or other strategic transactions on an opportunistic basis. We may face costs and risks arising from any such transactions, including integrating a new business into our business or managing a joint venture. These may include legal, operational, financial and other costs and risks. For instance, in 2018, we incurred approximately \$11.2 million for consultants and other advisors related to the now-terminated merger (and related litigation) discussed in Note 11: Related Party Transactions and Note 9: Contingencies to our Consolidated Financial Statements in Part II, Item 8 of this Report.

In addition, if we were to choose to engage in any major business combination or similar strategic transaction, we may require significant external financing in connection with the transaction. Depending on market conditions, investor perceptions of us, and other factors, we may not be able to obtain capital on acceptable terms, in acceptable amounts or at appropriate times to implement any such transaction. Our Facility Agreement and other debt obligations contain covenants which limit our ability to engage in specified forms of capital transactions without lender consent, which may be impossible to obtain. Any such financing, if obtained, may further dilute our existing stockholders.

Our networks and those of our third-party service providers may be vulnerable to security risks, and our use of personal information could give rise to liabilities or additional costs as a result of laws, governmental regulations and evolving views of personal privacy rights.

Our network and those of our third-party service providers and our customers may be vulnerable to unauthorized access, computer viruses and other security problems. Persons who circumvent security measures could wrongfully obtain or use information on the network or cause interruptions, delays or malfunctions in our operations, any of which could harm our reputation, cause demand for our products and services to fall or compromise our ability to pursue our business plans. A number of significant, widespread security breaches have occurred that have compromised network integrity for many companies and governmental agencies. In some cases, these breaches originated from outside the United States. We may be required to expend significant resources to protect against the threat of security breaches or to alleviate problems, including reputational harm and litigation, caused by any breaches. In addition, our customer contracts may not adequately protect us against liability to third parties with whom our customers conduct business.

We collect and store data, including our customers' personal information. In jurisdictions around the world, personal information is becoming increasingly subject to legislation and regulations intended to protect consumers' privacy and security, including the EU's General Data Protection Regulation that became effective in 2018. The interpretation of privacy and data protection laws and regulations regarding the collection, storage, transmission, use and disclosure of such information in some jurisdictions is unclear and evolving. These laws may be interpreted and applied in conflicting ways from country to country and in a manner that is not consistent with our current data protection practices. Complying with these varying international requirements could cause us to incur additional costs and change our business practices. Because our services are accessible in many foreign jurisdictions, some of these jurisdictions may claim that we are required to comply with their laws, even where we have no local entity, employees or infrastructure. We could be forced to incur significant expenses if we were required to modify our products, our services or our existing security and privacy procedures in order to comply with new or expanded regulations. In addition, we could have liability to end users that allege that their personal information is not collected, stored, transmitted, used or disclosed appropriately or in accordance with our privacy policies or applicable laws, including claims and litigation resulting from such allegations. Any failure on our part to protect information pursuant to applicable regulations could result in a loss of user confidence, reputation and the loss of customers which could materially impact our results of operations and cash flows.

We may be unable to obtain and maintain our insurance coverages, and the insurance we obtain may not cover all liabilities to which we may become subject. As a result, we may incur material uninsured or under-insured losses.

The price, terms and availability of insurance have fluctuated significantly since we began offering commercial satellite services. The cost of obtaining insurance can vary as a result of either satellite failures or general conditions in the insurance industry. Higher premiums on insurance policies would increase our cost. In addition to higher premiums, insurance policies may provide for higher deductibles, shorter coverage periods and additional policy exclusions. Our insurance could become more expensive and difficult to maintain and may not be available in the future on commercially reasonable terms, if at all. Our failure to maintain sufficient insurance could also be an event of default under our Facility Agreement.

Our insurance may not adequately cover losses related to claims brought against us, which could be material. For instance, in connection with the Action (described in Note 9: Contingencies in our Consolidated Financial Statements in Part II, Item 8 of this Report), the Plaintiff's claims for damages from us are limited to the payment of certain attorneys' fees and costs for bringing the Action and also in connection with a demand to inspect certain of our books and records. We have incurred legal fees and expenses in connection with these matters and we may incur additional legal fees and expenses in the future. We expect that these costs will be at least partially covered by our directors and officers insurance policy, subject to the \$1.5 million retention and other limits provided in the policy; however, we cannot guarantee that our insurance provider will agree.

Product Liability Insurance and Product Replacement or Recall Costs

We are subject to product liability and product recall claims if any of our products and services are alleged to have resulted in injury to persons or damage to property. If any of our products proves to be defective, we may need to recall and/or redesign them. In addition, any claim or product recall that results in significant adverse publicity may negatively affect our business, financial condition or results of operations. In addition, we do not maintain any product recall insurance, so any product recall we are required to initiate could have a significant impact on our financial position, results of operations or cash flows. We regularly investigate potential quality issues as part of our ongoing effort to deliver quality products to our customers.

Because consumers use SPOT products and services in isolated and, in some cases, dangerous locations, we cannot predict whether users of the device who suffer injury or death may seek to assert claims against us alleging failure of the device to facilitate timely emergency response. Although we will seek to limit our exposure to any such claims through appropriate disclaimers and liability insurance coverage, we cannot assure investors that the disclaimers will be effective, claims will not arise or insurance coverage will be sufficient.

General Liability Insurance In-Orbit Exposures

Our liability policy, covers amounts up to €70 million per occurrence (with a €70 million annual limit) that we and other specified parties may become liable to pay for bodily injury and property damages to third parties related to processing, maintaining and operating our satellite constellation. Our current policy has a one-year term, which expires in October 2019. Our current in-orbit liability insurance policy contains, and we expect any future policies would likewise contain, specified exclusions and material change limitations customary in the industry. These exclusions may relate to, among other things, losses resulting from in-orbit collisions, acts of war, insurrection, terrorism or military action, government confiscation, strikes, riots, civil commotions, labor disturbances, sabotage, unauthorized use of the satellites and nuclear or radioactive contamination, as well as claims directly or indirectly occasioned as a result of noise, pollution, electrical and electromagnetic interference and interference with the use of property.

Our in-orbit insurance does not cover losses that might arise as a result of a satellite failure or other operational problems affecting our constellation, or damage that may result from de-orbiting a satellite. As a result, a failure of one or more of our satellites or the occurrence of equipment failures and other related problems or collision damage that may result during the de-orbiting process could constitute an uninsured loss and could materially harm our financial condition.

Our satellites may collide with space debris which could adversely affect the performance of our constellation.

Although we have some ability to maneuver our satellites to avoid potential collisions with space debris, this ability is limited by, among other factors, uncertainties and inaccuracies in the projected orbit location of and predicted conjunctions with debris objects tracked and cataloged by the U.S. government. Additionally, some space debris is too small to be tracked and therefore its orbital location is completely unknown; nevertheless, this debris is still large enough to potentially cause severe damage or a failure of one of our satellites should a collision occur. If our constellation experiences satellite collisions with space debris, our service could be impaired. Any such collision could potentially expose us to significant losses.

Changes in tax rates or adverse results of tax examinations could materially increase our costs.

We operate in various U.S. and foreign tax jurisdictions. The process of determining our anticipated tax liabilities involves many calculations and estimates which are inherently complex. We believe that we have complied, in all material respects, with our obligations to pay taxes in these jurisdictions. However, our position is subject to review and possible challenge by the taxing authorities of these jurisdictions. If the applicable taxing authorities were to challenge successfully our current tax positions, or if there were changes in the manner in which we conduct our activities, we could become subject to material unanticipated tax liabilities. We may also become subject to additional tax liabilities as a result of changes in tax laws, which could in certain circumstances have a retroactive effect.

As a result of our acquisition of an IGO in Brazil during 2008, we are exposed to potential pre-acquisition tax liabilities, for which we have been indemnified by the previous owners. As of December 31, 2018, and 2017, we recorded a tax liability of \$0.4 million and \$1.4 million, respectively, to the foreign tax authorities with an offsetting tax receivable from the previous owners.

We continuously monitor these contingencies and work with the Brazilian tax authority to settle any remaining unpaid contingencies. We may also be exposed to other pre-acquisition liabilities for which we may not be fully indemnified by the seller, or the seller may fail to perform its indemnification obligations.

Our revenues are subject to changes in global economic conditions and consumer sentiment and discretionary spending.

Financial markets continue to be uncertain and could significantly adversely impact global economic conditions. These conditions could lead to further reduced consumer spending in the foreseeable future, especially for discretionary travel and related products. A substantial portion of the potential addressable market for our consumer retail products and services relates to recreational users, such as mountain climbers, campers, kayakers, sport fishermen and wilderness hikers. These potential customers may reduce their activities or their spending due to economic conditions, which could adversely affect our business, financial condition, results of operations and liquidity.

We are exposed to trade credit risk in the ordinary course of our business activities.

We are exposed to risk of loss in the event of nonperformance by our customers. Some of our customers may be highly leveraged and subject to their own operating and regulatory risks. Many of our customers finance their activities through cash flow from operations, the incurrence of debt or the issuance of equity. From time to time, the availability of credit is more restrictive. The combination of reduction of cash flow resulting from declines in commodity prices and the lack of availability of debt or equity financing may result in a significant reduction in our customers' liquidity and ability to make payments or perform on their obligations to us. Even if our credit review and analysis mechanisms work properly, we may experience financial losses in our dealings with other parties. Any increase in the nonpayment or nonperformance by our customers could reduce our cash flows.

For instance, our Simplex business is heavily concentrated in the oil and gas industry and was negatively impacted by the downturn in this industry in recent years. For example, our largest customer during 2017 and 2018 is a reseller to oil and gas companies. Concentrations of customers in other industries may further increase trade credit risk of our business.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Borrowings under our Facility Agreement bear interest at a variable rate. In order to mitigate a portion of our variable rate interest risk, we entered into a ten-year interest rate cap agreement. The interest rate cap agreement reflects a variable notional amount at interest rates that provide coverage to us for exposure resulting from escalating interest rates over the term of the Facility Agreement. The interest rate cap provides limits on the six-month Libor rate ("Base Rate") used to calculate the coupon interest on outstanding amounts on the Facility Agreement. Our interest rate is capped at 5.5% if the Base Rate does not exceed 6.5%. Should the Base Rate exceed 6.5%, our Base Rate will be 1% less than the then six-month Libor rate. Regardless of our attempts to mitigate our exposure to interest rate fluctuations through the interest rate cap, we still have exposure for the uncapped amounts of the facility, which remain subject to a variable interest rate. As a result, an increase in interest rates could result in a substantial increase in interest expense, especially as the capped amount of the term loan decreases over time.

Additionally, in July 2017, the Financial Conduct Authority in the United Kingdom ("FCA") announced the phase out the Libor rate, no longer requiring financial institutions to make Libor submissions after 2021. Our Facility Agreement provides for a fallback rate in the event Libor is unable to be determined. At this time, we cannot provide assurance of the impact this Libor phase out will have on our financial statements and internal processes.

The loss of skilled management and personnel could impair our operations.

Our performance is substantially dependent on the performance and institutional knowledge of our senior management and key scientific and technical personnel. The loss of the services of any member of our senior management, scientific or technical staff or the inability to attract key employees may significantly delay or prevent the achievement of business objectives by diverting management's attention to retention matters and could have a material adverse effect on our business, operating results and financial condition.

A natural disaster could diminish our ability to provide communications service.

Natural disasters could damage or destroy our ground stations resulting in a disruption of service to our customers. In addition, the collateral effects of disasters such as flooding may impair the functioning of our ground equipment. If a natural disaster were to impair or destroy any of our ground facilities, we might be unable to provide service to our customers in the affected area for a period of time. Even if our gateways are not affected by natural disasters, our service could be disrupted if a natural disaster damages the public switch telephone network or terrestrial wireless networks or our ability to connect to the public switch telephone network or terrestrial wireless networks. Additionally, there are inherent dangers and risk associated with our satellite operations, including the risk of increased radiation. Any such failures or service disruptions could harm our business and results of operations.

We have been in the past from time to time, and may be in the future, subject to litigation and investigations that could have a substantial, adverse impact on our business.

From time to time we are subject to litigation, including claims related to our business activities. We have also been in the past from time to time, and may be in the future, subject to investigations by regulators and governmental agencies, including from the United States Department of the Treasury's Office of Foreign Assets Control, the United States Department of Commerce, Bureau of Industry and Security and the United States Immigration and Customs Enforcement. Irrespective of its merits, litigation and investigations may be both lengthy and disruptive to our operations and could cause significant expenditure and diversion of management attention. In our opinion there is no pending litigation, investigation, dispute or claim that could have a material adverse effect on our financial condition, results of operations or liquidity. However, we may be wrong in this assessment. Additionally, in the future we may become subject to additional litigation that could have a material adverse effect on our financial position and operating results, on the trading price of our securities and on our ability to access the capital markets.

We have had material weaknesses in our internal controls in the past and we cannot assure you that in the future additional material weaknesses will not recur, exist or otherwise be identified.

Our internal control processes, regardless of how well designed, operated and evaluated, can provide only reasonable, not absolute, assurance that their objectives will be met. Therefore, we have had material weaknesses in our internal controls in the past, and we cannot assure you that in the future additional material weaknesses will not recur, exist or otherwise be identified. We will continue to monitor the effectiveness of our processes, procedures and controls and will make changes as management determines appropriate. Effective internal controls are necessary for us to produce reliable financial reports. If we cannot produce reliable financial reports, our business and operating results may be adversely affected, investors may lose confidence in our reported financial information, there may be a negative effect on our stock price, and we may be subject to civil or criminal investigations and penalties, litigation, regulatory or enforcement actions by the SEC and the NYSE American.

Wireless devices' radio frequency emissions are the subject of regulation and litigation concerning their environmental effects, which includes alleged health and safety risks. As a result, we may be subject to new regulations, demand for our services may decrease, and we could face liability based on alleged health risks.

There has been adverse publicity concerning alleged health risks associated with radio frequency transmissions from portable hand-held telephones that have transmitting antennas. Lawsuits have been filed against participants in the wireless industry

alleging a number of adverse health consequences, including cancer, as a result of wireless phone usage. Other claims allege consumer harm from failures to disclose information about radio frequency emissions or aspects of the regulatory regimes governing those emissions. Although we have not been party to any such lawsuits, we may be exposed to such litigation in the future. While we comply with applicable standards for radio frequency emissions and power and do not believe that there is valid scientific evidence that use of our devices poses a health risk, courts or governmental agencies could determine otherwise. Any such finding could reduce our revenue and profitability and expose us and other communications service providers or device sellers to litigation, which, even if frivolous or unsuccessful, could be costly to defend.

If consumers' health concerns over radio frequency emissions increase, they may be discouraged from using wireless handsets. Further, government authorities might increase regulation of wireless handsets as a result of these health concerns. Any actual or perceived risk from radio frequency emissions could reduce the number of our subscribers and demand for our products and services.

Risks Related to Government Regulations

Our business is subject to extensive government regulation, which mandates how we may operate our business and may increase our cost of providing services, slow our expansion into new markets and subject our services to additional competitive pressures.

Our ownership and operation of an MSS system are subject to significant regulation in the United States by the FCC and in foreign jurisdictions by similar authorities. Additionally, our use of our licensed spectrum globally is subject to coordination by the ITU. Our second-generation constellation has been licensed and registered in France. The rules and regulations of the FCC or these foreign authorities may change and may not continue to permit our operations as currently conducted or as we plan to conduct them. Further, certain foreign jurisdictions may decide to allow additional uses within our ITU-allocation of spectrum that may be incompatible with our continued provision of MSS.

Failure to provide services in accordance with the terms of our licenses or failure to operate our satellites, ground stations, or other terrestrial facilities (including those necessary to provide ancillary terrestrial component "ATC" services) as required by our licenses and applicable government regulations could result in the imposition of government sanctions against us, up to and including cancellation of our licenses.

Our system requires regulatory authorization in each of the markets in which we or the IGOs provide service. We and the IGOs may not be able to obtain or retain all regulatory approvals needed for operations. Regulatory changes, such as those resulting from judicial decisions or adoption of treaties, legislation or regulation in countries where we operate or intend to operate, may also significantly affect our business. Because regulations in each country are different, we may not be aware if some of the IGOs and/or persons with which we or they do business do not hold the requisite licenses and approvals.

Our current regulatory approvals could now be, or could become, insufficient in the view of foreign regulatory authorities. Furthermore, any additional necessary approvals may not be granted on a timely basis, or at all, in all jurisdictions in which we wish to offer services, and applicable restrictions in those jurisdictions could become unduly burdensome.

Our operations are subject to certain regulations of the United States State Department's Directorate of Defense Trade Controls (the export of satellites and related technical data), United States Treasury Department's Office of Foreign Assets Control (financial transactions and transactions with sanctioned persons or countries) and the United States Commerce Department's Bureau of Industry and Security (export of satellites and related technical data, our gateways and phones) and as well as other similar foreign regulations. These U.S. and foreign obligations and regulations may limit or delay our ability to offer products and services in a particular country. We may be required to provide U.S. and some foreign government law enforcement and security agencies with call interception services and related government assistance, in respect of which we face legal obligations and restrictions in various jurisdictions. These regulations may limit or delay our ability to operate in a particular country or engage in transactions with certain parties and may impose significant compliance costs. As new laws and regulations are issued, we may be required to modify our business plans or operations. If we fail to comply with these regulations in any country, we could be subject to sanctions that could affect, materially and adversely, our ability to operate in that country. Failure to obtain the authorizations necessary to use our assigned radio frequency spectrum and to distribute our products in certain countries could have a material adverse effect on our ability to generate revenue and on our overall competitive position.

Spectrum values historically have been volatile, which could cause the value of our business to fluctuate.

Our business plan includes forming strategic partnerships to maximize the use and value of our spectrum, network assets and combined service offerings in the United States and internationally. Value that we may be able to realize from these partnerships will depend in part on the value ascribed to our spectrum. Historically, valuations of spectrum in other frequency bands have been volatile, and we cannot predict the future value that we may be able to realize for our spectrum and other assets. In addition, to the extent that the FCC takes action that makes additional spectrum available or promotes the more flexible use or greater availability (e.g., via spectrum leasing or new spectrum sales) of existing satellite or terrestrial spectrum allocations, the availability of such additional spectrum could reduce the value that we may be able to realize for our spectrum.

Our business plan to use our licensed MSS spectrum to provide terrestrial wireless services depends upon action by third parties, which we cannot control.

Our business plan includes utilizing approximately 11.5 MHz of our licensed MSS spectrum to provide terrestrial wireless services, including mobile broadband applications, around the world. In support of these plans, in December 2016, the FCC adopted a Report and Order establishing rules that permit us to offer such services. In August 2017, the FCC modified Globalstar's MSS licenses, granting it authority to provide terrestrial broadband services over its satellite spectrum at 2483.5 MHz to 2495.0 MHz. Globalstar's MSS licenses, including its terrestrial authority, are valid through various terms, which we expect to renew. In addition, we will need to comply with certain conditions in order to provide terrestrial broadband service under its MSS licenses, including obtaining FCC certifications for our equipment that will utilize this spectrum authority. We are seeking similar approvals in various foreign jurisdictions, including applying for licenses and commencing due diligence efforts. We cannot guarantee that such efforts will be successful. We are currently engaged in the process of selecting a strategic partner (or multiple partners) for operating these spectrum licenses. If we encounter delays in engaging one or more partners or other delays or obstacles in implementing our business plan to use licensed MSS spectrum to provide terrestrial wireless services, our anticipated future revenues and profitability could be reduced. We can provide no assurance that that we will be successful in monetizing the value of these licenses.

Other future regulatory decisions could reduce our existing spectrum allocation or impose additional spectrum sharing agreements on us, which could adversely affect our services and operations.

Under the FCC's plan for MSS in our frequency bands, we must share frequencies in the United States with other licensed MSS operators. To date, there are no other authorized CDMA-based MSS operators and no pending applications for authorization. However, the FCC or other regulatory authorities may require us to share spectrum with other systems that are not currently licensed by the United States or any other jurisdiction. On February 11, 2013, Iridium filed its own petition for rulemaking seeking to have the FCC reallocate 2.725 MHz of "Big LEO" spectrum from 1616-1618.725 MHz to Iridium's exclusive use. Subsequently, Iridium modified its petition, requesting the ability to share additional spectrum licensed to Globalstar at 1616-1618.725 MHz. On November 1, 2017, Iridium withdrew its petition for rulemaking without prejudice. There can be no assurance, however, that Iridium will not file a similar petition for rulemaking in the future that requests either the redesignation of some amount of our 1.6 GHz spectrum to Iridium's exclusive use or the sharing of additional spectrum licensed to us. An adverse result in this proceeding could materially affect our ability to provide both Duplex and Simplex mobile satellite services.

We registered our second-generation constellation with the ITU through France rather than the United States. The French radio frequency spectrum regulatory agency, ANFR, submitted the technical papers filing to the ITU on our behalf in July 2009. As with the first-generation constellation, the ITU requires us to coordinate our spectrum assignments with other administrators and operators that use any portion of our spectrum frequency bands. We are actively engaged in but cannot predict how long the coordination process will take; however, we are able to use the frequencies during the coordination process in accordance with our national licenses.

In March 2014, the FCC adopted an order related to the 5 GHz band which, among other things, expanded the use of unlicensed terrestrial mobile broadband services within our C-band Forward Link (Earth Station to Satellite) which operates at 5091-5250 MHz. As part of this order, the FCC adopted certain technical requirements for the expanded unlicensed use within our licensed spectrum which were intended to protect our services from harmful interference. However, since the FCC order has been adopted, we have identified a noticeable increase in the ambient level of interference in the 5 GHz band. Although this increase does not currently affect the quality of our service to customers, should the noise floor rise above a certain level, we could experience a significant reduction in our satellite downlink capacity, resulting in degradation of quality of our service to

customers. In May 2018, we petitioned the FCC to open a Notice of Inquiry to assess the potential future effects of continuing to allow unlicensed use of the 5 GHz band. Furthermore, other regulatory jurisdictions internationally may also consider similar expanded unlicensed use in the 5 GHz band that may have a significant adverse impact on our ability to provide mobile satellite services.

If the FCC revokes, modifies or fails to renew or amend our licenses, our ability to operate may be curtailed.

We hold FCC licenses for the operation of certain of our satellites, our U.S. gateways and other ground facilities, and our mobile earth terminals that are subject to revocation if we fail to satisfy specified conditions or to meet prescribed milestones. The FCC licenses are also subject to modification by the FCC. There can be no assurance that the FCC will renew the FCC licenses we hold. If the FCC revokes, modifies or fails to renew or amend the FCC licenses we hold, or if we fail to satisfy any of the conditions of our respective FCC licenses, we may not be able to continue to provide mobile satellite communications services.

If our French regulator, or any other regulator, revokes, modifies or fails to renew or amend our licenses, our ability to operate may be curtailed.

We hold licenses issued by, and are subject to the continued regulatory jurisdiction of, the French Ministry for the Economy, Industry and Employment, French Ministry in charge of Space Activities ("MESR") and ARCEP, the French independent administrative authority of post and electronic communications regulations, for the operation of our second-generation satellites. These licenses are subject to revocation if we fail to satisfy specified conditions or to meet prescribed milestones. These licenses are also subject to modification by the French regulators. There can be no assurance that the French regulators will renew the licenses we hold. If the MESR and ARCEP or other French regulators revoke, modify or fail to renew or amend the licenses we hold, or if we fail to satisfy any of the conditions of our respective French licenses, we may not be able to continue to provide mobile satellite communications services which would have a material adverse effect on our business and operations.

Similarly, we hold certain licenses in each country within which we have ground infrastructure located. If we fail to maintain such licenses within any particular country, we may not be able to continue to operate the ground infrastructure located within that country which could prevent us from continuing to provide mobile satellite communications services within that region.

Furthermore, if we operate in any country without a valid license, we could face regulatory fines and criminal sanctions. For example, ANATEL, the national telecommunications agency of Brazil, imposed a fine because we operated our gateway stations in Brazil without a valid license while we were working on renewing such license. In October 2018, this matter was referred to the Brazil federal authorities, who are currently performing an investigation, and could result in criminal sanctions. This investigation is at an early stage and we cannot predict the outcome of this investigation at this time.

Changes in international trade regulations and other risks associated with foreign trade could adversely affect our sourcing.

We source our products primarily from foreign contract manufacturers, with the largest concentration being in China. The adoption of regulations related to the importation of product, including quotas, duties, taxes and other charges or restrictions on imported goods, and changes in U.S. customs procedures could result in an increase in the cost of our products. Recently, the U.S. imposed increased tariffs on certain imports from China. While the current tariffs have not had a material impact on goods that we currently import from China, the current U.S. administration has proposed additional tariffs on a list of thousands of categories of products that may be imposed imminently and expressed a willingness for further tariffs on goods imported from China, including on additional items that we purchase. While it is too early to predict how the recently enacted, proposed and any future tariffs or any other trade restrictions will impact our business, such trade restrictions may result in lower gross margin on impacted products.

Additionally, delays in customs clearance of goods or the disruption of international transportation lines used by us could result in our inability to deliver goods to customers in a timely manner or the potential loss of sales altogether. Current or future social and environmental regulations or critical issues, such as those relating to the sourcing of conflict minerals from the Democratic Republic of the Congo or the need to eliminate environmentally sensitive materials from our products, could restrict the supply of components and materials used in production or increase our costs. Any delay or interruption to our manufacturing process or in shipping our products could result in lost revenue, which would adversely affect our business, financial condition or results of operations.

Risks Related to Our Common Stock

Our common stock is traded on the NYSE American but could be delisted in the future, which may impair our ability to raise capital.

Our common stock is listed on the NYSE American under the symbol "GSAT." Broker-dealers may be less willing or able to sell and/or make a market in our common stock if delisting were to occur, which may make it more difficult for shareholders to dispose of, or to obtain accurate quotations for the price of, our common stock. Removal of our common stock from listing on the NYSE American may also make it more difficult for us to raise capital through the sale of our securities.

Additionally, if our common stock is not listed on a U.S. national stock exchange or approved for quotation and trading on a national automated dealer quotation system or established automated over-the-counter trading market, holders of our 2013 8.00% Notes will have the option to require us to repurchase the notes, which we may not have sufficient financial resources to do.

Restrictive covenants in our Facility Agreement do not allow us to pay dividends on our common stock for the foreseeable future.

We do not expect to pay cash dividends on our common stock. Our Facility Agreement currently prohibits the payment of cash dividends. Any future dividend payments are within the discretion of our board of directors and will depend on, among other things, our results of operations, working capital requirements, capital expenditure requirements, financial condition, contractual restrictions, business opportunities, anticipated cash needs, provisions of applicable law and other factors that our board of directors may deem relevant. We may not generate sufficient cash from operations in the future to pay dividends on our common stock.

The market price of our common stock is volatile and there is a limited market for our shares.

The trading price of our common stock is subject to wide fluctuations. Factors affecting the trading price of our common stock may include, but are not limited to:

- actual or anticipated variations in our operating results;
- failure in the performance of our current or future satellites;
- changes in financial estimates by research analysts, or any failure by us to meet or exceed any such estimates, or changes
 in the recommendations of any research analysts that elect to follow our common stock or the common stock of our
 competitors;
- actual or anticipated changes in economic, political or market conditions, such as recessions or international currency fluctuations;
- actual or anticipated changes in the regulatory environment affecting our industry;
- actual or anticipated sales of common stock by our controlling stockholder or others;
- · changes in the market valuations of our industry peers; and
- announcement by us or our competitors of significant acquisitions, strategic partnerships, divestitures, joint ventures or other strategic initiatives.

The trading price of our common stock may also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Our stockholders may be unable to resell their shares of our common stock at or above the initial purchase price. Additionally, because we are a controlled company there is a limited market for our common stock, and we cannot assure our stockholders that a trading market will develop further or be maintained. In periods of low trading volume, sales of significant amounts of shares of our common stock in the public market could lower the market price of our stock.

The future issuance of additional shares of our common stock could cause dilution of ownership interests and adversely affect our stock price.

We may issue our previously authorized and unissued securities, resulting in the dilution of the ownership interests of our current stockholders. We are authorized to issue 1.9 billion shares of common stock (400 million are designated as nonvoting) and 100 million shares of preferred stock. As of December 31, 2018, approximately 1.4 billion shares of voting common stock and no shares of nonvoting common stock were issued and outstanding. As of December 31, 2018, there were 553.2 million shares available for future issuance (of which 100 million are designated as preferred and 400 million are designated as nonvoting), of which approximately 177.9 million shares were contingently issuable upon the exercise of stock options, the conversion of convertible notes and the vesting of restricted stock awards. We currently do not have sufficient authorized and unissued shares of voting common stock available to satisfy all possible exercises, conversions and vestings; we expect to be required to authorize additional shares of voting common stock. The potential issuance of additional shares of common stock may create downward pressure on the trading price of our common stock and may increase the potential for dilution of ownership interest of current shareholders. We may issue additional shares of our common stock or other securities that are convertible into or exercisable for common stock for capital raising or other business purposes. Future sales of substantial amounts of common stock, or the perception that sales could occur, could have a material adverse effect on the price of our common stock.

We have issued and may issue shares of preferred stock or debt securities with greater rights than our common stock.

Our certificate of incorporation authorizes our board of directors to issue one or more series of preferred stock and set the terms of the preferred stock without seeking any further approval from holders of our common stock. Currently, there are 100 million shares of preferred stock authorized. Any preferred stock that is issued may rank ahead of our common stock in terms of dividends, priority and liquidation premiums and may have greater voting rights than holders of our common stock.

If persons engage in short sales of our common stock, the price of our common stock may decline.

Selling short is a technique used by a stockholder to take advantage of an anticipated decline in the price of a security. A significant number of short sales or a large volume of other sales within a relatively short period of time can create downward pressure on the market price of a security. Further sales of common stock could cause even greater declines in the price of our common stock due to the number of additional shares available in the market, which could encourage short sales that could further undermine the value of our common stock. Holders of our securities could, therefore, experience a decline in the value of their investment as a result of short sales of our common stock.

Provisions in our charter documents and Facility Agreement and Delaware corporate law may discourage takeovers, which could affect the rights of holders of our common stock and convertible notes.

Provisions of Delaware law and our amended and restated certificate of incorporation (after giving effect to the changes required by the Settlement Agreement discussed in Note 9: Contingencies in our Consolidated Financial Statements), amended and restated bylaws and our Facility Agreement and indenture could hamper a third party's acquisition of us or discourage a third party from attempting to acquire control of us. These provisions include:

- the election of our Minority Directors by a plurality of the vote of our stockholders other than Thermo;
- the requirement that (i) any extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving us or any of our subsidiaries and (ii) any sale or transfer of a material amount of assets of Globalstar or any sale or transfer of assets of any of our subsidiaries which are material to us has to be approved by the Strategic Review Committee until such time as Thermo no longer beneficially owns at least 45% of our common stock;
- the ability of our board of directors to issue preferred stock with voting rights or with rights senior to those of the common stock without any further vote or action by the holders of our common stock;
- the division of our board of directors into three separate classes serving staggered three-year terms;
- the ability of our stockholders, at such time when Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, to remove our directors only for cause by the holders of at least 66 2/3% of the outstanding shares of capital stock entitled to vote in the election of directors;
- prohibitions, at such time when Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, on our stockholders acting by written consent;

- prohibitions on our stockholders calling special meetings of stockholders or filling vacancies on our board of directors;
- the requirement, at such time when Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, that our stockholders must obtain a super-majority vote to amend or repeal our amended and restated certificate of incorporation or bylaws;
- change of control provisions in our Facility Agreement, which provide that a change of control will constitute an event
 of default and, unless waived by the lenders, will result in the acceleration of the maturity of all indebtedness under that
 agreement;
- change of control provisions relating to our 2013 8.00% Notes, which provide that a change of control will permit holders of those notes to demand immediate repayment; and
- change of control provisions in our 2006 Equity Incentive Plan, which provide that a change of control may accelerate the vesting of all outstanding stock options, stock appreciation rights and restricted stock.

We also are subject to Section 203 of the Delaware General Corporation Law, which, subject to certain exceptions, prohibits us from engaging in any business combination with any interested stockholder, as defined in that section, for a period of three years following the date on which that stockholder became an interested stockholder. This provision does not apply to Thermo, which became our principal stockholder prior to our initial public offering.

These provisions also could make it more difficult for you and our other stockholders to take other corporate actions, and could limit the price that investors might be willing to pay in the future for shares of our common stock.

We are controlled by Thermo, whose interests may conflict with yours.

As of December 31, 2018, Thermo owned approximately 57% of our outstanding common stock. Additionally, Thermo owns convertible notes that may be converted into additional shares of common stock. Although (after giving effect to the changes required by the Settlement Agreement discussed in Note 9: Contingencies in our Consolidated Financial Statements) extraordinary corporate transactions, material sales of assets and certain transactions with related parties must be approved by the Strategic Review Committee, to the extent these and other matters are also subject to a vote of our shareholders, Thermo is able to control such vote. These matters include the election of certain members of our board of directors and numerous other matters, including changes of control and other significant corporate transactions, so long as these transactions are not between Thermo and Globalstar and until such time as Thermo shall no longer be the beneficial owner of 45% or more of our outstanding common stock.

We have depended substantially on Thermo to provide capital to finance our business. In 2006 and 2007, Thermo purchased an aggregate of \$200 million of common stock at prices substantially above market. On December 17, 2007, Thermo assumed all of the obligations and was assigned all of the rights (other than indemnification rights) of the administrative agent and the lenders under our amended and restated credit agreement. To fulfill the conditions precedent to our Facility Agreement, in 2009, Thermo converted the loans outstanding under the credit agreement into equity and terminated the credit agreement. In addition, Thermo and its affiliates deposited \$60.0 million in a contingent equity account to fulfill a condition precedent for borrowing under the Facility Agreement, purchased \$20.0 million of our 5.0% Notes, which were subsequently converted into shares of common stock in 2013, purchased \$11.4 million of our 2013 8.00% Notes, loaned us \$37.5 million to fund our debt service reserve account under the Facility Agreement, and funded a total of \$65.0 million during 2013 pursuant to the terms of the Equity Commitment, Restructuring and Consent Agreement, the Common Stock Purchase Agreement, and the Common Stock Purchase and Option Agreement. In June 2017, Thermo purchased \$33.0 million of our common stock to provide funds required by our lenders to obtain an amendment to our Facility Agreement. In October 2017 and December 2018, Thermo purchased \$43.3 million and \$49.3 million, respectively, of our common stock in connection with our public stock offerings.

Thermo is controlled by James Monroe III, our Executive Chairman. Through Thermo, Mr. Monroe holds equity interests in, and serves as an executive officer or director of, a diverse group of privately-owned businesses not otherwise related to us. We reimburse Thermo and Mr. Monroe for certain third party, documented, out of pocket expenses they incur in connection with our business.

The interests of Thermo may conflict with the interests of our other stockholders. Thermo may take actions it believes will benefit its equity investment in us or loans to us even though such actions might not be in your best interests as a holder of our common stock.

Item 1B. Unresolved Staff Comments

Not Applicable

Item 2. Properties

As of December 31, 2018, our principal headquarters are located in Covington, Louisiana, where we currently lease approximately 31,000 square feet of office space. We own or lease the facilities described in the following table (in approximate square feet):

Location	Country	Square Feet	Facility Use	Owned/Leased
Covington, Louisiana	USA	31,433	Corporate Offices	Leased
Milpitas, California	USA	12,375	Satellite and Ground Control Center	Leased
Managua	Nicaragua	10,900	Gateway	Owned
Clifton, Texas	USA	10,000	Gateway	Owned
Los Velasquez, Edo Miranda	Venezuela	9,700	Gateway	Owned
Mississauga, Ontario	Canada	9,502	Canada Office	Leased
Sebring, Florida	USA	9,000	Gateway	Leased
Aussaguel	France	7,502	Satellite Control Center and Gateway	Leased
Smith Falls, Ontario	Canada	6,500	Gateway	Owned
High River, Alberta	Canada	6,500	Gateway	Owned
Barrio of Las Palmas, Cabo Rojo	Puerto Rico	6,000	Gateway	Owned
Wasilla, Alaska	USA	5,000	Gateway	Owned
Seletar Satellite Earth Station	Singapore	4,500	Gateway	Leased
Petrolina	Brazil	2,500	Gateway	Owned
Rio de Janeiro	Brazil	2,120	Brazil Office	Leased
Gaborone	Botswana	2,000	Gateway	Leased
Manaus	Brazil	1,900	Gateway	Owned
Presidente Prudente	Brazil	1,300	Gateway	Owned
Dublin	Ireland	1,280	Ireland Office	Leased
Panama City	Panama	1,100	Panama Office	Leased
Gaborone	Botswana	270	Botswana Office	Leased

Our owned properties in Clifton, Texas and Wasilla, Alaska are encumbered by liens in favor of the administrative agent under our Facility Agreement for the benefit of the lenders thereunder. See Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources - Contractual Obligations and Commitments* in this Report.

Effective February 2019, we moved into a new corporate office due to the expiration of our former lease agreement. The new location remains in Covington, Louisiana and is approximately 66,180 square feet.

Item 3. Legal Proceedings

For a description of our material pending legal and regulatory proceedings and settlements, see Note 9: Contingencies in our Consolidated Financial Statements in Part II, Item 8 of this Report.

Item 4. Mine Safety Disclosures

Not Applicable

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Common Stock Information

Our common stock trades on the NYSE American under the symbol "GSAT".

As of February 22, 2019, 1,448,027,328 shares of our voting common stock were outstanding, held by 249 holders of record. The number of holders of record is based upon the actual number of holders registered at such date and does not include holders of shares in street name or persons, partnerships, associates, corporations or other entities in security position listings maintained by depositories.

Dividend Information

We have never declared or paid any cash dividends on our common stock. Our Facility Agreement prohibits us from paying dividends. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. See Note 5: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion.

Item 6. Selected Financial Data

The following table presents our selected consolidated financial data for the periods indicated. We derived the historical data from our audited Consolidated Financial Statements.

You should read the data set forth below together with our Consolidated Financial Statements and the related notes thereto included in Part II, Item 8 of this Report and the discussion in Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* in this Report.

Effective January 1, 2018, we adopted Accounting Standards Codification ("ASC") Topic 606, "Revenue from Contracts with Customers" ("ASC 606"). We adopted this standard using the modified retrospective method and, as such, prior period amounts reflected in the tables and discussion below have not been adjusted.

Effective January 1, 2018, we adopted ASU No. 2017-07, Compensation—Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. We adopted this standard retrospectively and, as such, we reclassified a portion of net periodic benefit cost from marketing, general and administrative expense to other income (expense) for the years ended December 31, 2018, 2017 and 2016. Financial data for the periods ended December 31, 2015 and 2014 have not been recast.

	December 31,							
(in thousands)	2018		2017	2016	2015	2014		
Statement of Operations Data (year ended):								
Revenue	\$ 130,1	13 \$	112,660	\$ 96,861	\$ 90,490	\$ 90,064		
Operating loss	(47,3)	79)	(68,446)	(63,253	(66,604	(95,895)		
Other income (expense)	40,9	88	(20,438)	(75,936	140,318	(366,090)		
Income (loss) before income taxes	(6,3)	91)	(88,884)	(139,189	73,714	(461,985)		
Net income (loss)	(6,5	16)	(89,074)	(132,646	72,322	(462,866)		
Balance Sheet Data (end of period):								
Cash and cash equivalents	15,2	12	41,644	10,230	7,476	7,121		
Property and equipment, net	882,€	95	971,119	1,039,719	1,077,560	1,113,560		
Total assets	1,045,4	82	1,129,265	1,132,614	1,175,015	1,268,420		
Current maturities of long-term debt	96,2	49	79,215	75,755	32,835	6,450		
Long-term debt, less current maturities	367,2	02	434,651	500,524	548,286	623,640		
Stockholders' equity	358,9	45	291,224	161,819	237,131	78,916		

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with our Consolidated Financial Statements and applicable notes to our Consolidated Financial Statements and other information included elsewhere in this Report, including risk factors disclosed in Part I, Item IA. Risk Factors. The following information contains forward-looking statements, which are subject to risks and uncertainties. Should one or more of these risks or uncertainties materialize, our actual results may differ from those expressed or implied by the forward-looking statements. See "Forward-Looking Statements" at the beginning of this Report.

Performance Indicators

Our management reviews and analyzes several key performance indicators in order to manage our business and assess the quality and potential variability of our earnings and cash flows. These key performance indicators include:

- total revenue, which is an indicator of our overall business growth;
- subscriber growth and churn rate, which are both indicators of the satisfaction of our customers;
- average monthly revenue per user, or ARPU, which is an indicator of our pricing and ability to obtain effectively longterm, high-value customers. We calculate ARPU separately for each type of our Duplex, Simplex, SPOT and IGO revenue;
- operating income and adjusted EBITDA, both of which are indicators of our financial performance; and
- capital expenditures, which are an indicator of future revenue growth potential and cash requirements.

Comparison of the Results of Operations for the years ended December 31, 2018 and 2017

Revenue:

During 2018, total revenue increased \$17.4 million to \$130.1 million from \$112.7 million in 2017. This increase was due primarily to a \$12.6 million increase in service revenue, which is attributable to increases in ARPU across all core business lines and growth in our total average subscriber base. Also contributing to the increase in total revenue was an increase of \$4.8 million in revenue generated from subscriber equipment sales during 2018, which resulted primarily from Simplex and SPOT products, offset by a lower volume and pricing of Duplex units sold.

Effective January 1, 2018, we adopted ASC 606. We adopted this standard using the modified retrospective method and, as such, prior period amounts reflected in the tables and discussion below have not been adjusted.

The following table sets forth amounts and percentages of our revenue by type of service (dollars in thousands).

		Year F December		Year I December	
		Revenue	% of Total Revenue	Revenue	% of Total Revenue
Service Revenue:	_				
Duplex	\$	41,223	32% \$	37,635	33%
SPOT		52,363	40%	45,427	40%
Simplex		13,459	10%	10,946	10%
IGO		932	1%	1,068	1%
Other		3,112	2%	3,397	3%
Total Service Revenue	\$	111,089	85% \$	98,473	87%

The following table sets forth amounts and percentages of our revenue generated from equipment sales (dollars in thousands).

	 Year I December			Ended r 31, 2017
	 Revenue	% of Total Revenue	Revenue	% of Total Revenue
Equipment Revenue:				
Duplex	\$ 2,016	2% \$	2,754	2%
SPOT	8,046	6%	5,394	5%
Simplex	8,330	7%	5,243	5%
IGO	498	<u> </u>	779	1%
Other	134	%	17	%
Total Equipment Revenue	\$ 19,024	15% \$	14,187	13%

The following table sets forth our average number of subscribers and ARPU by type of revenue.

	Dece	mber 31,
	2018	2017
Average number of subscribers for the year ended:		
Duplex	65,50	1 72,443
SPOT	291,289	9 285,683
Simplex	354,673	313,553
IGO	31,53	7 37,165
Other	1,14	1,478
Total	744,14:	5 710,322
ARPU (monthly):		
Duplex	\$ 52.4	5 \$ 43.29
SPOT	14.98	3 13.25
Simplex	3.10	5 2.91
IGO	2.40	5 2.39

The numbers reported in the above table are subject to immaterial rounding inherent in calculating averages.

During 2018, gross Duplex and SPOT subscriber additions were 11,589 and 69,607, respectively. During 2017, gross Duplex and SPOT subscriber additions were 14,660 and 74,830, respectively. Duplex gross subscriber additions were higher in 2017 as we experienced higher demand due to lower service plan prices in effect and higher availability of new phone inventory. SPOT gross subscriber activities were higher in 2017 driven primarily by promotions in place during the year that did not recur at the same levels in 2018; also driving a decrease in SPOT gross subscriber activations during 2018 was a reduction in legacy SPOT device sales in anticipation of the launch of our new SPOT XTM device in May 2018. Because our Simplex subscribers are able to activate and deactivate their units several times during the year, gross Simplex subscriber additions are not considered to be a meaningful metric.

We count "subscribers" based on the number of devices that are subject to agreements that entitle them to use our voice or data communications services rather than the number of persons or entities who own or lease those devices.

Other service revenue includes revenue generated primarily from sources which are not subscriber driven, such as engineering services. Accordingly, we do not present ARPU for other service revenue in the table above.

Service Revenue

Duplex service revenue increased 10% in 2018 due to an increase in ARPU, offset partially by a decline in average subscribers. ARPU increased 21% in 2018 compared to 2017, contributing \$7.2 million to the total Duplex service revenue increase. The increase in ARPU was driven primarily by price increases for certain of our legacy rate plans to align our rate plans with our service levels. Subscribers activating on rate plans higher than our 2017 blended ARPU also contributed to the increase in ARPU year over year. A decrease in average subscribers of 10% during 2018 offset partially the increase in ARPU. This decrease was due to lower gross activations resulting from fewer equipment sales over the last twelve months. The decline in the average subscriber base negatively impacted Duplex service revenue by \$3.6 million in 2018.

SPOT service revenue increased 15% in 2018 due to increases in both ARPU and the average subscriber base. ARPU increased 13% in 2018 compared to 2017, contributing \$6.0 million to the total increase in SPOT service revenue. Higher ARPU was primarily driven by rate plan increases. The blend of subscribers in the SPOT base also impacts ARPU. For instance, rate plans for new subscribers activating our SPOT Gen3 and SPOT XTM devices are higher than our current blended ARPU, whereas SPOT Trace subscribers activate on rate plans lower than current ARPU levels. The average number of SPOT subscribers increased 2% in 2018 compared to 2017 driven in part by the launch of SPOT XTM in 2018. The increase in our SPOT subscriber base contributed \$0.9 million to the total SPOT service revenue increase.

Simplex service revenue increased 23% in 2018 due primarily to a 13% increase in average subscribers, which contributed \$1.4 million to the increase. The increase in average subscribers was driven by higher Simplex equipment sales during the last twelve months, primarily in North America due to the 2018 launch of SmartOne SolarTM as well as strong sales of legacy Simplex equipment. An increase in ARPU of 9% contributed \$1.1 million to the Simplex service revenue increase during 2018 driven by higher usage as well as the mix of rate plans on which subscribers are activating.

Other service revenue decreased \$0.3 million, or 9%, in 2018. The decrease in other service revenue was due primarily to a \$0.2 million decrease in revenue generated from government contracts, which was driven by the timing and amount of revenue recognized for contracts awarded to us. Other smaller items also contributed to the decrease year over year.

Subscriber Equipment Sales

Revenue from Duplex equipment sales decreased \$0.7 million, or 27%, in 2018. The decrease was due to a decline in the volume and pricing of our GSP-1700 phones and related accessories sold as we continue to deplete our remaining inventory. The decrease in revenue from GSP-1700 devices was offset partially by sales of Sat-Fi2TM, our new second-generation Duplex device, which launched in April 2018. Sales of this device were slower than expected as we focused on improving usability and solving mass production issues.

Revenue from SPOT equipment sales increased \$2.7 million, or 49%, in 2018. The increase was driven primarily by sales of our new SPOT XTM product, which launched in May 2018. Sales of SPOT XTM were negatively impacted by certain production issues during 2018 that have been substantially resolved. Offsetting this increase was a decline in volume and pricing of our Gen3 and Trace devices; this decline primarily driven by the fact that in 2018 we did not repeat certain sales promotions we offered in 2017.

Revenue from Simplex equipment sales increased \$3.1 million, or 59%, in 2018. This increase was attributable to the recognition of \$4.3 million of revenue during 2018 in connection with the launch of our new SmartOne SolarTM device in March 2018. This increase was offset partially by a non-recurring \$1.3 million sale of our SmartOne tracking device to support disaster recovery efforts related to hurricane activity in 2017.

Operating Expenses:

Total operating expenses decreased \$3.6 million, or 2%, to \$177.4 million in 2018 from \$181.1 million in 2017. As discussed further below, the decrease in total operating expenses was driven primarily by a \$20.5 million revision to our contract termination charge with Thales during 2018 as well as a reduction in value of long-lived assets of \$17.0 million during 2017 that did not recur in 2018. Partially offsetting this reduction to expense were increases in depreciation, amortization and accretion expense as well as legal and advisor costs incurred related to the proposed merger (and related litigation) (see Note 11: Related Party Transactions and Note 9: Contingencies to our Consolidated Financial Statements for further discussion).

Cost of Services

Cost of services increased \$0.6 million, or 2%, to \$37.6 million in 2018 from \$37.0 million in 2017. The increase was due primarily to maintenance, support costs and related technology amortization associated with our ground network of \$1.1 million and higher personnel and contractor costs of \$0.4 million due to the timing and scope of capital projects; these increases were offset by lower research and development costs of \$0.8 million due to the release of new products in 2018 in all of our core equipment categories. Other smaller items contributed to the remaining change in cost of services during the year.

Cost of Subscriber Equipment Sales

Cost of subscriber equipment sales increased by \$4.5 million, or 45%, to \$14.4 million in 2018 from \$9.9 million in 2017. Consistent with the increase in equipment revenue, sales of the new products launched in 2018, particularly our SPOT X^{TM} and SmartOne SolarTM, drove nearly all of the increase in costs.

Cost of Subscriber Equipment Sales - Reduction in the Value of Inventory

During 2017, we recorded \$0.8 million after adjusting for changes in net realizable value for certain products, particularly in certain international locations, compared to the carrying value of the inventory, as well as for a reduction in the value of prepaid inventory due to design changes for products under development. A similar inventory reserve was not required during 2018.

Marketing, General and Administrative

Marketing, general and administrative expenses increased \$16.6 million, or 43%, to \$55.4 million in 2018 from \$38.8 million in 2017. This increase was driven primarily by costs incurred for consultant and other advisors related to strategic opportunities, including the proposed merger (and related litigation) discussed in Note 11: Related Party Transactions and Note 9: Contingencies to our Consolidated Financial Statements, the monetization of our spectrum and other business development efforts. In total, these items contributed to an increase in expense of \$12.6 million, of which the majority was directly associated with the proposed merger and subsequent litigation. Higher subscriber acquisition costs of \$1.4 million also contributed to the increase in expense, driven by efforts supporting the launch of three new products during 2018 as well as the timing of certain promotions and event sponsorships as we continue to expand our global consumer footprint. We also had an increase in personnel costs and stock based compensation of \$2.7 million; the increase in stock based compensation resulted from additional grants to certain employees during the fourth quarter of 2018 and the increase in personnel costs was driven by increased headcount particularly at the senior management level. Other smaller items contributed to the remaining change.

Reduction in the Value of Long-Lived Assets

During 2017, we recorded a reduction in the carrying value of long-lived assets of \$17.0 million related to purchase and procurement costs for prepaid long-lead items ("LLI") to reflect the fair value of these assets on our consolidated balance sheet. See Note 2: Property and Equipment to our 2017 Annual Report on Form 10-K for further discussion. Similar reserves specific to the carrying value of long-lived assets were not required in 2018.

Revision to Contract Termination Charge

In May 2018, the statute of limitations for Thales to enforce the arbitration award pursuant to the Federal Arbitration Act expired. Accordingly, we believe that payment of the contract termination charge is not probable, and we removed this liability from our consolidated balance sheet during the second quarter of 2018, resulting in a reduction in operating expenses of ϵ 17.5 million, or \$20.5 million. See Note 9: Contingencies in our Consolidated Financial Statements for further discussion.

Depreciation, Amortization and Accretion

Depreciation, amortization, and accretion expense increased \$12.9 million to \$90.4 million in 2018 compared to \$77.5 million in 2017. During 2018, we placed into service approximately \$208 million of construction in progress (including capitalized interest) associated with our next-generation upgrades to our ground infrastructure. The costs placed into service represent the gateways capable of supporting commercial traffic from the recently launched Sat-Fi2TM, the first device to work on our upgraded network. We expect depreciation expense for these assets to be approximately \$3.5 million per quarter for an estimated life of fifteen years.

As of December 31, 2018, we had \$18.1 million in construction in progress related primarily to the remaining costs (including capitalized interest) associated with our next-generation upgrades to our ground infrastructure in certain regions around the world. In January 2019, we placed into service approximately \$7.9 million of costs associated with two RANs that were deployed in Brazil in connection with the technology upgrade and associated release of Sat-Fi2TM to this region. The remaining costs in construction in progress will be placed into service when the assets are deployed.

Other Income (Expense):

Loss on Extinguishment of Debt

We recorded a non-cash loss on extinguishment of debt of \$6.3 million during 2017 due to the conversion of a significant portion of our 2013 8.00% Notes. During the third quarter of 2017, holders of \$16.0 million principal amount of 2013 8.00% Notes converted their notes, resulting in the issuance of 26.4 million shares of our common stock. The fair value of these shares exceeded the derivative liability and principal amount written off due to the conversions, resulting in a loss on extinguishment of debt. See Note 3: Long-Term Debt and Other Financing Arrangements, Note 4: Derivatives and Note 5: Fair Value Measurements to our 2017 Annual Report on Form 10-K for further discussion. Similar transactions did not occur in 2018.

Gain on Equity Issuance

Gain on equity issuance was \$2.7 million during 2017 driven primarily by downside protection features included in certain of our contracts relating to payment of consideration with our common stock in lieu of cash. As discussed in Note 6: Commitments to our 2017 Annual Report on Form 10-K, we had an agreement with Hughes whereby it exercised its right to receive a prepayment of certain payment milestones in shares of our common stock at a 7% discount to the market value in lieu of cash. In connection with this agreement, we provided Hughes downside protection through June 30, 2017. In April 2017, Hughes sold all remaining shares of our common stock recognizing the required proceeds under the agreement. As a result of changes in the estimated value of this option between initial issuance and settlement in April 2017, we recorded non-cash gains and losses during each reporting period. This liability is no longer outstanding. There was no gain or loss on equity issuance during 2018.

Interest Income and Expense

Interest income and expense, net, increased \$8.8 million to expense of \$43.6 million for 2018 compared to expense of \$34.8 million for 2017. This increase was driven by a reduction in capitalized interest of \$9.5 million due primarily to the reduction in our construction in progress balance related to our ground network, which results in lower interest eligible to be capitalized. As discussed above, we placed approximately \$208.0 million of assets into service during 2018, which decreased our construction in progress balance. Gross interest costs increased \$0.5 million due to an increase in interest expense on our Facility Agreement from a higher LIBOR-based interest rate and a higher principal balance outstanding on our Loan Agreement with Thermo offset by lower interest related to our 2013 8.00% Notes as the principal balance decreased significantly due to conversions in 2017. The increase in interest expense was offset by an increase in interest income of \$0.8 million, resulting primarily from a higher balance in our restricted cash account. Other smaller items contributed to the remaining variance year over year.

Derivative Gain (Loss)

We recorded derivative gains of \$81.1 million and \$21.2 million in 2018 and 2017, respectively. We recognize gains or losses due to the change in the value of certain embedded features within our debt instruments that require standalone derivative accounting. Although fluctuation in our stock price is the most significant cause for the change in value of these derivative instruments, other inputs can impact the value including stock price volatility, discount rate, maturity date and changes in the principal amount of notes outstanding. See Note 7: Fair Value Measurements to our Consolidated Financial Statements for further discussion of computation of the fair value computations of our derivatives.

Gain on Legal Settlement

In May 2018, we concluded the settlement of a business economic loss claim in which we will receive proceeds of \$7.4 million, net of legal fees. We received the first installment of \$3.7 million in January 2019; the final installment is expected to be received in January 2020. During the second quarter of 2018, we recorded \$6.8 million, the present value of such proceeds, as other income in our consolidated statement of operations. See Note 9: Contingencies to our Consolidated Financial Statements for further discussion.

Other

Other expense increased slightly to \$3.3 million in 2018 compared to \$3.2 million in 2017. Changes in other income (expense) are due primarily to foreign currency gains and losses recognized during the respective periods given the significant financial statement items we have denominated in foreign currencies, including primarily the Brazilian real, euro and Canadian dollar. We also record the non-operating components of net periodic benefit cost to other income (loss), which did not fluctuate significantly during the respective periods.

Comparison of the Results of Operations for the years ended December 31, 2017 and 2016

Revenue:

During 2017, total revenue increased \$15.8 million to \$112.7 million from \$96.9 million in 2016. This increase was due primarily to a \$15.4 million increase in service revenue, which is attributable to increases in ARPU across all core business lines and growth in our total average subscriber base. Also contributing to the increase in total revenue was an increase of \$0.4 million in revenue generated from subscriber equipment sales during 2017, which resulted primarily from a higher volume of Simplex units sold and higher selling prices for SPOT units, offset by a lower volume of Duplex units sold.

The following table sets forth amounts and percentages of our revenue by type of service (dollars in thousands).

	 Year I December			Ended r 31, 2016
	 Revenue	% of Total Revenue	Revenue	% of Total Revenue
Service Revenues:				
Duplex	\$ 37,635	33% \$	31,848	33%
SPOT	45,427	40%	38,157	40%
Simplex	10,946	10%	10,005	10%
IGO	1,068	1%	907	1%
Other	 3,397	3%	2,152	2%
Total Service Revenues	\$ 98,473	87% \$	83,069	86%

The following table sets forth amounts and percentages of our revenue generated from equipment sales (dollars in thousands).

	 Year E December		Year E December	
	Revenue	% of Total Revenue	Revenue	% of Total Revenue
Equipment Revenues:				
Duplex	\$ 2,754	2% \$	3,877	4%
SPOT	5,394	5%	5,321	5%
Simplex	5,243	5%	3,765	4%
IGO	779	1%	843	1%
Other	17		(14)	%
Total Equipment Revenues	\$ 14,187	13% \$	13,792	14%

The following table sets forth our average number of subscribers and ARPU by type of revenue.

	Dece	ember 31,
	2017	2016
Average number of subscribers for the year ended:		
Duplex	72,44	3 75,925
SPOT	285,68	3 272,006
Simplex	313,55	3 300,055
IGO	37,16	5 38,618
Other	1,47	8 2,215
Total	710,32	2 688,819
ARPU (monthly):		
Duplex	\$ 43.2	9 \$ 34.96
SPOT	13.2	5 11.69
Simplex	2.9	1 2.78
IGO	2.3	9 1.96

The numbers reported in the above table are subject to immaterial rounding inherent in calculating averages.

During 2017, gross Duplex and SPOT subscriber additions were 14,660 and 74,830, respectively. During 2016, gross Duplex and SPOT subscriber additions were 20,169 and 75,163, respectively. Gross subscriber additions were higher in 2016 as we experienced higher demand due to lower service plan prices in effect and higher availability of new phone inventory. Because our Simplex subscribers are able to activate and deactivate their units several times during the year, gross Simplex subscriber additions are not considered to be a meaningful metric.

We count "subscribers" based on the number of devices that are subject to agreements that entitle them to use our voice or data communications services rather than the number of persons or entities who own or lease those devices.

Other service revenue includes revenue generated primarily from sources which are not subscriber driven, such as engineering services. Accordingly, we do not present ARPU for other service revenue in the table above. Effective April 1, 2016, we began classifying activations fees with the service revenue to which they relate.

Service Revenue

Duplex service revenue increased 18% in 2017 due to an increase in ARPU. ARPU increased 24% in 2017 compared to 2016, contributing \$7.6 million to the total Duplex service revenue increase. Higher ARPU was due primarily to rate plan changes and increased revenue from prepaid, usage-based plans. We increased prices for certain of our legacy rate plans beginning in 2016 to align our rate plans with our service levels and prospective rate plans for future products. Additionally, approximately half of our new subscribers select our prepaid, usage-based plans. These plans generally result in higher service revenue recognized when unused minutes expire on the anniversary date of the customer's contract. This accounting practice changed effective January 1, 2018 upon adoption of ASC 606 and will be reflected in prospective financial results. A decrease in average subscribers of 5% during 2017 offset partially the increase in ARPU. This decrease was due to lower gross activations resulting from fewer equipment sales over the last twelve months. The decline in the average subscriber base negatively impacted Duplex service revenue by \$1.8 million in 2017.

SPOT service revenue increased 19% in 2017 due to increases in both ARPU and the average subscriber base. ARPU increased 13% in 2017 compared to 2016, contributing \$5.1 million to the total increase in SPOT service revenue. Higher ARPU was primarily driven by rate plan increases beginning in 2016 and continuing throughout 2017. The average number of SPOT subscribers increased 5% in 2017 compared to 2016 driven by gross subscriber additions of approximately 75,000 offset partially by churn. The increase in our SPOT base contributed \$2.2 million to the total SPOT service revenue increase.

Simplex service revenue increased 9% in 2017 due to a 4% increase in average subscribers and a 5% increase in ARPU. During 2016, the oil and gas industry downturn affected some of our largest customers and impacted our Simplex business. A combination of expansion into new markets as well as price increases contributed to the increase in total Simplex service revenue in 2017.

Other service revenue increased \$1.2 million, or 56%, in 2017. The increase in other service revenue was due primarily to a \$1.7 million increase in revenue generated from government contracts, which was driven by an increase in the volume and value of contracts awarded to us. The increase from government contracts was offset partially by the reclassification of activation fees from other revenue to Simplex and Duplex service revenue beginning in 2016, which resulted in a \$0.3 million decrease. Lower revenue generated from third party sources also contributed \$0.2 million to the total decrease in other service revenue.

Subscriber Equipment Sales

Revenue from Duplex equipment sales decreased \$1.1 million, or 29%, in 2017. As discussed above, we experienced higher demand in 2016 due to lower service plan prices in effect and higher availability of new phone inventory. We continue to deplete our remaining inventory of GSP-1700 phones in advance of the launch of a new second-generation Duplex device.

Revenue from SPOT equipment sales increased \$0.1 million, or 1%, in 2017. This increase resulted primarily from higher selling prices during the year due to changes in and the success of sales promotions from 2016 to 2017, offset partially by lower volume compared to the prior year period.

Revenue from Simplex equipment sales increased \$1.5 million, or 39%, in 2017. During the third quarter of 2017, we sold a significant volume of our SmartOne asset-ready tracking device to support disaster recovery efforts related to the hurricane activity. This sale represented the majority of the increase during the year.

Operating Expenses:

Total operating expenses increased \$20.9 million, or 13%, to \$181.4 million in 2017 from \$160.5 million in 2016, due primarily to a \$17.0 million reduction in the value of long-lived assets recorded in the fourth quarter of 2017 (see further discussion below) as well as an increase in cost of services, offset by lower and marketing, general and administrative costs.

Cost of Services

Cost of services increased \$5.1 million, or 16%, to \$37.0 million in 2017 from \$31.9 million in 2016. These increases were due primarily to maintenance and support costs related to our ground network, which increased \$2.6 million from 2016. Also contributing to the increase year over year were higher research and development costs of \$2.0 million driven by new products and technology being developed internally and through external partners as well as higher personnel costs of \$0.9 million due to the timing of capital projects, which increased net payroll expense when compared to 2016. These increases were offset by lower telecom service costs of \$0.6 million due to cost saving initiatives implemented over the past year. Other smaller items contributed to the remaining fluctuation in cost of services during the year.

Cost of Subscriber Equipment Sales

Cost of subscriber equipment sales remained flat at \$9.9 million in both 2017 and 2016. Although revenue from subscriber equipment sales increased year over year, costs remained flat. The timing of sales promotions in 2016 and 2017 impacted our revenue from subscriber equipment sales. We sold both SPOT and Duplex hardware at higher prices in 2017 compared to 2016, resulting in higher margins. Volume and mix of products sold during the respective periods as well as price variances across our worldwide markets also contribute to fluctuations in margins.

Cost of Subscriber Equipment Sales - Reduction in the Value of Inventory

Cost of subscriber equipment sales - reduction in the value of inventory was \$0.8 million in 2017. We recognized this charge after adjusting for changes in net realizable value for certain products, particularly in certain international locations, compared to the carrying value of the inventory, as well as for a reduction in the value of prepaid inventory due to design changes for products under development. A similar inventory reserve was not required during 2016.

Marketing, General and Administrative

Marketing, general and administrative expenses decreased \$1.9 million, or 5%, to \$39.1 million in 2017 from \$41.0 million in 2016. This decrease was driven primarily by lower subscriber acquisition costs of \$2.3 million and professional and legal fees of \$0.6 million; partially offsetting these decreases was higher stock compensation expense of \$0.3 million and personnel costs of \$0.6 million. Subscriber acquisition costs were down due to changes in sales strategies during the respective periods, including lower rebates and co-op marketing credits given to our resellers. The reduction in professional fees and legal expenses was driven primarily by a \$1.1 million accrual recorded in the second quarter of 2016 for the settlement of litigation related to one of our international operations. This settlement was paid through the issuance of shares of our common stock in October 2016. Partially offsetting the legal settlement expense fluctuation year over year were higher costs incurred with certain contractors and advisers related to our domestic spectrum authority.

Reduction in the Value of Long-Lived Assets

As discussed in Note 2: Property and Equipment, we recorded a reduction in the carrying value of long-lived assets of \$17.0 million during the fourth quarter of 2017 related to purchase and procurement costs for prepaid long-lead items ("LLI") to reflect the fair value of these assets on our consolidated balance sheet.

Reduction in the value of long-lived assets was \$0.4 million in 2016. Certain of our intangible assets consist of costs associated with the efforts related to our petition to the FCC to use our licensed MSS spectrum to provide terrestrial wireless services. In November 2016, we revised our original proposal to the FCC to request terrestrial use of only our 11.5 MHz of licensed spectrum in the 2.4 GHz band. For the year ended December 31, 2016, we recorded an impairment of \$0.4 million related to the portion of our efforts specific to our original proposed rules.

Depreciation, Amortization and Accretion

Depreciation, amortization, and accretion expense increased \$0.1 million to \$77.5 million in 2017 compared to \$77.4 million in 2016.

As of December 31, 2017, we had \$227.2 million in construction in progress related to costs (including capitalized interest) associated with our contracts with Hughes and Ericsson to complete next-generation upgrades to our ground infrastructure. We will begin depreciating these assets when the second-generation gateways are placed into service.

Other Income (Expense):

Loss on Extinguishment of Debt

We recorded a non-cash loss on extinguishment of debt of \$6.3 million during 2017 due to the conversion of a significant portion of our 2013 8.00% Notes. During the third quarter of 2017, holders of \$16.0 million principal amount of 2013 8.00% Notes converted their notes, resulting in the issuance of 26.4 million shares of our common stock. The fair value of these shares exceeded the derivative liability and principal amount written off due to the conversions, resulting in a loss on extinguishment of debt. See Note 3: Long-Term Debt and Other Financing Arrangements, Note 4: Derivatives and Note 5: Fair Value Measurements to our consolidated financial statements for further discussion. Similar transactions did not occur in 2016.

Gain (Loss) on Equity Issuance

Gain (loss) on equity issuance was a gain of \$2.7 million during 2017 and a gain of \$2.4 million during 2016. This change was driven primarily by downside protection features included in certain of our contracts relating to payment of consideration with our common stock in lieu of cash.

As discussed in Note 6: Commitments to our consolidated financial statements, we had an agreement with Hughes whereby it exercised its right to receive a pre-payment of certain payment milestones in shares of our common stock at a 7% discount to the market value in lieu of cash. In connection with this agreement, we provided Hughes downside protection through June 30, 2017. In April 2017, Hughes sold all remaining shares of our common stock recognizing the required proceeds under the agreement. As a result of changes in the estimated value of this option between initial issuance and settlement in April 2017, we recorded non-cash gains and losses during each reporting period. During 2017 and 2016, we recorded a gain resulting from changes in fair value of the liability of \$2.7 million and \$2.8 million, respectively. This liability is no longer outstanding.

In October 2016, we settled litigation related to our Brazilian subsidiary. In connection with this settlement, we agreed to provide downside protection for the difference between the total settlement amount of 4.5 million reais and the total amount of gross proceeds the counterparty received from the sale of these shares. We accrued a total of 1.3 million reais, or \$0.4 million, as of December 31, 2016 related to this downside protection. In March 2017, we settled the liability through the final payment of

approximately 0.3 million shares of our common stock. We recorded this non-cash loss of \$0.4 million and less than \$0.1 million, during the fourth quarter of 2016 and the first quarter of 2017, respectively.

Interest Income and Expense

Interest income and expense, net, decreased \$1.2 million to expense of \$34.8 million for 2017 compared to expense of \$36.0 million for 2016. This fluctuation is due primarily to an increase in gross interest costs of \$3.0 million from 2016 to 2017, resulting primarily from a higher LIBOR-based interest rate on our Facility Agreement and a higher principal balance outstanding on our Loan Agreement with Thermo. The increase in gross interest expense was offset by an increase in capitalized interest of \$3.9 million from 2016 to 2017, due primarily to an increase in our construction in progress balance related to our ground network, which result in higher interest eligible to be capitalized.

Derivative Gain (Loss)

Derivative gain (loss) fluctuated by \$62.7 million to a gain of \$21.2 million in 2017 compared to a loss of \$41.5 million in 2016. We recognize gains or losses due to the change in the value of certain embedded features within our debt instruments that require standalone derivative accounting. Although fluctuation in our stock price is the most significant cause for the change in value of these derivative instruments, other inputs can impact the value including volatility, discount rate, maturity date and changes in the principal amount of notes outstanding. Our stock price fluctuated significantly during 2017 and 2016, resulting in material non-cash derivative gains and losses in these periods. See Note 5: Fair Value Measurements to our Consolidated Financial Statements for further discussion of computation of the fair value computations of our derivatives.

Other

Other income (expense) fluctuated by \$2.5 million to an expense of \$2.9 million in 2017 from expense of \$0.4 million in 2016. Changes in other income (expense) are due primarily to foreign currency gains and losses recognized during the respective periods given the significant financial statement items we have denominated in foreign currencies, including primarily the Brazilian real, euro and Canadian dollar.

Income Tax Benefit (Expense)

Income tax benefit (expense) fluctuated \$6.7 million to an expense of \$0.2 million in 2017 compared to a benefit of \$6.5 million in 2016. As a result of the expiration of the statute of limitations associated with the tax position of one of our foreign subsidiaries during the third quarter of 2016, we removed \$6.3 million in unrecognized tax positions, inclusive of cumulative interest and penalties, from our non-current liabilities resulting in a corresponding tax benefit. Similar activity did not recur in 2017.

As discussed in Note 11: Taxes in our Consolidated Financial Statements, on December 22, 2017, the U.S. enacted significant changes to the U.S. tax law. The Tax Act included significant changes to existing tax law, including a permanent reduction to the U.S. federal corporate income tax rate from 35% to 21%. In connection with the Tax Act, we have remeasured our deferred tax assets with the new rate. As our deferred tax assets have a full valuation allowance, we have not recorded any income statement impact during the year ended December 31, 2017.

Liquidity and Capital Resources

Our principal liquidity requirements include paying our debt service obligations and funding our operating costs, including certain contractual obligations discussed in the "Contractual Obligations and Commitments" section below. Our principal sources of liquidity include cash on hand and cash flows from operations, including funds from the settlement of a business economic loss claim (as previously discussed). We expect sources of liquidity to include funds from other debt or equity financings that have not yet been arranged. See below for further discussion. See Part I, Item 1A. Risk Factors in this Report for a description of risks, some of which are beyond our control, affecting our ability to fulfill our liquidity requirements.

Cash Flows for the years ended December 31, 2018, 2017 and 2016

The following table shows our cash flows from operating, investing and financing activities (in thousands):

	 Year En	1,		
Statements of Cash Flows	2018	2017	2016	
Net cash provided by operating activities	\$ 5,920 \$	13,857 \$	8,813	
Net cash used in investing activities	(17,401)	(20,776)	(24,551)	
Net cash provided by (used in) financing activities	(18,196)	63,790	18,502	
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(112)	195	55	
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ (29,789) \$	57,066 \$	2,819	

Cash Flows Provided by Operating Activities

Cash provided by operations includes primarily cash receipts from subscribers related to the purchase of equipment and satellite voice and data services. We use cash in operating activities primarily for personnel costs, inventory purchases and other general corporate expenditures. Net cash provided by operating activities was \$5.9 million during 2018 compared to \$13.9 million during 2017. This decrease was due to unfavorable changes in certain operating assets and liabilities, primarily resulting from the timing of prepaid assets. These unfavorable changes were offset by higher net income, after adjusting for non-cash items, driven in part by price increases for our Duplex and SPOT subscribers, coupled with higher Simplex and SPOT equipment sales (as described in more detail in the Performance Indicators section of Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations).

Net cash provided by operating activities was \$13.9 million during 2017 compared to \$8.8 million during 2016. This increase was due to higher net income, after adjusting for non-cash items, offset by unfavorable changes in certain operating assets and liabilities, primarily resulting from higher inventory purchases in 2017.

Cash Flows Used in Investing Activities

Net cash used in investing activities was \$17.4 million during 2018 compared to \$20.8 million during 2017. This decrease was driven by lower second-generation network additions in 2018 as we substantially completed the deployment of our next-generation ground infrastructure. This decrease was offset partially by higher property and equipment additions during 2018 as we incurred costs to bring our newly developed products into production, including software and other back-office efforts.

Net cash used in investing activities was \$20.8 million during 2017 compared to \$24.6 million during 2016. This decrease was driven by higher property and equipment and second-generation network additions in the prior year, offset partially by an increase in intangible assets in 2017 related to our domestic and international spectrum efforts.

Net cash used in financing activities was \$18.2 million in 2018 compared to cash provided by financing activities of \$63.8 million in 2017. The change in financing activities was driven primarily by lower cash proceeds from equity financings in 2018, resulting in a decline of cash provided to us of \$100.9 million, offset partially by lower debt service payments due primarily by the payment of a \$20.8 million debt restructuring fee in 2017 that did not recur in 2018.

Net cash provided by financing activities was \$63.8 million in 2017 compared to \$18.5 million in 2016. This increase was due primarily to higher proceeds from equity financings, including primarily the public offering of our common stock in October 2017 of \$115.0 million, offset by higher debt service payments of \$63.7 million.

Overview

As of December 31, 2018, we held cash and cash equivalents of \$15.2 million and restricted cash of \$60.3 million, consisting of the balance in our debt service reserve account under our Facility Agreement. The Facility Agreement restricts the use of these funds to making principal and interest payments under the Facility Agreement. See below for further discussion. As of December 31, 2017, we held cash and cash equivalents of \$41.6 million and had \$63.6 million in restricted cash.

As of December 31, 2018, we also had a reserve of \$2.3 million held with our credit card processor to address any liability arising from potential charge-backs given the growth in both volume and amount of our annual service subscriptions, among other factors. We expect that the total cash required to be withheld will increase to the required reserve balance of \$5.0 million by the third quarter of 2019. The reserve amount is recorded in prepaid and other current assets on our consolidated balance sheet. We are in discussions with our senior lenders to evaluate how this reserve impacts the terms of our Facility Agreement.

The carrying amount of our current and long-term debt outstanding was \$96.2 million and \$367.2 million, respectively, at December 31, 2018, compared to \$79.2 million and \$434.7 million, respectively, at December 31, 2017. The current portion of our debt outstanding at these dates represents primarily principal payments under our Facility Agreement scheduled to occur within 12 months. At December 31, 2018, this current debt balance also included the total outstanding amount of our 2013 8.00% Notes because we currently intend on redeeming such notes in the near future if our stock price exceeds the conversion price of the notes. Accordingly, any such redemption is expected to result in the conversion of the notes by the holders in lieu of cash payment by us at par value. The \$50.5 million net decrease in our total debt balance was due primarily to principal payments of \$77.9 million for the Facility Agreement in June and December 2018. This decrease was offset partially by a higher carrying value of the Loan Agreement with Thermo due to interest accruing on that debt as well as accretion of the debt discount associated with the Loan Agreement with Thermo and a higher carrying value of the Facility Agreement due to accretion of debt financing costs.

Indebtedness and Available Credit

Facility Agreement

We entered into the Facility Agreement in 2009, which was amended and restated in July 2013, August 2015 and June 2017. The Facility Agreement is scheduled to mature in December 2022.

The Facility Agreement contains customary events of default and requires that we satisfy various financial and non-financial covenants. The compliance calculations of the financial covenants of the Facility Agreement permit us to include certain cash funds we receive from the issuance of our common stock and/or subordinated indebtedness before or immediately after the calculation date. We refer to these funds as "Equity Cure Contributions" and we may include them in calculating compliance with financial covenants through December 2019, subject to the conditions set forth in the Facility Agreement. If we violate any covenants and are unable to obtain a sufficient Equity Cure Contribution or a waiver, or are unable to make payments to satisfy our debt obligations under the Facility Agreement and are unable to obtain a waiver, we would be in default under the Facility Agreement, and the lenders could accelerate payment of the indebtedness. The acceleration of our indebtedness under one

agreement may permit acceleration of indebtedness under other agreements that contain cross-acceleration provisions. We needed an Equity Cure Contribution to maintain compliance with financial covenants under the Facility Agreement for the measurement period ending December 31, 2018. We anticipate that we will also need Equity Cure Contributions for periods thereafter, subject to the provisions of the Facility Agreement. The source of funds for these Equity Cure Contributions has not yet been arranged. As of December 31, 2018, we were in compliance with respect to the covenants of the Facility Agreement, except for one matter. In February 2019, we were made aware that we had not complied with an administrative provision within the Facility Agreement. Prior to the issuance of these financial statements, this noncompliance was remedied within the applicable grace period in order to avoid an event of default.

The Facility Agreement also requires that we maintain a debt service reserve account that is pledged to secure all of our obligations under the Facility Agreement. We may use the debt service reserve account funds only to make principal and interest payments under the Facility Agreement. The balance in the debt service reserve account must equal the total amount of principal and interest payable on the next payment date. As of December 31, 2018, the balance in the debt service reserve account was \$60.3 million and classified as restricted cash on our consolidated balance sheet.

Our indebtedness under the Facility Agreement bears interest at a floating rate of LIBOR plus 3.75% through June 2019, increasing by an additional 0.5% each year thereafter to a maximum rate of LIBOR plus 5.75%. Interest on the Facility Agreement is payable semi-annual in arrears in June and December of each calendar year. Ninety-five percent of our obligations under the Facility Agreement are guaranteed by Bpifrance Assurance Export S.A.S. ("BPIFAE") (formerly COFACE). Our obligations under the Facility Agreement are guaranteed on a senior secured basis by all of our domestic subsidiaries and are secured by a first priority lien on substantially all of our assets and our domestic subsidiaries (other than their FCC licenses), including patents and trademarks, 100% of the equity of our domestic subsidiaries and 65% of the equity of certain foreign subsidiaries.

See Note 5: Long-Term Debt and Other Financing Arrangements to our Consolidated Financial Statements for further discussion of the Facility Agreement.

Thermo Loan Agreement

We have an amended and restated loan agreement with Thermo (the "Loan Agreement"). Our obligations to Thermo under the Loan Agreement are subordinated to all of our obligations under the Facility Agreement.

Amounts outstanding under the Loan Agreement accrue interest at 12% per annum, which we capitalize and add to the outstanding principal in lieu of cash payments. We will make payments to Thermo only when permitted by the Facility Agreement. Principal and interest under the Loan Agreement become due and payable six months after the obligations under the Facility Agreement have been paid in full, or earlier if there is a change in control or any acceleration of the maturity of the loans under the Facility Agreement occurs. As of December 31, 2018, the principal amount outstanding was \$119.7 million, including \$76.2 million of interest that had accrued since 2009 under the Loan Agreement.

As part of the July 2013 amendment and restatement of the Loan Agreement, conversion features were added to the Loan Agreement consistent with those features in the 2013 8.00% Notes. The Loan Agreement is convertible into shares of common stock at a conversion price of \$0.69 (as adjusted) per share of common stock.

See Note 5: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion of the Thermo Loan Agreement.

Our 2013 8.00% Notes are convertible into shares of our common stock at a conversion price of \$0.69 (as adjusted) per share of common stock. As of December 31, 2018, the principal amount outstanding of the 2013 8.00% Notes was \$1.4 million. The 2013 8.00% Notes will mature on April 1, 2028, subject to various call and put features, as discussed further below. Interest on the 2013 8.00% Notes is payable semi-annually in arrears on April 1 and October 1 of each year. We pay interest in cash at a rate of 5.75% per annum and by issuing additional 2013 8.00% Notes at a rate of 2.25% per annum.

A holder of 2013 8.00% Notes has the right, at the holder's option, to require us to purchase some or all of the 2013 8.00% Notes on each of April 1, 2018 and April 1, 2023 at a price equal to the principal amount of the 2013 8.00% Notes to be purchased plus accrued and unpaid interest. The remaining holders did not exercise this option on April 1, 2018.

The indenture governing the 2013 8.00% Notes provides for customary events of default. If there is an event of default, the Trustee may, at the direction of the holders of 25% or more in aggregate principal amount of the 2013 8.00% Notes, accelerate the maturity of the 2013 8.00% Notes. As of December 31, 2018, we were in compliance under the terms of the 2013 8.00% Notes and the Indenture.

See Note 5: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion of the 2013 8.00% Notes.

Public Offering of Common Stock

In December 2018, we entered into an underwriting agreement (the "2018 Underwriting Agreement") with Cantor Fitzgerald & Co., as the sole book-running manager, relating to the sale of 171.4 million shares of common stock, at a public offering price of \$0.35 per share. Under the terms of the 2018 Underwriting Agreement, we granted the underwriter a 30-day option to purchase an additional 25.7 million shares of our common stock. This option was not exercised.

We received approximately \$59.1 million in net proceeds from the sale of our common stock during the 2018 offering. Eighty percent of the net proceeds from the 2018 offering was deposited into our debt service reserve account. We used the funds from the 2018 offering, together with cash on hand, to fund the principal and interest payment due in December 2018 under our Facility Agreement. The funds raised in the 2018 offering also qualified as an Equity Cure Contribution, allowing us to remain in compliance with the covenants under our Facility Agreement as of December 31, 2018.

Contractual Obligations and Commitments

Contractual obligations at December 31, 2018 are as follows (in thousands):

Contractual Obligations:	2019	2020	2021	2022	2023	T	hereafter	Total
Debt obligations (1)	\$ 96,280	\$ 100,000	\$ 100,000	\$ 94,520	\$ 206,351	\$	_	\$ 597,151
Interest on long-term debt (2)	25,525	20,160	13,473	5,719	_		_	64,877
Network purchase obligations (3)	5,522	5,820	5,820	_	_		_	17,162
Inventory purchase obligations (4)	15,870	_	_	_	_		_	15,870
Operating lease obligations (5)	766	694	495	404	408		2,730	5,497
Pension obligations	1,023	 1,025	 1,026	1,052	1,070		5,623	10,819
Total (6)	\$ 144,986	\$ 127,699	\$ 120,814	\$ 101,695	\$ 207,829	\$	8,353	\$ 711,376

(1) These amounts include principal payments and payment in kind ("PIK") interest. Interest on the 2013 8.00% Notes is payable semi-annually in cash at a rate of 5.75% per annum and in additional notes at a rate of 2.25% per annum. The maturity date of the 2013 8.00% Notes is April 1, 2028. For purposes of this schedule, we show these notes as due in 2019 because we expect to redeem the notes in the near future; amounts also include expected PIK interest through 2019. Interest on the Loan Agreement with Thermo accrues at 12% per annum and is capitalized and added to the total outstanding principal in lieu of

cash payments. Principal and interest under the Loan Agreement with Thermo become due and payable six months after the maturity of the Facility Agreement. For purposes of this schedule, we show the Loan Agreement with Thermo as due in 2023. PIK interest for the 2013 8.00% Notes and the Loan Agreement with Thermo is shown as due in the year the underlying debt is due or may be redeemed. The table above does not consider other potential conversions as we cannot predict the amount, if any, of the notes that may be converted.

- (2) Amounts include projected interest payments to be made in cash. Debt outstanding under our Facility Agreement bears interest at a floating rate and, accordingly, we estimated our interest costs in future periods. Amounts also include projected cash interest to be paid on the 2013 8.00% Notes through December 31, 2019 (see further discussion above).
- (3) We have purchase commitments with certain vendors related to the procurement, deployment and maintenance of our second-generation network, including gateway acquisitions. We intend to continue to purchase maintenance and warranties for our second-generation network. However, there is no contractual obligation at this time for future annual payments; therefore, we have excluded maintenance and warranty payments for these contracts in the table above.

Amounts in the table above include the minimum purchase commitment of prototype and production LEO tracking antennas. Additionally, in connection with this contract, we are obligated to incur additional costs for auxiliary equipment at each installation site as well as costs for installing the antennas at each of our gateways; these amounts are not included in the table above as we can perform some of the work internally or through other vendors. The additional installation costs above and beyond the minimum purchase commitment are approximately \$0.8 million in each of 2019, 2020 and 2021.

See Note 8: Commitments in our Consolidated Financial Statements for discussion on our contractual commitments.

- (4) Amounts include obligations for non-cancelable purchase orders for inventory as of December 31, 2018. This amount is reflected in 2019 based on current forecasted equipment sales.
- (5) As of December 31, 2018, the leases for our current headquarters and our gateway in Singapore expired and converted into month to month leases. We moved into a new headquarter location in Covington, LA in February 2019. As our former headquarters lease had a remaining term of less than one year and our new lease was not signed as of December 31, 2018, amounts for both headquarters locations are not reflected in the table above. The new commercial lease agreement is with Thermo Covington, LLC. We obtained independent valuation reports for similar properties in Covington, Louisiana in order to determine the terms of the commercial lease agreement with Thermo Covington, LLC and to ensure that the lease complied with applicable rules and policies governing related-party transactions. Our new headquarters lease will have a term of ten years with annual base rental payments of approximately \$1.4 million, increasing at a compounding rate of 2.5% per year. We renewed our lease agreement with our gateway in Singapore in February 2019; as this lease agreement had a remaining term of less than one year and our new lease was not signed as of December 31, 2018, amounts for this gateway location are not reflected in the table above. The Singapore gateway lease will have a total lease term of two years with annual base lease payments of approximately \$0.5 million per year.
- (6) In December 2018, we entered into a Settlement Agreement, pursuant to which we are liable for plaintiffs' legal fees and expenses in connection with the shareholder action in an amount to be determined by the Chancery Court of the State of Delaware. We expect that these costs will be at least partially covered by our directors and officers insurance policy, subject to the \$1.5 million retention provided in the policy. Further discussion of the shareholder action and the Settlement Agreement is discussed in Note 9: Contingencies to our Consolidated Financial Statements. See also Item 1A: Risk Factors We have substantial contractual obligations, which may require additional capital, the terms of which have not been arranged. The terms of our Facility Agreement could complicate raising this additional capital.

Off-Balance Sheet Transactions

We have no material off-balance sheet transactions.

Recently Issued Accounting Pronouncements

For a discussion of recent accounting guidance and the expected impact that the guidance could have on our Consolidated Financial Statements, see Note 1: Summary of Significant Accounting Policies in our Consolidated Financial Statements.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the amounts reported in our Consolidated Financial Statements and accompanying notes. Note 1: Summary of Significant Accounting Policies in our Consolidated Financial Statements contains a description of the accounting policies used in the preparation of our financial statements as well as the consideration of recently issued accounting standards and the estimated impact these standards will have on our financial statements. We evaluate our estimates on an ongoing basis, including those related to revenue recognition; property and equipment; income taxes; and derivative instruments. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Actual amounts could differ significantly from these estimates under different assumptions and conditions.

We define a critical accounting policy or estimate as one that is both important to our financial condition and results of operations and requires us to make difficult, subjective or complex judgments or estimates about matters that are uncertain. We believe that the following are the critical accounting policies and estimates used in the preparation of our Consolidated Financial Statements. In addition, there are other items within our Consolidated Financial Statements that require estimates but are not deemed critical as defined in this paragraph.

Revenue Recognition

Our primary types of revenue include (i) service revenue from two-way voice communication and data transmissions and one-way data transmissions between a mobile or fixed device and (ii) subscriber equipment revenue primarily from the sale of fixed and mobile devices as well as other products and accessories. Additionally, we generate revenue by providing engineering and support services to certain customers.

Unless otherwise disclosed, service revenue is recognized over a period of time (consistent with the customer's receipt and consumption of the benefits of our performance) and revenue from the sale of subscriber equipment is recognized at a point in time (consistent with the transfer of risks and rewards of ownership of the hardware). We record customer payments received in advance of the corresponding service period as deferred revenue. We provide Duplex, SPOT and Simplex services directly to customers and indirectly through resellers and IGOs. Credits granted to customers are expensed or charged against revenue or accounts receivable over the remaining term of the customer contract. Subscriber acquisition costs primarily include dealer and internal sales commissions and certain other costs, including but not limited to, promotional costs, cooperative marketing credits and shipping and fulfillment costs. We capitalize incremental costs to obtain a contract to the extent we expect to recover them; these costs include internal and external initial activation commissions. All other subscriber acquisitions costs are expensed at the time of the related sale.

Duplex Service Revenue

We recognize revenue for monthly access fees in the period services are rendered. Access fees represent the minimum monthly charge for each line of service based on its associated rate plan. We also recognize revenue for airtime minutes and data in excess of the monthly access fees in the period such minutes or data are used. Under certain annual plans whereby a customer prepays for a predetermined amount of minutes and data, revenue is recognized consistent with the customer's expected pattern of usage based on historical experience because we believe that this method most accurately depicts the satisfaction of our obligation to the customer. For annual plans where the customer is charged an annual fee to access our system, we recognize revenue on a straight-line basis over the term of the plan.

SPOT Service Revenue

We sell SPOT services as monthly, annual or multi-year plans and recognize revenue on a straight-line basis over the service term, beginning when the service is activated by the customer.

Simplex Service Revenue

We sell Simplex services as monthly, annual or multi-year plans and recognize revenue ratably over the service term or as service is used, beginning when the service is activated by the customer.

IGO Service Revenue

We earn a portion of our revenues through the sale of airtime minutes or data on a wholesale basis to IGOs. Revenue from services provided to IGOs is recognized based upon airtime minutes or data packages used by customers of the IGO and in accordance with contractual fee arrangements.

Other Service Revenue

We also provide certain engineering services to assist customers in developing new applications related to our system. We generally recognize the revenues associated with these services when the services are rendered and our obligation to the customer is satisfied.

Equipment Revenue

Subscriber equipment revenue represents the sale of fixed and mobile user terminals, SPOT and Simplex products, and accessories to these products. We recognize revenue upon shipment provided control has transferred to the customer. We sell equipment designed to work on our network through various channels.

Multiple-Element Arrangement Contracts

At times, we sell subscriber equipment through multiple-element arrangement contracts with services. When we sell subscriber equipment and services in bundled arrangements and determine that we have separate performance obligations, we allocate the bundled contract price among the various performance obligations based on relative stand-alone selling prices at contract inception of the distinct goods or services underlying each performance obligation and recognizes them when, or as, each performance obligation is satisfied.

Property and Equipment

We capitalize costs associated with the design, manufacture, test and launch of our low earth orbit satellites. We track capitalized costs associated with our satellites by fixed asset category and allocate them to each asset as it comes into service. For assets that are sold or retired, including satellites that are de-orbited and no longer providing services, we remove the estimated cost and accumulated depreciation. We recognize a loss from an in-orbit failure of a satellite equal to its net book value, if any, in the period it is determined that the satellite is not recoverable.

We depreciate satellites over their estimated useful lives, beginning on the date each satellite is placed into service. We evaluate the appropriateness of estimated depreciable lives assigned to our property and equipment and revise such lives to the extent warranted by changing facts and circumstances.

We capitalize costs associated with the design, manufacture and test of our ground stations and other capital assets. We track capitalized costs associated with our ground stations and other capital assets by fixed asset category and allocate them to each asset as it comes into service.

We review the carrying value of our assets for impairment whenever events or changes in circumstances indicate that the recorded value may not be recoverable. We look to current and future undiscounted cash flows, excluding financing costs, as primary indicators of recoverability. If we determine that impairment exists, we calculate any related impairment loss based on fair value.

Income Taxes

We use the asset and liability method of accounting for income taxes. This method takes into account the differences between financial statement treatment and tax treatment of certain transactions. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Our deferred tax calculation requires us to make certain estimates about our future operations. Changes in state, federal and foreign tax laws, as well as changes in our financial condition or the carrying value of existing assets and liabilities, could affect these estimates. We recognize the effect of a change in tax rates as income or expense in the period that the rate is enacted; however, as we have a full valuation allowance on our deferred tax assets, there is no impact to the consolidated statements of operations and balance sheets.

GAAP requires us to assess whether it is more likely than not that we will be able to realize some or all of our deferred tax assets. If we cannot determine that deferred tax assets are more likely than not to be recoverable, GAAP requires us to provide a valuation allowance against those assets. This assessment takes into account factors including: (a) the nature, frequency, and severity of current and cumulative financial reporting losses; (b) sources of estimated future taxable income; and (c) tax planning strategies. We must weigh heavily a pattern of recent financial reporting losses as a source of negative evidence when determining our ability to realize deferred tax assets. Projections of estimated future taxable income exclusive of reversing temporary differences are a source of positive evidence only when the projections are combined with a history of recent profitable operations and can be reasonably estimated. Otherwise, GAAP requires that we consider projections inherently subjective and generally insufficient to overcome negative evidence that includes cumulative losses in recent years. If necessary and available, we would implement tax planning strategies to accelerate taxable amounts to utilize expiring carryforwards. These strategies would be a source of additional positive evidence supporting the realization of deferred tax assets.

Derivative Instruments

We recognize all derivative instruments as either assets or liabilities on the balance sheet at their respective fair values. We record recognized gains or losses on derivative instruments in the consolidated statements of operations.

We estimate the fair values of our derivative financial instruments using various techniques that are considered to be consistent with the objective of measuring fair values. In selecting the appropriate technique, we consider, among other factors, the nature of the instrument, the market risks that embody it and the expected means of settlement. There are various features embedded in our debt instruments that require bifurcation from the debt host. For the conversion options and the contingent put features in the Loan Agreement with Thermo and the 2013 8.00% Notes, we use a Monte Carlo simulation model to determine fair value. Valuations derived from these models are subject to ongoing internal and external verification and review. Estimating fair values of derivative financial instruments requires the development of significant and subjective estimates that may, and are likely to, change over the duration of the instrument with related changes in internal and external market factors. Our financial position and results of operations may vary materially from quarter-to-quarter based on conditions other than our operating revenues and expenses.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our services and products are sold, distributed or available in over 120 countries. Our international sales are denominated primarily in Canadian dollars, Brazilian reais and euros. In some cases, insufficient supplies of U.S. currency may require us to accept payment in other foreign currencies. We reduce our currency exchange risk from revenues in currencies other than the U.S. dollar by requiring payment in U.S. dollars whenever possible and purchasing foreign currencies on the spot market when rates are favorable. We currently do not purchase hedging instruments to hedge foreign currencies. We are obligated to enter into currency hedges with the lenders to the Facility Agreement no later than 90 days after any fiscal quarter during which more than 25% of revenues is denominated in a single currency other than U.S. or Canadian dollars. Otherwise, we cannot enter into hedging agreements other than interest rate cap agreements or other hedges described above without the consent of the agent for the Facility Agreement, and with that consent the counterparties may only be the lenders to the Facility Agreement.

We also have operations in Venezuela. Since 2010, the Venezuelan government's frequent modifications to its currency laws have caused the bolivar to devalue significantly and resulted in Venezuela being considered a highly inflationary economy. We continue to monitor the significant uncertainty surrounding current Venezuela exchange mechanisms.

Our interest rate risk arises from our variable rate debt under our Facility Agreement, under which loans bear interest at a floating rate based on the LIBOR. In order to reduce the interest rate risk, we completed an arrangement with the lenders under the Facility Agreement to limit the interest to which we are exposed. The interest rate cap provides limits on the 6-month Libor rate (Base Rate) used to calculate the coupon interest on outstanding amounts on the Facility Agreement to be capped at 5.50% should the Base Rate not exceed 6.5%. Should the Base Rate exceed 6.5%, our Base Rate will be 1% less than the then 6-month LIBOR rate. We have \$389.4 million in principal outstanding under the Facility Agreement. A 1.0% change in interest rates would result in a change to interest expense of approximately \$3.9 million annually.

See Note 7: Fair Value Measurements in our Consolidated Financial Statements for discussion of our financial assets and liabilities measured at fair market value and the market factors affecting changes in fair market value of each.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Audited Consolidated Financial Statements of Globalstar, Inc.	58
Report of Crowe LLP, independent registered public accounting firm	58
Consolidated balance sheets at December 31, 2018 and 2017	60
Consolidated statements of operations for the years ended December 31, 2018, 2017 and 2016	61
Consolidated statements of comprehensive income (loss) for the years ended December 31, 2018, 2017 and 2016	62
Consolidated statements of stockholders' equity for the years ended December 31, 2018, 2017 and 2016	63
Consolidated statements of cash flows for the years ended December 31, 2018, 2017 and 2016	64
Notes to Consolidated Financial Statements	66

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Globalstar, Inc. Covington, Louisiana

Opinions on the Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Globalstar, Inc. (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework: (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework: (2013) issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A - *Management's Annual Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company's financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, and as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation

of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Crowe LLP

We have served as the Company's auditor since 2006.

Oak Brook, Illinois February 28, 2019

GLOBALSTAR, INC. CONSOLIDATED BALANCE SHEETS

(In thousands, except par value and share data)

		31,		
		2018		2017
ASSETS				
Current assets:				
Cash and cash equivalents	\$	15,212	\$	41,644
Restricted cash		60,278		63,635
Accounts receivable, net of allowance of \$3,382 and \$3,610, respectively		19,327		17,113
Inventory		14,274		7,273
Prepaid expenses and other current assets		13,410		6,745
Total current assets		122,501		136,410
Property and equipment, net		882,695		971,119
Intangible and other assets, net of accumulated amortization of \$7,930 and \$7,314, respectively		40,286		21,736
Total assets	\$	1,045,482	\$	1,129,265
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Current portion of long-term debt	\$	96,249	\$	79,215
Accounts payable		6,995		6,048
Accrued contract termination charge				21,002
Accrued expenses		23,085		20,754
Payables to affiliates		656		225
Derivative liabilities		757		1,326
Deferred revenue		31,938		31,747
Total current liabilities		159,680		160,317
Long-term debt, less current portion		367,202		434,651
Employee benefit obligations		4,489		4,389
Derivative liabilities		146,108		226,659
Deferred revenue		5,692		6,052
Other non-current liabilities		3,366		5,973
Total non-current liabilities		526,857		677,724
Commitments and contingent liabilities (Notes 8 and 9)				
Stockholders' equity:				
Preferred Stock of \$0.0001 par value; 100,000,000 shares authorized and none issued and outstanding at December 31, 2018 and 2017, respectively		_		_
Series A Preferred Convertible Stock of \$0.0001 par value; one share authorized and none issued and outstanding at December 31, 2018 and 2017, respectively		_		_
Voting Common Stock of \$0.0001 par value; 1,500,000,000 shares authorized; 1,446,783,645 and 1,261,949,123 shares issued and outstanding at December 31, 2018 and 2017, respectively		145		126
Nonvoting Common Stock of \$0.0001 par value; 400,000,000 shares authorized; none issued and outstanding at December 31, 2018 and 2017, respectively		_		_
Additional paid-in capital		1,937,364		1,869,339
Accumulated other comprehensive loss		(3,839)		(6,939)
Retained deficit		(1,574,725)		(1,571,302)
Total stockholders' equity		358,945		291,224
Total liabilities and stockholders' equity	\$	1,045,482	\$	1,129,265

See accompanying notes to Consolidated Financial Statements.

GLOBALSTAR, INC. CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Year Ended December 31,				
		2018	2017		2016
Revenue:					
Service revenue	\$	111,089 \$	98,473	\$	83,069
Subscriber equipment sales		19,024	14,187		13,792
Total revenue		130,113	112,660		96,861
Operating expenses:					
Cost of services (exclusive of depreciation, amortization and accretion shown separately below)		37,648	37,022		31,908
Cost of subscriber equipment sales		14,441	9,944		9,907
Cost of subscriber equipment sales - reduction in the value of inventory		_	843		_
Marketing, general and administrative		55,443	38,759		40,559
Reduction in the value of long-lived assets		_	17,040		350
Revision to contract termination charge		(20,478)	_		_
Depreciation, amortization and accretion		90,438	77,498		77,390
Total operating expenses		177,492	181,106		160,114
Loss from operations		(47,379)	(68,446)		(63,253)
Other income (expense):					
Loss on extinguishment of debt		_	(6,306)		_
Gain on equity issuance		_	2,670		2,400
Interest income and expense, net of amounts capitalized		(43,612)	(34,771)		(35,952)
Derivative gain (loss)		81,120	21,182		(41,531)
Gain on legal settlement		6,779	_		_
Other		(3,299)	(3,213)		(853)
Total other income (expense)		40,988	(20,438)		(75,936)
Loss before income taxes		(6,391)	(88,884)		(139,189)
Income tax expense (benefit)		125	190		(6,543)
Net loss	\$	(6,516) \$	(89,074)	\$	(132,646)
Loss per common share:	_			-	
Basic	\$	(0.01) \$	(0.08)	\$	(0.12)
Diluted		(0.01)	(0.08)		(0.12)
Weighted-average shares outstanding:					
Basic		1,269,548	1,166,581		1,064,443

See accompanying notes to Consolidated Financial Statements.

1,269,548

1,166,581

1,064,443

Diluted

GLOBALSTAR, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (In thousands)

Year Ended December 31, 2018 2017 2016 Net loss \$ (6,516) \$ (89,074) \$ (132,646)Other comprehensive income (loss): Defined benefit pension plan liability adjustment (64) 221 384 Net foreign currency translation adjustment 3,164 (1,945)(766)Total other comprehensive income (loss) (545)3,100 (1,561)

See accompanying notes to Consolidated Financial Statements.

Total comprehensive loss

\$

(3,416) \$

(90,635) \$

(133,191)

GLOBALSTAR, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (In thousands)

	Common Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Deficit	Total
Balances - December 31, 2015	1,038,457 \$	103	\$ 1,591,443		(1,349,582)\$	237,131
Net issuance of restricted stock awards and recognition of stock-based compensation	3,246	_	4,136		_	4,136
Contribution of services	_	_	548	_	_	548
Issuance of stock for employee stock option exercises	177	_	97	_	_	97
Issuance of stock through employee stock purchase plan Issuance of stock to Thermo from exercise of	723	_	1,086	_	_	1,086
warrants	13,620	2	2,615	_	_	2,617
Issuance of stock to Terrapin	49,072	5	47,995	_	_	48,000
Issuance of stock for legal settlement	1,316	_	1,395	_	_	1,395
Other comprehensive loss		_		(545)	_	(545)
Net loss	_	_	_	_	(132,646)	(132,646)
Balances – December 31, 2016	1,106,611 \$	110	\$ 1,649,315	\$ (5.378)\$	(1,482,228)\$	161,819
Net issuance of restricted stock awards and recognition of stock-based compensation	3,088	1	4,040			4,041
Contribution of services	_	_	548	_	_	548
Issuance of stock for employee stock option exercises	102	_	71	_	_	71
Issuance of stock through employee stock purchase	775	_	1,151	_	_	1,151
Issuance of stock to Terrapin	8,867	1	11,999	_	_	12,000
Issuance of stock to Thermo from exercise of warrants	24,571	2	243	_	_	245
Issuance of stock to Thermo for equity financing	17,838	2	32,998	_	_	33,000
Common stock issued in connection with conversions of 2013 8.00% Notes	26,411	3	53,614	_	_	53,617
Issuance of stock for legal settlement	321_	_	453			453_
Issuance of stock for public offering	73,365	7	114,986	_	_	114,993
Stock offering issuance costs	_	_	(300)	_		(300)
Investment in business	_	_	221	_	_	221
Other comprehensive loss	_	_	_	(1,561)	_	(1,561)
Net loss	_	_	_	_	(89,074)	(89,074)
Balances – December 31, 2017	1,261,949 \$	126	\$ 1,869,339	\$ (6,939)\$	(1,571,302)\$	291,224
Net issuance of restricted stock awards and recognition of stock-based compensation	11,042	2	7,402	_		7,404
Contribution of services	_	_	428	_		428
Issuance of stock for employee stock option exercises	850	_	324	_	_	324
Issuance of stock through employee stock purchase plan	1,514	_	1,047	_	_	1,047
Issuance of stock for public offering	171,429	17	59,083	_	_	59,100
Stock offering issuance costs	_	_	(259)	_	_	(259)
Other comprehensive income	_	_		3,100	_	3,100
Impact of adoption of ASC 606					3,093	3,093
Net loss					(6,516)	(6,516)
	1 446 504 5		<u> </u>	<u> </u>		
Balances – December 31, 2018	1,446,784 \$	145	\$ 1,937,364	\$ (3,839)\$	(1,574,725)\$	358,945

See accompanying notes to Consolidated Financial Statements.

GLOBALSTAR, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended December 31,					
	2018	2017	2016			
Cash flows provided by (used in) operating activities:						
Net loss	\$ (6,516) \$	(89,074) \$	(132,646)			
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:						
Depreciation, amortization, and accretion	90,438	77,498	77,390			
Change in fair value of derivative assets and liabilities	(81,120)	(21,182)	41,531			
Stock-based compensation expense	6,995	5,088	4,858			
Amortization of deferred financing costs	8,690	8,096	9,165			
Reduction in the value of long-lived assets and inventory	_	17,883	350			
Provision for bad debts	1,398	1,256	1,256			
Noncash interest and accretion expense	14,541	11,043	11,195			
Loss on extinguishment of debt	_	6,306				
Change in fair value related to equity issuance	_	(2,670)	(2,400)			
Noncash expense related to legal settlement	_	_	1,094			
Reversal of uncertain tax position	_	_	(6,317)			
Revision to contract termination charge	(20,478)	_	_			
Unrealized foreign currency loss	3,057	2,159	144			
Other, net	919	(260)	1,154			
Changes in operating assets and liabilities:						
Accounts receivable	(3,792)	(2,983)	(2,196)			
Inventory	(486)	50	4,571			
Prepaid expenses and other current assets	(7,926)	(2,504)	(488)			
Other assets	(3,794)	(699)	(469)			
Accounts payable and accrued expenses	3,979	(1,114)	102			
Payables to affiliates	431	(84)	(307)			
Other non-current liabilities	(1,394)	105	(1,163)			
Deferred revenue	978	4,943	1,989			
Net cash provided by operating activities	5,920	13,857	8,813			
Cash flows provided by (used in) investing activities:			,			
Second-generation network costs (including interest)	(7,032)	(11,910)	(13,170)			
Property and equipment additions	(7,349)	(5,525)	(9,385)			
Purchase of intangible assets	(3,020)	(3,796)	(1,996)			
Investment in businesses		455	_			
Net cash used in investing activities	(17,401)	(20,776)	(24,551)			
Cash flows provided by (used in) financing activities:	(1, 1)	(3,113,	3 7			
Principal payments of the Facility Agreement	(77,866)	(75,755)	(32,835)			
Net proceeds from common stock offering	59,100	114,993	_			
Proceeds from Thermo Common Stock Purchase Agreement	, <u> </u>	33,000	_			
Payment of debt restructuring fee	_	(20,795)	_			
Payments for financing costs	(276)	(654)	_			
Proceeds from issuance of stock to Terrapin	(270)	12,000	48,000			
Proceeds from issuance of common stock and exercise of options and warrants	846	1,001	3,337			
Net cash provided by (used in) financing activities	(18,196)	63,790	18,502			
Effect of exchange rate changes on cash, cash equivalents and restricted cash Net increase (decrease) in cash, cash equivalents and restricted cash	(112) (29,789)	195 57,066	2 810			
Cash, cash equivalents and restricted cash, beginning of period	105,279	48,213	2,819 45,394			
Cash, cash equivalents and restricted cash, end of period	\$ 75,490 \$	105,279 \$	48,213			

	,						
		2018		2017		2016	
Reconciliation of cash, cash equivalents and restricted cash							
Cash and cash equivalents	\$	15,212	\$	41,644	\$	10,230	
Restricted cash (See Note 5 for further discussion on restrictions)		60,278		63,635		37,983	
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	\$	75,490	\$	105,279	\$	48,213	
Supplemental disclosure of cash flow information:							
Cash paid for:							
Interest	\$	25,867	\$	24,075	\$	21,783	
Income taxes		155		115		171	
		Yea	r Ei	nded Decembe	er 31,		
		2018		2017		2016	
Supplemental disclosure of non-cash financing and investing activities:							
Increase in capitalized accrued interest for second-generation network costs	\$	2,093	\$	4,317	\$	3,235	
Increase in accrued second-generation network costs		_		_		1,616	
Capitalized accretion of debt discount and amortization of prepaid financing costs		1,898		5,089		4,401	
Issuance of common stock for legal settlement		_		453		1,395	
Principal amount of debt converted into common stock		_		15,986		_	
Reduction of debt discount and issuance costs due to note conversions		_		1,194		_	
Fair value of common stock issued upon conversion of debt		_		53,614		_	
D 1 2 1 1 2 2 11 12 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 2							
Reduction in derivative liability due to conversion of debt		_		32,000		_	

As of December 31,

See accompanying notes to Consolidated Financial Statements.

GLOBALSTAR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business

Globalstar, Inc. ("Globalstar" or the "Company") was formed as a Delaware limited liability company in November 2003 and was converted into a Delaware corporation on March 17, 2006. Globalstar provides Mobile Satellite Services ("MSS") including voice and data communications services through its global satellite network. Thermo Capital Partners LLC, through its affiliates (collectively, "Thermo"), is the principal owner and largest stockholder of Globalstar. The Company's Executive Chairman of the Board controls Thermo. Two other members of the Company's Board of Directors are also directors, officers or minority equity owners of various Thermo entities.

The Company's satellite communications business, by providing critical mobile communications to subscribers, serves principally the following markets: recreation and personal; government; public safety and disaster relief; oil and gas; maritime and fishing; natural resources, mining and forestry; construction; utilities; and transportation.

Globalstar currently provides the following communications services via satellite which are available only with equipment designed to work on the Globalstar network:

- two-way voice communication and data transmissions using mobile or fixed devices, including the GSP-1700 phone, the Globalstar 9600TM hotspot, two generations of the Sat-Fi, and other fixed and data-only devices ("Duplex");
- one-way or two-way communication and data transmissions using mobile devices, including the SPOT family of
 products, such as SPOT XTM, SPOT Gen3 and Trace, that transmit messages and the location of the device ("SPOT");
 and
- one-way data transmissions using a mobile or fixed device that transmits its location and other information to a central
 monitoring station, including commercial Simplex products, such as the battery- and solar-powered SmartOne, STX-3
 and STINGR ("Simplex").

Globalstar provides Duplex, SPOT and Simplex products and services to customers directly and through a variety of independent agents, dealers and resellers, and independent gateway operators ("IGOs").

Use of Estimates in Preparation of Financial Statements

The preparation of Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from estimates. Certain reclassifications have been made to prior year Consolidated Financial Statements to conform to current year presentation. The Company evaluates estimates on an ongoing basis. Significant estimates include the value of derivative instruments, the allowance for doubtful accounts, the net realizable value of inventory, the useful life and value of property and equipment, the value of stock-based compensation, and income taxes.

Principles of Consolidation

The Consolidated Financial Statements include the accounts of Globalstar and all its subsidiaries. All significant intercompany transactions and balances have been eliminated in the consolidation.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and highly liquid investments with original maturities of three months or less.

Restricted Cash

Restricted cash is comprised of funds held in escrow by the agent for the Company's senior secured facility agreement (the "Facility Agreement") to secure the Company's principal and interest payment obligations related to its Facility Agreement. Restricted cash is classified as a current asset on its Consolidated Balance Sheet as these funds are expected to be used to pay principal and interest due under the Facility Agreement during the next twelve months.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents and restricted cash. Cash and cash equivalents and restricted cash consist primarily of highly liquid short-term investments deposited with financial institutions that are of high credit quality.

Accounts and Notes Receivable

Receivables are recorded when the right to consideration from the customer becomes unconditional, which is generally upon billing or upon satisfaction of a performance obligation, whichever is earlier. Accounts receivable are uncollateralized, without interest, and consist primarily of receivables from the sale of Globalstar services and equipment. For service customers, payment is generally due within thirty days of the invoice date and for equipment customers, payment is generally due within thirty to sixty days of the invoice date, or, for some customers, may be made in advance of shipment.

The Company performs ongoing credit evaluations of its customers and impairs receivable balances by recording specific allowances for bad debts based on factors such as current trends, the length of time the receivables are past due and historical collection experience. Accounts receivable are considered past due in accordance with the contractual terms of the arrangements. Accounts receivable balances that are determined likely to be uncollectible are included in the allowance for doubtful accounts. After attempts to collect a receivable have failed, the receivable is written off against the allowance.

The following is a summary of the activity in the allowance for doubtful accounts (in thousands):

	 Year Ended December 31,						
	2018		2017		2016		
Balance at beginning of period	\$ 3,610	\$	3,966	\$	5,270		
Provision, net of recoveries	1,398		1,256		1,256		
Write-offs and other adjustments	 (1,626)		(1,612)		(2,560)		
Balance at end of period	\$ 3,382	\$	3,610	\$	3,966		

Inventory

Inventory consists primarily of purchased products, including subscriber equipment devices which work on the Company's network, approximately \$8.6 million and \$7.3 million as of December 31, 2018 and 2017, respectively, as well as ground infrastructure assets expected to be used as spare parts or sold to third parties, approximately \$5.7 million and zero as of December 31, 2018 and 2017, respectively. Inventory is stated at the lower of cost and net realizable value. Cost is computed using the first-in, first-out (FIFO) method. Inventory write downs are measured as the difference between the cost of inventory and the net realizable value and are recorded as a cost of subscriber equipment sales - reduction in the value of inventory in the Company's Consolidated Financial Statements. At the point of any inventory write down to net realizable value, a new, lower cost basis for that inventory is established, and any subsequent changes in facts and circumstances do not result in the restoration of the former cost basis or increase in that newly established cost basis. Product sales and returns from the previous 12 months and future demand forecasts are reviewed and excess and obsolete inventory is written off.

For the year ended December 31, 2017, the Company wrote down the value of inventory by \$0.8 million after adjusting for changes in net realizable value for certain products, particularly in international locations, compared to the carrying value of inventory, as well as for a reduction in the value of prepaid inventory due to design changes for products under development. During the years ended December 31, 2018 and 2016, no write down of inventory was required.

Property and Equipment

The Globalstar System includes costs for the design, manufacture, test, and launch of a constellation of low earth orbit satellites (the "Space Component"), and primary and backup control centers and gateways (the "Ground Component"). Property and equipment is stated at cost, net of accumulated depreciation.

Costs associated with the design, manufacture, test and launch of the Company's Space and Ground Components are capitalized. Capitalized costs associated with the Company's Space Component, Ground Component, and other assets are tracked by fixed asset category and are allocated to each asset as it comes into service. When a second-generation satellite was incorporated into the second-generation constellation, the Company began depreciation on the date the satellite was placed into service, which was the point that the satellite reached its orbital altitude, over its estimated depreciable life.

The Company capitalizes interest costs associated with the costs of assets in progress. Capitalized interest is added to the cost of the underlying asset and is amortized over the depreciable life of the asset after it is placed into service. As the Company's construction in progress decreases, the Company capitalizes less interest, resulting in a higher amount of net interest expense recognized under U.S. GAAP. In connection with the launch of Sat-Fi2TM, the first device to operate on the Company's upgraded ground network, the Company placed into service the portion of the next-generation ground component (including associated developed technology and software upgrades), which represents the gateways capable of supporting commercial traffic. Placing these assets into service during 2018 resulted in a decrease in the Company's construction in progress balance; however, as the Company continues to improve its network and other related assets, the balance of construction in progress may increase in future periods.

Depreciation is provided using the straight-line method over the estimated useful lives of the respective assets as follows:

Space Component - 15 years from the commencement of service
Ground Component - Up to 15 years from commencement of service
Software, Facilities & Equipment - 3 to 10 years
Buildings - 18 years
Leasehold Improvements - Shorter of lease term or the estimated useful lives of the improvements

The Company evaluates and revises the estimated depreciable lives assigned to property and equipment based on changes in facts and circumstances. When changes are made to estimated useful lives, the remaining carrying amounts are depreciated prospectively over the remaining useful lives.

For assets that are sold or retired, including satellites that are de-orbited and no longer providing services, the estimated cost and accumulated depreciation is removed from property and equipment.

The Company assesses the impairment of long-lived assets when indicators of impairment are present. Recoverability of assets is measured by comparing the carrying amounts of the assets to the estimated future undiscounted cash flows, excluding financing costs. If the Company determines that an impairment exists, any related impairment loss is estimated based on fair values.

Derivative Instruments

The Company enters into financing arrangements that are hybrid instruments that contain embedded derivative features. Derivative instruments are recognized as either assets or liabilities in the consolidated balance sheets and are measured at fair value with gains or losses recognized in earnings. The Company determines the fair value of derivative instruments based on available market data using appropriate valuation models.

Deferred Financing Costs

Deferred financing costs are those costs directly incurred in obtaining long-term debt. These costs are amortized as additional interest expense over the expected term of the corresponding debt. Deferred financing costs are recorded on the Company's consolidated balance sheets as a reduction in the carrying amount of the related debt liability. The Company classifies deferred financing costs consistent with the classification of the related debt outstanding at the end of the reporting period. As of December 31, 2018, and 2017, the Company had net deferred financing costs of \$24.4 million and \$34.5 million, respectively.

Fair Value of Financial Instruments

The Company believes it is not practicable to determine the fair value of the Facility Agreement. Interest rates and other terms for long-term debt are not readily available and generally involve a variety of factors, including due diligence by the debt holders. For the Company's other debt instruments, which include the Loan Agreement with Thermo and the Company's 8.00% Convertible Senior Notes Issued in 2013 ("2013 8.00% Notes"), the fair value of debt is calculated using inputs consistent with those used to calculate the fair value of the derivatives embedded in these instruments.

Litigation, Commitments and Contingencies

The Company is subject to various claims and lawsuits that arise in the ordinary course of business. Estimating liabilities and costs associated with these matters requires judgment and assessment based on professional knowledge and experience of our management and legal counsel. When a loss is considered probable and reasonably estimable, a liability is recorded for the Company's best estimate. If there is a range of loss, the Company will record a reserve based on the low end of the range, unless facts and circumstances can support a different point in the range. When a loss is probable, but not reasonably estimable, disclosure is provided, as considered necessary. Reserves for potential claims or lawsuits may be relieved if the loss is no longer considered probable. The ultimate resolution of any such exposure may vary from earlier estimates as further facts and circumstances become known.

Gain/Loss on Extinguishment of Debt

Gain or loss on extinguishment of debt generally is recorded upon an extinguishment of a debt instrument or the conversion of certain of the Company's convertible notes. Gain or loss on extinguishment of debt is calculated as the difference between the reacquisition price and net carrying amount of the debt and is recorded as an extinguishment gain or loss in the Company's consolidated statement of operations.

Revenue Recognition and Deferred Revenue

Effective January 1, 2018, the Company adopted ASC 606 using the modified retrospective method. As such, the revenue accounting policies below reflect the Company's policies after adoption of this standard. Refer to the Company's annual report on Form 10-K for the year ended December 31, 2017 for its revenue accounting policies in place during 2017 and 2016.

Revenue consists primarily of satellite voice and data service revenue and revenue generated from the sale of fixed and mobile devices as well as other products and accessories. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. Each type of revenue is a separate performance obligation with distinct deliverables and is therefore accounted for discretely. Revenue is measured based on the consideration specified in a contract with a customer, adjusted for credits and discounts, as applicable, and is recognized when the Company satisfies a performance obligation by transferring control over a product or service to a customer.

Unless otherwise disclosed, service revenue is recognized over a period of time and revenue from the sale of subscriber equipment is recognized at a point in time. The recognition of revenue for service is over time as the customer simultaneously receives and consumes the benefits of the Company's performance over the contract term. The recognition of revenue for subscriber equipment is at a point in time as the risks and rewards of ownership of the hardware transfer to the customer generally upon shipment, which is when legal title of the product transfers to the customer, among other things (as discussed further below).

The Company does not record sales taxes, telecommunication taxes or other governmental fees collected from customers in revenue. The Company excludes these taxes from the measurement of contract transaction prices.

The Company receives payment from customers in accordance with billing statements or invoices for customer contracts; these payments may be in advance or arrears of services provided to the customer by the Company. Customer payments received in advance of the corresponding service period are recorded as deferred revenue.

Upon activation of a Globalstar device, certain customers are charged an activation fee, which is recognized over the term of the expected customer life. Credits granted to customers are expensed or charged against revenue or accounts receivable over the remaining term of the contract. Estimates related to earned but unbilled service revenue are calculated using current subscriber data, including plan subscriptions and usage between the end of the billing cycle and the end of the period. The recognition of revenue related to amounts allocated to performance obligations that were satisfied (or partially satisfied) in a previous period is not routine or material to the Company's financial statements.

Provisions for estimated future warranty costs, returns and rebates are recorded as a cost of sale, or a reduction to revenue, as applicable. These costs are based on historical trends and the provision is reviewed regularly and periodically adjusted to reflect changes in estimates.

Certain contracts with customers may contain a financing component. Under ASC 606, an entity should adjust the promised amount of the consideration for the effects of time value of money if the timing of the payments agreed upon by the parties to the contract provides the customer or the entity with a significant benefit of financing for the transfer of goods or services to the customer. This type of transaction is infrequent and not considered material to the Company. Additionally, in connection with the adoption of ASC 606, the Company has applied the practical expedient related to the existence of a significant financing component as it expects at contract inception that the period between payment by the customer and transfer of the promised goods or services will be one year or less.

The following describes the principal activities from which the Company generates its revenue. The Company's only reportable segment is its MSS business.

Duplex Service Revenue. The Company recognizes revenue for monthly access fees in the period services are rendered. Access fees represent the minimum monthly charge for each line of service based on its associated rate plan. The Company also recognizes revenue for airtime minutes and data in excess of the monthly access fees in the period such minutes or data are used.

The Company offers certain annual plans whereby a customer prepays for a predetermined amount of minutes and data. In these cases, revenue is recognized consistent with a customer's expected pattern of usage based on historical experience because the Company believes that this method most accurately depicts the satisfaction of the Company's obligation to the customer. This usage pattern is typically seasonal and highest in the second and third calendar quarters of the year. The Company offers other annual plans whereby the customer is charged an annual fee to access the Company's system with an unlimited amount of usage. Annual fees for unlimited plans are recognized on a straight-line basis over the term of the plans.

SPOT Service Revenue. The Company sells SPOT services as monthly, annual or multi-year plans and recognizes revenue on a straight-line basis over the service term, beginning when the service is activated by the customer.

Simplex Service Revenue. The Company sells Simplex services as monthly, annual or multi-year plans and recognizes revenue ratably over the service term or as service is used, beginning when the service is activated by the customer.

Independent Gateway Operator (I'GO)' Service Revenue. The Company owns and operates its satellite constellation and earns a portion of its revenues through the sale of airtime minutes or data on a wholesale basis to IGOs. Revenue from services provided to IGOs is recognized based upon airtime minutes or data packages used by customers of the IGOs and in accordance with contractual fee arrangements.

Equipment Revenue. Subscriber equipment revenue represents the sale of fixed and mobile user terminals, SPOT and Simplex products, and accessories. The Company recognizes revenue upon shipment provided control has transferred to the customer. Indicators of transfer of control include, but are not limited to; 1) the Company's right to payment, 2) the customer has legal title of the equipment, 3) the Company has transferred physical possession of the equipment to the customer or carrier, and 4) the customer has significant risks and rewards of ownership of the equipment. The Company sells equipment designed to work on its network through various channels, including through dealers, retailers and resellers (including IGOs) as well as direct to consumers or other businesses by its global sales team and through its e-commerce website. The sales channel depends primarily on the type of equipment and geographic region. Promotional rebates are offered from time to time. A reduction to revenue is recorded to reflect the lower transaction price based on an estimate of the customer take rate at the time of the sale using primarily historical data. This estimate is adjusted periodically to reflect actual rebates given to the Company's customers. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of revenues.

Other Service Revenue. Other service revenue includes primarily revenue associated with engineering services to assist customers in developing new applications related to its system. The revenue associated with these engineering services is generally recorded over time as the services are rendered, and the Company's obligation to the customer is satisfied.

Multiple-Element Arrangement Contracts. At times, the Company will sell subscriber equipment through multiple-element arrangement contracts with services. When the Company sells subscriber equipment and services in bundled arrangements and determines that it has separate performance obligations, the Company allocates the bundled contract price among the various performance obligations based on relative stand-alone selling prices at contract inception of the district goods or services underlying each performance obligation and recognizes revenue when, or as, each performance obligation is satisfied.

Stock-Based Compensation

The Company recognizes compensation expense in the financial statements for both employee and non-employee share-based awards based on the grant date fair value of those awards. The Company uses the Black-Scholes option pricing model to estimate fair values of stock options. Option pricing models, including the Black-Scholes model, require the use of input estimates and assumptions, including expected volatility, term, and risk-free interest rate. The assumptions for expected volatility and expected term most significantly affect the estimated grant-date fair value. The Company's estimate of the forfeiture rate of its share-based awards also impacts the timing of expense recorded over the vesting period of the award. The Company's estimate for pre-vesting forfeitures is recognized over the requisite service periods of the awards on a straight-line basis, which is generally commensurate with the vesting term. See Note 14: Stock Compensation for a description of methods used to determine the Company's assumptions. If the Company determined that another method used to estimate expected volatility or expected life was more reasonable than its current methods, or if another method for calculating these input assumptions was prescribed by authoritative guidance, the estimated fair value calculated for share-based awards could change significantly. Higher volatility and longer expected lives result in increases to share-based compensation determined at the date of grant.

Foreign Currency

The functional currency of the Company's foreign consolidated subsidiaries is generally their local currency, unless the subsidiary operates in a hyperinflationary economy, such as Venezuela. Assets and liabilities of its foreign subsidiaries are translated into United States dollars based on exchange rates at the end of the reporting period. Income and expense items are translated at the average exchange rates prevailing during the reporting period. For 2018, 2017 and 2016, the foreign currency translation adjustments were net gains of \$3.2 million, net losses of \$1.9 million and net losses of \$0.8 million, respectively.

Foreign currency transaction gains/losses were net losses of \$3.1 million \$2.2 million and \$0.2 million for each of 2018, 2017, and 2016, respectively. These were classified as other income (expense) on the consolidated statement of operations.

Asset Retirement Obligation

Liabilities arising from legal obligations associated with the retirement of long-lived assets are measured at fair value and recorded as a liability. Upon initial recognition of a liability for retirement obligations, the Company records an asset, which is depreciated over the life of the asset to be retired. Accretion of the asset retirement obligation liability and depreciation of the related assets are included in depreciation, amortization and accretion in the accompanying consolidated statements of operations.

The Company capitalizes, as part of the carrying amount, the estimated costs associated with the eventual retirement of gateways owned by the Company. As of both December 31, 2018 and 2017, the Company had accrued approximately \$1.5 million, respectively, for asset retirement obligations. The Company believes this estimate will be sufficient to satisfy the Company's obligation under leases to remove the gateway equipment and restore the sites to their original condition.

Warranty Expense

Warranty terms extend from 90 days on equipment accessories to one year for fixed and mobile user terminals. A provision for estimated future warranty costs is recorded as cost of sales when products are shipped. Warranty costs are based on historical trends in warranty charges as a percentage of gross product shipments. The resulting accrual is reviewed regularly and periodically adjusted to reflect changes in warranty cost estimates.

Research and Development Expenses

Research and development costs were \$1.5 million, \$3.8 million and \$2.1 million for 2018, 2017 and 2016, respectively. These costs are expensed as incurred as cost of services and include primarily the cost of new product development, chip set design and other engineering work.

Advertising Expenses

Advertising costs were \$3.0 million, \$2.1 million and \$4.1 million for 2018, 2017, and 2016, respectively. These costs are expensed as incurred as marketing, general and administrative expenses.

Income Taxes

The Company is taxed as a C corporation for U.S. tax purposes. The Company recognizes deferred tax assets and liabilities for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis, operating losses and tax credit carryforwards. The Company measures deferred tax assets and liabilities using tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The Company recognizes the effect on deferred tax assets and liabilities of a change in tax rates in income in the period that includes the enactment date; however, as the Company has full valuation allowance on its deferred tax assets, there is no impact to the consolidated statements of operations and balance sheets.

The Company also recognizes valuation allowances to reduce deferred tax assets to the amount that is more likely than not to be realized. In assessing the likelihood of realization, management considers: (i) future reversals of existing taxable temporary differences; (ii) future taxable income exclusive of reversing temporary differences and carryforwards; (iii) taxable income in prior carry-back year(s) if carry-back is permitted under applicable tax law; and (iv) tax planning strategies.

Comprehensive Income (Loss)

All components of comprehensive income (loss), including the minimum pension liability adjustment and foreign currency translation adjustment, are reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources.

Earnings (Loss) Per Share

The Company is required to present basic and diluted earnings (loss) per share. Basic earnings (loss) per share is computed by dividing income (loss) available to common stockholders by the weighted average number of common shares outstanding during the period. Common stock equivalents are included in the calculation of diluted earnings per share only when the effect of their inclusion would be dilutive. Potentially dilutive securities include primarily outstanding stock-based awards, convertible notes and shares issuable pursuant to the Company's Employee Stock Purchase Plan.

For the years ended December 31, 2018, 2017 and 2016, 201.7 million, 176.5 million and 204.2 million shares of potential common stock, respectively, were excluded from diluted shares outstanding because the effects of potentially dilutive securities would be anti-dilutive.

Intangible and Other Assets

Intangible Assets Not Subject to Amortization

A significant portion of the Company's intangible assets are licenses that provide the Company the exclusive right to provide MSS services over the Globalstar System or to utilize designated radio frequency spectrum to provide terrestrial wireless communication services in a particular region of the world. While licenses are issued for only a fixed time, such licenses are subject to renewal by the Federal Communications Commission ("FCC") or equivalent international regulatory authorities. These license renewals are expected to occur routinely and at nominal cost. Moreover, the Company has determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of its wireless licenses. As a result, the Company treats the wireless licenses as an indefinite-lived intangible asset. The Company re-evaluates the useful

life determination for wireless licenses annually, or more frequently if needed, to determine whether events and circumstances continue to support an indefinite useful life.

Intangible Assets Subject to Amortization

Our intangible assets that do not have indefinite lives (primarily developed technology and customer relationships) are amortized over their estimated useful lives. For information related to each major classes of intangible assets, including accumulated amortization and estimated average useful lives, see Note 4: Intangible and Other Assets.

Other Assets

Prepaid Licenses and Royalties

The Company has signed various licensing and royalty agreements necessary for the manufacture and distribution of its second-generation products. Amounts that are prepaid are recorded primarily in noncurrent assets on the Company's consolidated balance sheet. The Company estimates the portion of expense incurred or royalties earned for the next 12 months and reclassifies these amounts to current assets on the Company's consolidated balance sheet each reporting period. The Company will expense these amounts through depreciation expense over the life of the gateway, maintenance expense over the term of the services, or cost of goods sold on a per unit basis as these units are manufactured, sold, or activated.

Business Economic Loss Claim Receivable

In accordance with ASC 450, the Company believes that the recognition of a gain is appropriate at the earlier of when the gain is realizable or realized. A realized gain is one where cash (or other assets, such as claims to cash) has already been received without expectation of repayment. A gain is realizable when assets are readily convertible to known amounts of cash or claims to cash. In May 2018, the Company entered into a settlement agreement related a business economic loss claim. As part of the Company's assessment, it considered that the terms of the settlement agreement are final (e.g. not subject to appeal) and the counterparty has the ability to pay the amount. Therefore, the Company recorded a receivable and non-operating income for the amount of the settlement. The Company imputed interest on this receivable in accordance with ASC 835-30-15-2 as it represents a contractual right to receive money on fixed or determinable dates. The difference between the present value and the face amount was treated as a discount and is being amortized as interest income over the life of the claim using the interest method. See Note 9: Contingencies for further discussion.

Costs to Obtain a Contract

The Company also capitalizes costs to obtain a contract, which include certain deferred subscriber acquisition costs which are amortized consistently with the pattern of transfer of the good or delivery of the service to which the asset relates. When a contract terminates prior to the end of its expected life, the remaining deferred costs asset associated with it becomes impaired. An immediate recognition of expense for individual remaining costs to obtain a contract following deactivation is not practicable. See Note 2: Revenue for further discussion.

Impairment of Intangible and Other Assets

The Company assesses these intangible assets for impairment annually or more frequently if events or changes in circumstances indicate that it is more likely than not that the asset is impaired. In assessing whether it is more likely than not that such an asset is impaired, the Company assesses relevant events and circumstances that could affect the significant inputs used to determine the fair value of the asset. If the Company determines that an impairment exists, any related loss is estimated based on fair values.

Recently Issued Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13, *Credit Losses, Measurement of Credit Losses on Financial Instruments*. ASU No. 2016-13, as amended, significantly changes how entities will measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. The standard will replace today's incurred loss approach with an expected loss model for instruments measured at amortized cost. Entities will apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2019. Early adoption is permitted for all entities for annual periods beginning after December 15, 2018, and interim periods therein. The Company has not yet determined the impact this standard will have on its financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement. As part of the FASB's disclosure framework project, it has eliminated, amended and added disclosure requirements for fair value measurements. Entities will no longer be required to disclose the amount of, and reasons for, transfers between Level 1 and Level 2 of the fair value hierarchy, the policy of timing of transfers between levels of the fair value hierarchy and the valuation processes for Level 3 fair value measurements. Public companies will be required to disclose the range and weighted average used to develop significant unobservable inputs for Level 3 fair value measurements. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2019. Early adoption is permitted as of the beginning of any interim or annual reporting period. This ASU will have an impact on the Company's disclosures.

In August 2018, the FASB issued ASU No. 2018-14, Compensation - Retirement Benefits - Defined Benefit Plans - General Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans. As part of the FASB's disclosure framework project, it has changed the disclosure requirements for defined pension and other post-retirement benefit plans. The FASB eliminated disclosure requirements related to the amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year, the amount and timing of plan assets expected to be returned to the employer, if any, information related to Japanese Welfare Pension Insurance Law, information about the amount of future annual benefits covered by insurance contracts and significant transactions between the employer or related parties and the plan, and the disclosure of the effects of a one-percentage-point change in the assumed health care cost trend rates on the (1) aggregate of the service and interest cost components of net periodic benefit costs and the (2) benefit obligation for postretirement health care benefits. Entities will be required to disclose the weighted-average interest crediting rate for cash balance plans and other plans with promised interest crediting rates as well as an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. This ASU is effective for public entities for annual periods beginning after December 15, 2020. Early adoption is permitted as of the beginning of any annual reporting period. This ASU will have an impact on the Company's disclosures.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This ASU requires companies to defer specified implementation costs in a cloud computing arrangement that are often expensed under current US GAAP and recognize these costs to expense over the noncancellable term of the arrangement. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2019. Early adoption is permitted as of the beginning of any interim or annual reporting period. The Company does not expect it to have a material effect on the Company's financial statements and related disclosures.

Recently Implemented Financial Reporting Rules

In August 2018, the SEC adopted the final rule under SEC Release 33-10532, *Disclosure Update and Simplification*, which amended its rules to eliminate, modify, or integrate into other SEC requirements certain disclosure rules. The amendments are part of the SEC's ongoing disclosure effectiveness initiative. The amendments eliminate redundant and duplicative requirements including, but not limited to, the ratio of earnings to fixed charges, outdated regulatory disclosures, certain accounting policies about derivative instruments and specific SEC disclosures that are also required under current US GAAP. The amendments may

expand current disclosures for certain companies, specifically the requirement to disclose the change in stockholders' equity for the current and comparative quarter and year-to-date interim periods. The amended rules became effective November 5, 2018 and are applied to any filings after that date. These final rules did not have a material impact on the Company's disclosures and financial statements.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*. ASU 2014-09 became effective for annual reporting periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. See Note 2: Revenue for further discussion, including the impact on the Company's consolidated financial statements and required disclosures.

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Updates ("ASU") No. 2016-02, Leases, which has been modified since its initial release. The main difference between the provisions of ASU No. 2016-02 and previous U.S. GAAP is the recognition of right-of-use assets and lease liabilities by lessees for those leases classified as operating leases under previous U.S. GAAP. ASU No. 2016-02 retains a distinction between finance leases and operating leases, and the recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee have not significantly changed from previous U.S. GAAP. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize right-of-use assets and lease liabilities. The accounting applied by a lessor is largely unchanged from that applied under previous U.S. GAAP. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements, which provides for the election of transition methods between the modified retrospective method and the optional transition relief method. The modified retrospective method is applied to all prior reporting periods presented with a cumulative-effect adjustment recorded in the earliest comparative period while the optional transition relief method is applied beginning in the period of adoption with a cumulativeeffect adjustment recorded in the first quarter of 2019. This ASU is effective for public business entities in fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company adopted this standard when it became effective on January 1, 2019 using the optional transition relief method. The Company has an internal project team that has evaluated the impact that this standard has on its financial statements, accounting systems and related disclosures; for operating leases in which the Company is the lessee, it will recognize a right-of-use asset and associated lease liability upon adoption. The adoption of this standard on January 1, 2019 did not have a material impact to the Company's financial statements; however, as discussed further in Note 8: Commitments, the Company relocated to a new headquarters location in Covington, Louisiana in February 2019 and is currently evaluating the impact this lease will have on the Company's financial statements.

In March 2016, the FASB issued ASU No. 2016-04, *Liabilities-Extinguishment of Liabilities: Recognition of Breakage for Certain Prepaid Stored Value Products*. ASU No. 2016-04 contains specific guidance for the derecognition of prepaid stored-value product liabilities within the scope of this ASU. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's consolidated financial statements or related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments. ASU No. 2016-15 is intended to reduce diversity and clarify the classification of how certain cash receipts and cash payments are presented in the statement of cash flows. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's consolidated financial statements or related disclosures.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes: Intra-Entity Transfers of Assets Other Than Inventory*. ASU No. 2016-16 requires entities to account for the income tax effects of intercompany sales and transfers of assets other than inventory when the transfer occurs rather than current guidance which requires companies to defer the income tax effects of intercompany transfers of an asset until the asset has been sold to an outside party or otherwise recognized. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this

standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's consolidated financial statements or related disclosures.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations: Clarifying the Definition of a Business*. ASU No. 2017-01 most significantly revises guidance specific to the definition of a business related to accounting for acquisitions. Additionally, ASU No. 2017-01 also affects other areas of US GAAP, such as the definition of a business related to the consolidation of variable interest entities, the consolidation of a subsidiary or group of assets, components of an operating segment, and disposals of reporting units and the impact on goodwill. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's consolidated financial statements or related disclosures.

In February 2017, the FASB issued No. ASU 2017-05, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets: Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets. ASU 2017-05 was issued to provide clarity on the scope and application for recognizing gains and losses from the sale or transfer of nonfinancial assets, and should be adopted concurrently with ASU 2014-09, Revenue from Contracts with Customers. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's consolidated financial statements or related disclosures.

In February 2017, the FASB issued ASU No. 2017-07, Compensation-Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. ASU 2017-07 requires sponsors of benefit plans to present the service cost component of net periodic benefit cost in the same income statement line or items as other employee costs and present the remaining components of net periodic benefit cost in one or more separate line items outside of income from operations. This ASU also limits the capitalization of benefit costs to only the service cost component. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. As a result of the retrospective adoption of this standard, for the years ended December 31, 2017 and 2016, the Company reclassified \$0.3 million and \$0.4 million, respectively, from marketing, general and administrative expense to other income (expense). The service cost component of periodic benefit cost is the only cost that remains in income from operations; all other periodic benefit costs, including interest cost, expected return on plan assets and amortization of amounts deferred from previous periods are now reflected outside of income from operations and reflected in the other income (expense) line item on the Company's consolidated statements of operations. There were no other changes to the Company's consolidated financial statements or disclosures.

In March 2017, the FASB issued ASU No. 2017-08: Receivables-Nonrefundable Fees and Other Costs: Premium Amortization on Purchased Callable Debt Securities. This ASU amends current US GAAP to shorten the amortization period for certain purchased callable debt securities held at a premium to the earliest call date. This standard will replace today's yield-to-maturity approach, which generally requires amortization of premium over the life of the instrument. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2018. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material effect on the Company's consolidated financial statements or related disclosures.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation-Stock Compensation: Scope of Modification Accounting*. This ASU clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as modifications. Under the new guidance, a company will apply modification accounting only if the fair value, vesting conditions or classification of the award change due to a modification in the terms or conditions of the share-based payment award. This ASU became effective for public entities for annual and interim periods beginning after December 15, 2017. The Company adopted this standard on January 1, 2018. The adoption of this standard did not have a material impact on the Company's consolidated financial statements or related disclosures.

In February 2018, the FASB issued ASU No. 2018-02, Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. This guidance allows companies to reclassify items in accumulated other comprehensive income to

retained earnings for stranded tax effects resulting from the H.R.1, "An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018" (the "Tax Act") (previously known as "The Tax Cuts and Jobs Act"). This ASU is effective for all entities for annual and interim periods beginning after December 15, 2018. The Company adopted this standard on January 1, 2019. The adoption of this standard did not have a material effect on the Company's financial statements or related disclosures.

In June 2018, the FASB issued ASU No. 2018-07, Compensation - Stock Compensation: Improvements to Nonemployee Share-Based Payment Accounting. ASU 2018-07 aligns the accounting for share-based payment awards issued to employees and nonemployees. Measurement of equity-classified nonemployee awards will now be valued on the grant date and will no longer be remeasured through the performance completion date. This amendment also changes the accounting for nonemployee awards with performance conditions to recognize compensation cost when achievement of the performance condition is probable, rather than upon achievement of the performance condition, as well as eliminating the requirement to reassess the equity or liability classification for nonemployee awards upon vesting, except for certain award types. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2018. The Company adopted this standard on January 1, 2019. The adoption of this standard did not have a material effect on the Company's financial statements or related disclosures.

2. REVENUE

Adoption of ASC Topic 606, "Revenue from Contracts with Customers"

On January 1, 2018, the Company adopted ASC 606 using the modified retrospective method and recognized the cumulative effect of initially applying the guidance as an adjustment to the opening balance of retained deficit. The Company applied the new revenue standard to new and existing contracts that were not complete as of the date of initial application. The Company has applied the transitional practical expedient related to contract modifications and it has not retrospectively restated contracts that were modified prior to January 1, 2018.

As a result of applying this standard using the modified retrospective method, the Company has presented financial results and applied its accounting policies for the period beginning January 1, 2018 under ASC 606, while prior period results and accounting policies have not been adjusted and are reflected under legacy GAAP pursuant to ASC 605.

As a result of adopting ASC 606, the Company recorded a net increase to stockholders' equity of \$3.1 million, which resulted in a reduction to the opening retained deficit balance as of January 1, 2018 as a cumulative catch-up adjustment for all open contracts as of the date of adoption. The most significant drivers of this adjustment included the Company's change in accounting policy related to the deferral of costs to obtain a contract and the accrual of contract breakage to revenue based on historical usage patterns of existing contracts (see further discussion below).

See Note 1: Summary of Significant Accounting Policies for further discussion on the Company's accounting policies related to revenue, deferred revenue, accounts receivables and costs to obtain a contract.

Impact on Financial Statements

The following tables summarize the impact of the adoption of ASC 606 on the Company's consolidated financial statements. As noted above, the change in accounting policy related to the deferral of costs to obtain a contract and the accrual of estimated contract breakage to revenue based on historical usage patterns of existing contracts resulted in the most significant change to the Company's consolidated financial statements. The impact on the Company's financial statements related to the change in accounting policy is as follows: 1) deferred costs to obtain a contract are primarily reflected in the marketing, general and administrative as well as the intangible and other assets, net, lines in the tables below and 2) the accrual of estimated contract breakage to revenue is reflected primarily in the service revenue and deferred revenue lines in the tables below. Amounts presented in the tables below are in thousands.

Consolidated Statement of Operations and Comprehensive Income (Loss) Year Ended December 31, 2018

	Impac	Year ended December 31, 2018					
	Ye						
	As reported		Impact of ASC 606	Legacy GAAP			
Service revenue	\$ 111,	89 \$	(570) \$	110,519			
Subscriber equipment sales	19,	24	(445)	18,579			
Cost of subscriber equipment sales	14,4	41	(315)	14,126			
Marketing, general and administrative	55,4	43	(206)	55,237			
Other	40,	88	(51)	40,937			
Net loss	(6,	16)	(443)	(6,959)			
Comprehensive loss	(3,	16)	(443)	(3,859)			
Net loss per common share:							
Basic	\$ (0	01) \$	— \$	(0.01)			
Diluted	(0	.01)	_	(0.01)			

Consolidated Balance Sheet As of December 31, 2018

		Impact on change in accounting policy					
	_	December 31, 2018					
	_	As reported		Impact of ASC 606	Legacy GAAP		
Accounts receivable, net	\$	19,327	\$	(583) \$	18,744		
Prepaid expenses and other current assets		13,410		289	13,699		
Intangible and other assets, net		40,286		(1,921)	38,365		
Deferred revenue, current and long-term		37,630		1,241	38,871		
Retained earnings (deficit)		(1,574,725)		3,536	(1,571,189)		

Disaggregation of Revenue

The following table discloses revenue disaggregated by type of product and service (amounts in thousands):

		Year Ended						
	Dec	ember 31, 2018	December 31	2017 (1)	December 31	, 2016 (1)		
Service revenue:								
Duplex	\$	41,223	\$	37,635	\$	31,848		
SPOT		52,363		45,427		38,157		
Simplex		13,459		10,946		10,005		
IGO		932		1,068		907		
Other		3,112		3,397		2,152		
Total service revenue		111,089		98,473		83,069		
Subscriber equipment sales:								
Duplex	\$	2,016	\$	2,754	\$	3,877		
SPOT		8,046		5,394		5,321		
Simplex		8,330		5,243		3,765		
IGO		498		779		843		
Other		134		17		(14)		
Total subscriber equipment sales		19,024		14,187		13,792		
Total revenue	\$	130,113	\$	112,660	\$	96,861		

⁽¹⁾ As noted above, prior periods have not been adjusted under the modified retrospective method of adoption.

The Company attributes equipment revenue to various countries based on the location where equipment is sold. Service revenue is generally attributed to the various countries based on the Globalstar entity that holds the customer contract. The following table discloses revenue disaggregated by geographical market (amounts in thousands):

	Year Ended						
	December 31, 2018		December 31, 2017 (1)		Dec	ember 31, 2016 (1)	
Service revenue:							
United States	\$	78,918	\$	68,556	\$	56,868	
Canada		20,186		18,296		16,038	
Europe		9,190		8,183		6,955	
Central and South America		2,183		2,959		2,659	
Others		612		479		549	
Total service revenue		111,089		98,473		83,069	
Subscriber equipment sales:							
United States	\$	10,809	\$	8,431	\$	7,441	
Canada		3,343		2,995		3,122	
Europe		3,101		1,532		1,533	
Central and South America		1,472		1,202		1,413	
Others		299		27		283	
Total subscriber equipment sales		19,024		14,187		13,792	
Total revenue	\$	130,113	\$	112,660	\$	96,861	

⁽¹⁾ As noted above, prior periods have not been adjusted under the modified retrospective method of adoption.

Contract Balances

The following table discloses information about accounts receivable, costs to obtain a contract, and contract liabilities from contracts with customers (amounts in thousands):

	De	cember 31, 2018	January 1, 2018
Accounts receivable	\$	19,327	\$ 17,113
Capitalized costs to obtain a contract		2,018	2,265
Contract liabilities		37,630	37,799

Accounts Receivable

Included in the accounts receivable balance in the table above are contract assets, which represent primarily unbilled amounts related to performance obligations satisfied by the Company, of \$0.7 million and \$0.1 million as of December 31, 2018 and January 1, 2018, respectively.

The Company has agreements with certain of its IGOs whereby the parties net settle outstanding payables and receivables between the respective entities on a periodic basis. As of December 31, 2018, \$7.8 million related to these agreements was included in accounts receivable on the Company's consolidated balance sheet.

During the year ended December 31, 2018, impairment loss on receivables from contracts with customers was \$3.9 million including both provisions for bad debt and the reversal of revenue for accounts where collectability is not reasonably assured.

Costs to Obtain a Contract

The Company also capitalizes costs to obtain a contract, which include certain deferred subscriber acquisition costs which are amortized consistently with the pattern of transfer of the good or delivery of the service to which the asset relates. The Company's subscriber acquisition costs primarily include dealer and internal sales commissions and certain other costs, including but not limited to, promotional costs, cooperative marketing credits and shipping and fulfillment costs. The Company capitalizes incremental costs to obtain a contract to the extent it expects to recover them. These capitalized contract costs include only internal and external initial activation commissions because these costs are considered incremental and would not have been incurred if the contract had not been obtained. These capitalized costs are included in other assets on the Company's consolidated balance sheet and are amortized to marketing, general and administrative expenses on the Company's consolidated statement of operations on a straight-line basis over the estimated customer life of three years, which considers anticipated contract renewals.

Upon adoption of ASC 606, the Company applied the practical expedient and recognizes the incremental costs of obtaining contracts as expense when incurred if the amortization period of the assets that the Company otherwise would have recognized is one year or less. These costs are included in marketing, general and administrative expenses in the period in which the cost is incurred.

When a contract terminates prior to the end of its expected life, the remaining deferred costs asset associated with it becomes impaired. An immediate recognition of expense for individual remaining costs to obtain a contract following deactivation is not practicable. Because early terminations are factored into the determination of the expected customer life and therefore affect the amortization period, the Company does not recognize early termination expense on individual assets because the incremental effect would be immaterial and doing do would be impractical.

For the year ended December 31, 2018, the amount of amortization related to previously capitalized costs to obtain a contract was \$1.5 million.

Contract Liabilities

Contract liabilities, which are included in deferred revenue on the Company's consolidated balance sheet, represent the Company's obligation to transfer service or equipment to a customer for which it has previously received consideration from a customer. As of December 31, 2018, the total transaction price allocated to unsatisfied (or partially unsatisfied) performance obligations was \$37.6 million. As discussed above, revenue is recognized when the Company satisfies a performance obligation by transferring control over a product or service to a customer. The amount of revenue recognized during the year ended December 31, 2018 from performance obligations included in the contract liability balance at the beginning of the period was \$28.7 million.

In general, the duration of the Company's contracts is one year or less; however, from time to time, the Company offers multi-year contracts. As of December 31, 2018, the Company expects to recognize \$31.9 million, or approximately 85%, of its remaining performance obligations during the next twelve months and \$2.8 million, or approximately 7%, between two to seven years from the balance sheet date. The remaining \$2.9 million, or approximately 8%, is related to a single contract and will be recognized as work is performed by the Company, the timing of which is currently unknown. The Company has applied the practical expedient pursuant to ASC 606 allowing for limited disclosure of contract liabilities with a remaining duration of one year or less.

3. PROPERTY AND EQUIPMENT

Property and equipment consists of the following (in thousands):

	December 31, 2018	December 31, 2017
Globalstar System:		
Space component		
First and second-generation satellites in service	\$ 1,195,291	\$ 1,195,426
Second-generation satellite, on-ground spare	32,481	32,481
Ground component	256,850	48,710
Construction in progress:		
Ground component	18,068	227,167
Next-generation software upgrades	2,250	12,414
Other	2,699	2,575
Total Globalstar System	1,507,639	1,518,773
Internally developed and purchased software	26,045	16,132
Equipment	10,097	9,966
Land and buildings	3,311	3,322
Leasehold improvements	1,478	1,969
Total property and equipment	1,548,570	1,550,162
Accumulated depreciation	(665,875)	(579,043)
Total property and equipment, net	\$ 882,695	\$ 971,119

Amounts in the above table consist primarily of costs incurred related to the construction of the Company's second-generation constellation and ground upgrades. In connection with the 2018 launch of Sat-Fi2TM, the first device to operate on the Company's upgraded ground network, the Company placed into service the portion of the next-generation ground component (including associated developed technology and software upgrades), which represents the gateways currently capable of supporting commercial traffic. Also, during 2018, the Company reclassified approximately \$5.4 million from construction in progress to inventory consisting of amounts associated with the portion of ground infrastructure assets expected to be used as spare parts or sold to third parties. The remaining ground component of construction in progress represents costs (including capitalized interest)

associated with the Company's contracts primarily with Hughes Network Systems, LLC ("Hughes") and Ericsson Inc. ("Ericsson") for the Company's ground infrastructure in certain regions around the world. In January 2019, the Company completed certain technology upgrades to allow customers to use Sat-Fi2TM in Brazil; as such, it placed into service approximately \$7.9 million of construction in progress (including capitalized interest) related to the deployment of two RANs to this region.

Amounts included in the Company's second-generation satellite, on-ground spare balance as of December 31, 2018 and 2017, consist primarily of costs related to a spare second-generation satellite that has not been placed in orbit, but is capable of being included in a future launch. As of December 31, 2018, this satellite has not been placed into service; therefore, the Company has not started to record depreciation expense.

Capitalized Interest and Depreciation Expense

The following table summarizes capitalized interest for the periods indicated below (in thousands):

	Year Ended December 31,								
		2018	2017		2016				
Interest cost eligible to be capitalized	\$	51,819 \$	51,212	\$	48,095				
Interest cost recorded in interest income (expense), net		(43,434)	(33,319)		(34,108)				
Net interest capitalized	\$	8,385 \$	17,893	\$	13,987				

The following table summarizes depreciation expense for the periods indicated below (in thousands):

	 Year Ended December 31,							
	2018		2017		2016			
preciation Expense	\$ 81,779	\$	77,197	\$	76,960			

The following table summarizes amortization expense for the periods indicated below (in thousands):

	Year	Ended De	cember	31,	
	2018	2017	7	2016	5
\$	8,659	\$	301 \$		430

Geographic Location of Long-Lived Assets

Long-lived assets consist primarily of property and equipment and are attributed to various countries based on the physical location of the asset, except for the Company's satellites which are included in the long-lived assets of the United States. The Company's information by geographic area is as follows (in thousands):

	 Year Ended December 31,					
	 2018	2017				
Long-lived assets:						
United States	\$ 852,033	\$ 966,611				
Canada	12,603	773				
Europe	3,425	433				
Central and South America	14,383	3,051				
Other	251	251				
Total long-lived assets	\$ 882,695	\$ 971,119				

As discussed above, during 2018, the Company placed into service the portion of the next-generation ground component which represents the gateways capable of supporting commercial traffic. Construction in progress related to these assets was accumulated in the United States and allocated to the various gateways during 2018 based on physical location.

4. INTANGIBLE AND OTHER ASSETS

Intangible Assets Not Subject to Amortization

The Company has intangible assets not subject to amortization, which include certain costs to obtain or defend regulatory authorizations and a portion of capitalized interest associated with these assets. These costs include primarily efforts related to the Company's petition to the FCC to use its licensed MSS spectrum to provide terrestrial wireless services and costs with international regulatory agencies to obtain similar terrestrial authorizations outside of the United States. The total amount of these assets was \$19.9 million and \$9.7 million at December 31, 2018 and 2017, respectively.

Intangible Assets Subject to Amortization

The gross carrying amount and accumulated amortization of the Company's intangible assets subject to amortization consist of the following (in thousands):

		December 31, 2018				Γ) ece	mber 31, 201	7		
	Weighted Average Useful Life (in years)	·		Carrying Amount	Cost		ecumulated mortization		rrying mount		
Developed technology	9	\$ 9,764	\$	(5,478)	\$	4,286	\$ 6,108	\$	(4,958)	\$	1,150
Customer relationships	8	2,100		(2,100)		_	2,100		(2,100)		_
MSS licenses	7	1,109		(152)		957	878		(56)		822
Trade name	1	200		(200)		_	200		(200)		_
		\$ 13,173	\$	(7,930)	\$	5,243	\$ 9,286	\$	(7,314)	\$	1,972

During 2018, the Company placed into service developed technology and software associated with the launch of its next generation of products, including Sat-Fi2TM, SPOT XTM and SmartOne SolarTM. For 2018 and 2017, the Company recorded amortization expense on these intangible assets of \$0.6 million and \$0.3 million, respectively. Amortization expense is recorded in operating expenses in the Company's consolidated statements of operations. Total estimated annual amortization of intangible assets is expected to be approximately \$0.8 million for each of 2019 through 2022, \$0.5 million for 2023 and \$1.3 million thereafter, excluding the effects of any acquisitions, dispositions or write-downs subsequent to December 31, 2018.

Other assets consist of the following (in thousands):

		31,	
		2018	2017
Costs to obtain a contract	\$	2,018 \$	_
Long-term prepaid licenses and royalties		5,209	4,920
Business economic loss claim receivable (see Note 9 for further discussion)		3,684	
International tax receivables		840	1,823
Investments in businesses		2,089	2,089
Other long-term assets		1,338	1,226
	\$	15,178 \$	10,058

5. LONG-TERM DEBT AND OTHER FINANCING ARRANGEMENTS

Long-term debt consists of the following (in thousands):

	 December 31, 2018				 December 31, 2017					
	Principal Amount	-	Unamortized Discount and Deferred Financing Costs		Carrying Value	Principal Amount		Unamortized Discount and Deferred Financing Costs		Carrying Value
Facility Agreement	\$ 389,390	\$	24,355	\$	365,035	\$ 467,256	\$	34,459	\$	432,797
Loan Agreement with Thermo	119,702		22,665		97,037	106,054		26,333		79,721
8.00% Convertible Senior Notes Issued in 2013	1,379		_		1,379	 1,348		_		1,348
Total Debt	510,471		47,020		463,451	574,658		60,792		513,866
Less: Current Portion	96,249		_		96,249	79,215		_		79,215
Long-Term Debt	\$ 414,222	\$	47,020	\$	367,202	\$ 495,443	\$	60,792	\$	434,651

The principal amounts shown above include payment of in-kind interest, as applicable. The carrying value is net of deferred financing costs and any discounts to the loan amounts at issuance, including accretion, as further described below. The current portion of long-term debt represents the scheduled principal repayments under the Facility Agreement due within one year of the balance sheet date and the total outstanding balance of the Company's 2013 8.00% Notes. The Company believes that the principal payments due in June and December 2019 under the Facility Agreement will be in excess of its available sources of cash in order to also maintain compliance with the required balance in the debt service reserve account. The Company intends to raise funds in sufficient amounts to meet its obligations or, alternatively, seek a restructuring or refinancing of these debt obligations; however, the source of funds has not yet been arranged nor have the terms of any such restructuring or refinancing been determined.

Facility Agreement

In 2009, the Company entered into the Facility Agreement with a syndicate of bank lenders, including BNP Paribas, Société Générale, Natixis, Crédit Agricole Corporate and Investment Bank (formerly Calyon) and Crédit Industriel et Commercial, as arrangers, and BNP Paribas, as the security agent. The Facility Agreement was amended and restated in July 2013, August 2015 and June 2017.

The Facility Agreement is scheduled to mature in December 2022. As of December 31, 2018, the Facility Agreement was fully drawn. Semi-annual principal repayments began in December 2014. Indebtedness under the facility bears interest at a floating rate of LIBOR plus 3.75% through June 2019, increasing by an additional 0.5% each year thereafter to a maximum rate of LIBOR plus 5.75%. Interest on the Facility Agreement is payable semi-annually in arrears on June 30 and December 31 of each calendar year. Ninety-five percent of the Company's obligations under the Facility Agreement are guaranteed by Bpifrance Assurance Export S.A.S. ("BPIFAE") (formerly COFACE), the French export credit agency. The Company's obligations under the Facility Agreement are guaranteed on a senior secured basis by all of its domestic subsidiaries and are secured by a first priority lien on substantially all of the assets of the Company and its domestic subsidiaries (other than their FCC licenses), including patents and trademarks, 100% of the equity of the Company's domestic subsidiaries and 65% of the equity of certain foreign subsidiaries.

The Facility Agreement contains customary events of default and requires that the Company satisfy various financial and non-financial covenants, including the following:

- The Company's capital expenditures do not exceed \$15.0 million per year;
- The Company's expenditures in connection with its spectrum rights must be the lesser of (1) \$20.0 million and (2) 20% of the proceeds of the aggregate of any equity the Company raises from January 1, 2017 through December 31, 2019;
- The Company maintains at all times a minimum liquidity balance of \$4.0 million;
- The Company achieves for each period the following minimum adjusted consolidated EBITDA (as defined in the Facility Agreement) (amounts in thousands):

Period	Minimum Amount
7/1/18-12/31/18	\$ 47,694
1/1/19-6/30/19	\$ 45,509
7/1/19-12/31/19	\$ 53,830
1/1/20-6/30/20	\$ 50,790
7/1/20-12/31/20	\$ 59,114

- The minimum adjusted consolidated EBITDA Minimum Amount changes semi-annually through December 31, 2022, for which measurement period the Minimum Amount is \$65.7 million.
- The Company maintains a minimum debt service coverage ratio of 1.00:1;
- The Company maintains a maximum net debt to adjusted consolidated EBITDA ratio of 5.00:1 for the December 31, 2018 measurement period, decreasing gradually each semi-annual period until the requirement equals 2.50:1 for the five semi-annual measurement periods leading up to December 31, 2022;
- The Company maintains a minimum interest coverage ratio of 3.50:1 for the December 31, 2018 measurement period, increasing gradually each semi-annual period until the requirement equals 5.00:1 for the five semi-annual measurement periods leading up to December 31, 2022; and
- The Company makes mandatory prepayments in specified circumstances and amounts, including if the Company generates
 excess cash flow, monetizes its spectrum rights, receives the proceeds of certain asset dispositions or receives more than
 \$145.0 million from the sale of additional debt or equity securities (excluding the Thermo commitments described below
 and the excluded Purchase Agreement Amounts, as defined in the Facility Agreement).

Additionally, the covenants in the Facility Agreement limit the Company's ability to, among other things, incur or guarantee additional indebtedness; make certain investments, acquisitions or capital expenditures above certain agreed levels; pay dividends

or repurchase or redeem capital stock or subordinated indebtedness; grant liens on its assets; incur restrictions on the ability of its subsidiaries to pay dividends or to make other payments to the Company; enter into transactions with its affiliates; merge or consolidate with other entities or transfer all or substantially all of its assets; and transfer or sell assets. Additionally, the Company has a required reserve being held with its credit card processor to address any liability arising from potential charge-backs given the growth in both volume and amount of the Company's annual service subscriptions, among other factors. The Company is in discussions with its senior lenders to evaluate if this reserve impacts the terms of the Facility Agreement.

In calculating compliance with the financial covenants of the Facility Agreement, the Company may include certain cash funds contributed to the Company from the issuance of the Company's common stock and/or subordinated indebtedness. These funds are referred to as "Equity Cure Contributions" and may be used to achieve compliance with financial covenants through December 2019. If the Company violates any covenants and is unable to obtain a sufficient Equity Cure Contribution or obtain a waiver, or is unable to make payments to satisfy its debt obligations under the Facility Agreement when due and is unable to obtain a waiver, it would be in default under the Facility Agreement and payment of the indebtedness could be accelerated. The acceleration of the Company's indebtedness under one agreement may permit acceleration of indebtedness under other agreements that contain cross-acceleration provisions. The Company needed an Equity Cure Contribution to maintain compliance with financial covenants under the Facility Agreement for the measurement period ended December 31, 2018. The Company will also need Equity Cure Contributions for periods thereafter, subject to the provisions of the Facility Agreement. The source of funds for these Equity Cure Contributions has not yet been arranged. As of December 31, 2018, the Company was in compliance with respect to the covenants of the Facility Agreement, except for one matter. In February 2019, the Company became aware that it had not complied with an administrative provision within the Facility Agreement. Prior to the issuance of these financial statements, this noncompliance was remedied within the applicable grace period in order to avoid an event of default.

The Facility Agreement also requires the Company to maintain a debt service reserve account, which is pledged to secure all of the Company's obligations under the Facility Agreement. The use of the debt service reserve account funds is restricted to making principal and interest payments under the Facility Agreement. The balance in the debt service reserve account must equal the total amount of principal and interest payable by the Company on the next payment date. As of December 31, 2018, the balance in the debt service reserve account was \$60.3 million and is classified as restricted cash on the Company's consolidated balance sheet.

Thermo Loan Agreement

In connection with the amendment and restatement of the Facility Agreement in July 2013, the Company amended and restated its loan agreement with Thermo (the "Loan Agreement"). All obligations of the Company to Thermo under the Loan Agreement are subordinated to the Company's obligations under the Facility Agreement. The Loan Agreement is convertible into shares of common stock at a conversion price of \$0.69 (as adjusted) per share of common stock. As a result of the Company's equity offering in 2018 (as discussed below), the Company issued stock at a price below the base conversion rate at the time, accordingly, the base conversion rate was reset in December 2018 from \$0.73 to \$0.69.

The Loan Agreement accrues interest at 12% per annum, which is capitalized and added to the outstanding principal in lieu of cash payments. The Company will make payments to Thermo only when permitted by the Facility Agreement. Principal and interest under the Loan Agreement become due and payable six months after the obligations under the Facility Agreement have been paid in full, or earlier if the Company has a change in control or if any acceleration of the maturity of the loans under the Facility Agreement occurs. As of December 31, 2018, \$76.2 million of interest had accrued since 2009 with respect to the Loan Agreement; the Loan Agreement is included in long-term debt on the Company's consolidated balance sheets.

The Company evaluated the various embedded derivatives within the Loan Agreement (See Note 7: Fair Value Measurements for additional information about the embedded derivative in the Loan Agreement). The Company determined that the conversion option and the contingent put feature upon a fundamental change required bifurcation from the Loan Agreement. The conversion option and the contingent put feature were not deemed clearly and closely related to the Loan Agreement and were separately accounted for as a standalone derivative. The Company recorded this compound embedded derivative liability as a non-current

liability on its consolidated balance sheets with a corresponding debt discount, which is netted against the face value of the Loan Agreement.

The Company is accreting the debt discount associated with the compound embedded derivative liability to interest expense through the maturity of the Loan Agreement using an effective interest rate method. The fair value of the compound embedded derivative liability is marked-to-market at the end of each reporting period, with any changes in value reported in the consolidated statements of operations. The Company determines the fair value of the compound embedded derivative using a Monte Carlo simulation model.

All of the transactions between the Company and Thermo and its affiliates were reviewed and approved on the Company's behalf by a Special Committee of its disinterested independent directors, who were represented by independent counsel.

8.00% Convertible Senior Notes Issued in 2013

On May 20, 2013, the Company issued \$54.6 million aggregate principal amount of its 2013 8.00% Notes. The 2013 8.00% Notes are convertible into shares of common stock at a conversion price of \$0.69 (as adjusted) per share of common stock. The conversion price of the 2013 8.00% Notes is adjusted in the event of certain stock splits or extraordinary share distributions, or as a reset of the base conversion and exercise price pursuant to the terms of the Fourth Supplemental Indenture between the Company and U.S. Bank National Association, as Trustee, dated May 20, 2013 (the "Indenture"). As a result of the Company's equity offering in 2018 (as discussed below), the Company issued stock at a price below the base conversion rate at the time, accordingly, the base conversion rate was reset in December 2018 from \$0.73 to \$0.69.

The 2013 8.00% Notes are senior unsecured debt obligations of the Company with no sinking fund. The 2013 8.00% Notes will mature on April 1, 2028, subject to various call and put features, and bear interest at a rate of 8.00% per annum. Interest on the 2013 8.00% Notes is payable semi-annually in arrears on April 1 and October 1 of each year. Interest is paid in cash at a rate of 5.75% per annum and in additional notes at a rate of 2.25% per annum.

Subject to certain conditions set forth in the Indenture, the Company may redeem the 2013 8.00% Notes, with the prior approval of the majority lenders under the Facility Agreement, in whole or in part, at any time on or after April 1, 2018, at a price equal to the principal amount of the 2013 8.00% Notes to be redeemed plus all accrued and unpaid interest thereon. As of December 31, 2018, the 2013 8.00% Notes have not been redeemed by the Company.

A holder of the 2013 8.00% Notes has the right, at the holder's option, to require the Company to purchase some or all of the 2013 8.00% Notes held by it on each of April 1, 2018 and April 1, 2023 at a price equal to the principal amount of the 2013 8.00% Notes to be purchased plus accrued and unpaid interest. The remaining holders did not exercise this option on April 1, 2018.

Subject to the procedures for conversion and other terms and conditions of the Indenture, a holder may convert its 2013 8.00% Notes at its option at any time prior to the close of business on the business day immediately preceding April 1, 2028, into shares of common stock (or, at the option of the Company, cash in lieu of all or a portion thereof, provided that, under the Facility Agreement, the Company may pay cash only with the consent of the majority lenders) over a 40-consecutive trading day settlement period.

The conversion activity since issuance of the 2013 8.00% Notes is summarized in the table below (in thousands):

Period	ipal Amount onverted	Shares of Voting Common Stock Issued	(Gain)/Loss on Extinguishment of Debt
Year Ended December 31, 2013	\$ 8,029	14,863	\$ (4,237)
Year Ended December 31, 2014	24,881	46,353	44,061
Year Ended December 31, 2015	6,491	10,887	2,254
Year Ended December 31, 2016		<u>—</u> _	
Year Ended December 31, 2017	15,986	26,411	6,306
Year Ended December 31, 2018	<u> </u>		
Total	\$ 55,387	98,514	\$ 48,384

A holder of the 2013 8.00% Notes has the right, at the holder's option, to require the Company to purchase some or all of the 2013 8.00% Notes held by it at any time if there is a Fundamental Change. A Fundamental Change occurs if the Company's common stock ceases to be traded on a stock exchange or an established over-the-counter market, or if there is a change of control. If there is a Fundamental Change, the purchase price of any 2013 8.00% Notes purchased by the Company will be equal to its principal amount plus accrued and unpaid interest and a Fundamental Change Make-Whole Amount calculated as provided in the Indenture.

The Indenture provides for customary events of default. If there is an event of default, the Trustee may, at the direction of the holders of 25% or more in aggregate principal amount of the 2013 8.00% Notes, accelerate the maturity of the 2013 8.00% Notes. As of December 31, 2018, the Company was in compliance with respect to the terms of the 2013 8.00% Notes and the Indenture.

The Company evaluated the various embedded derivatives within the Indenture for the 2013 8.00% Notes. The Company determined that the conversion option and the contingent put feature within the Indenture required bifurcation from the 2013 8.00% Notes. The Company did not deem the conversion option and the contingent put feature to be clearly and closely related to the 2013 8.00% Notes and separately accounted for them as a standalone derivative. The Company recorded this compound embedded derivative liability as a liability on its consolidated balance sheets with a corresponding debt discount which is netted against the face value of the 2013 8.00% Notes.

The Company was accreting the debt discount associated with the compound embedded derivative liability to interest expense through the first put date of the 2013 8.00% Notes (April 1, 2018) using an effective interest rate method. Due to significant conversions since issuance, the entire debt discount has been recorded to interest expense resulting in no balance as of December 31, 2018. The Company is marking to market the fair value of the compound embedded derivative liability at the end of each reporting period, or more frequently as deemed necessary, and as of the date of a significant conversion, with any changes in value reported in the consolidated statements of operations. The Company determines the fair value of the compound embedded derivative using a Monte Carlo simulation model.

Debt maturities

Annual debt maturities for each of the five years following December 31, 2018 and thereafter are as follows (in thousands):

2019	96,249
2020	100,000
2021	100,000
2022	94,520
2023	-
Thereafter	119,702
Total	\$ 510,471

Amounts in the above table are calculated based on amounts outstanding at December 31, 2018, and therefore exclude paid-in-kind interest payments that will be made in future periods.

The Company intends on redeeming the 2013 8.00% Notes in the near future if the Company's stock price exceeds the conversion price of the notes. Accordingly, any such redemption is expected to result in the conversion of the notes by the holders in lieu of a cash payment by the Company at par value. As such, the amounts are included in the 2019 maturities in the table above.

Public Offering of Common Stock

In December 2018, the Company entered into an underwriting agreement (the "2018 Underwriting Agreement") with Cantor Fitzgerald & Co., as the sole book-running manager, relating to the sale of 171.4 million shares of common stock, at a public offering price of \$0.35 per share. Under the terms of the 2018 Underwriting Agreement, the Company granted the underwriter a 30-day option to purchase an additional 25.7 million shares of its common stock. This option was not exercised.

The Company received approximately \$59.1 million in net proceeds from the sale of its common stock during the 2018 offering. Eighty percent of the net proceeds from the 2018 offering was deposited into the Company's debt service reserve account. The Company used the funds from the 2018 offering, together with cash on hand, to fund the principal and interest payment due in December 2018 under the Facility Agreement. The funds raised in the 2018 offering qualified as an Equity Cure Contribution, allowing the Company to remain in compliance with the covenants under the Facility Agreement as of December 31, 2018.

6. DERIVATIVES

In connection with certain existing borrowing arrangements, the Company was required to record derivative instruments on its consolidated balance sheets. None of these derivative instruments are designated as a hedge. The following table discloses the fair values of the derivative instruments on the Company's consolidated balance sheets (in thousands):

	De	cember 31, 2018	December 31, 2017
Derivative liabilities:			
Compound embedded derivative with the 2013 8.00% Notes	\$	(757)	\$ (1,326)
Compound embedded derivative with the Loan Agreement with Thermo		(146,108)	(226,659)
Total derivative liabilities	\$	(146,865)	\$ (227,985)

The following table discloses the changes in value recorded as derivative gain (loss) in the Company's consolidated statement of operations (in thousands):

	Year ended December 31,			
		2018	2017	2016
Interest rate cap	\$	_ \$	(4) \$	(2)
Compound embedded derivative with the 2013 8.00% Notes		569	(6,662)	(461)
Compound embedded derivative with the Loan Agreement with Thermo		80,551	27,848	(41,068)
Total derivative gain (loss)	\$	81,120 \$	21,182 \$	(41,531)

Intangible and Other Assets

Interest Rate Cap

In June 2009, in connection with entering into the Facility Agreement, under which interest accrues at a variable rate, the Company entered into five ten-year interest rate cap agreements. The interest rate cap agreements reflect a variable notional amount at interest rates that provide coverage to the Company for exposure resulting from escalating interest rates over the term of the Facility Agreement. The interest rate cap provides limits on the six-month Libor rate ("Base Rate") used to calculate the coupon interest on outstanding amounts on the Facility Agreement and is capped at 5.50% should the Base Rate not exceed 6.5%. Should the Base Rate exceed 6.5%, the Company's Base Rate will be 1% less than the then six-month Libor rate. The Company paid an approximately \$12.4 million upfront fee for the interest rate cap agreements. The interest rate cap did not qualify for hedge accounting treatment, and changes in the fair value of the agreements are included in the consolidated statements of operations. The value of the interest rate cap was approximately zero as of both December 31, 2018 and December 31, 2017.

Derivative Liabilities

The Company has identified various embedded derivatives resulting from certain features in the Company's debt instruments, including the conversion option and the contingent put feature within both the 2013 8.00% Notes and the Loan Agreement with Thermo. The fair value of each embedded derivative liability is marked-to-market at the end of each reporting period, or more frequently as deemed necessary, with any changes in value reported in its consolidated statements of operations and its consolidated statements of cash flows as an operating activity. The Company determined the fair value of its compound embedded derivative liabilities using a Monte Carlo simulation model. See Note 7: Fair Value Measurements for further discussion. Each liability and the features embedded in the debt instrument which required the Company to account for the instrument as a derivative are described below.

Compound Embedded Derivative with 2013 8.00% Notes

As a result of the conversion option and the contingent put feature within the 2013 8.00% Notes, the Company recorded a compound embedded derivative liability on its consolidated balance sheets with a corresponding debt discount that is netted against the face value of the 2013 8.00% Notes. The Company determined the fair value of the compound embedded derivative liability using a Monte Carlo simulation model. Consistent with the classification of the 2013 8.00% Notes on the Company's consolidated balance sheet, the Company has classified this derivative liability as current on its consolidated balance sheet at December 31, 2018.

Compound Embedded Derivative with the Loan Agreement with Thermo

As a result of the conversion option and the contingent put feature within the Loan Agreement with Thermo as amended and restated in July 2013, the Company recorded a compound embedded derivative liability on its consolidated balance sheets with a corresponding debt discount that is netted against the face value of the Loan Agreement. The Company determined the fair value of the compound embedded derivative liability using a Monte Carlo simulation model.

7. FAIR VALUE MEASUREMENTS

The Company follows the authoritative guidance for fair value measurements relating to financial and non-financial assets and liabilities, including presentation of required disclosures herein. This guidance establishes a fair value framework requiring the categorization of assets and liabilities into three levels based upon the assumptions (inputs) used to price the assets and liabilities. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment. The three levels are defined as follows:

- Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical assets or liabilities.
- Level 2: Quoted prices in markets that are not active or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.
- Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

Recurring Fair Value Measurements

The following tables provide a summary of the liabilities measured at fair value on a recurring basis (in thousands):

	Fair Value Measurements at December 31, 2018:					
	(Level 1)	(Level 2)	(Level 3)	Total Balance		
Liabilities:						
Compound embedded derivative with the 2013 8.00% Notes	_	_	(757)	(757)		
Compound embedded derivative with the Loan Agreement with Thermo			(146,108)	(146,108)		
Total liabilities measured at fair value	\$	<u> </u>	\$ (146,865)	(146,865)		

	Fair Value Measurements at December 31, 2017:				
	(Level 1)	(Level 2)	(Level 3)	Total Balance	
Liabilities:					
Compound embedded derivative with the 2013 8.00% Notes	_	_	(1,326)	(1,326)	
Compound embedded derivative with the Loan Agreement with Thermo		_	(226,659)	(226,659)	
Total liabilities measured at fair value	\$ —	\$ —	\$ (227,985) \$	(227,985)	

Assets

Interest Rate Cap

The fair value of the interest rate cap is determined using observable pricing inputs including benchmark yields, reported trades and broker/dealer quotes at the reporting date. As previously disclosed, the value of the interest rate cap was approximately zero as of both December 31, 2018 and December 31, 2017, accordingly, the interest rate cap is not reflected in the tables above. See Note 6: Derivatives for further discussion.

Liabilities

Derivative Liabilities

The Company has two derivative liabilities classified as Level 3. The Company marks-to-market these liabilities at each reporting date, or more frequently as deemed necessary, with the changes in fair value recognized in the Company's consolidated statements of operations. See Note 6: Derivatives for further discussion.

The significant quantitative Level 3 inputs utilized in the valuation models are shown in the tables below:

T. 1		21	2010
Decem	nar	41	/11 I X
DUCUIII	vu	J1.	2010

	Stock Price Volatility	Risk-Free Interest Rate	Note Conversion Price	Discount Rate	Market Price of Common Stock
Compound embedded derivative with the 2013 8.00% Notes	40 - 120%	2.5%	\$0.69	28%	\$0.64
Compound embedded derivative with the Loan Agreement with Thermo	40 - 120%	2.5%	\$0.69	28%	\$0.64

December 31, 2017:

	Stock Price Volatility	Risk-Free Interest Rate	Note Conversion Price	Discount Rate	Market Price of Common Stock
Compound embedded derivative with the 2013 8.00% Notes	78%	1.4%	\$0.73	27%	\$1.31
Compound embedded derivative with the Loan Agreement with Thermo	40 - 77%	2.2%	\$0.73	27%	\$1.31

Fluctuation in the Company's stock price is one of the primary drivers for the changes in the derivative valuations during each reporting period. The Company's stock price decreased 51% from December 31, 2017 to December 31, 2018. As the stock price decreases, the value to the holder of the instrument generally decreases, thereby decreasing the liability on the Company's consolidated balance sheets. Stock price volatility is another significant unobservable input used in the fair value measurement of each of the Company's derivative instruments. The simulated fair value of these liabilities is sensitive to changes in the expected volatility of the Company's stock price. Increases in expected volatility would generally result in a higher fair value measurement.

Probability of a change of control is another significant unobservable input used in the fair value measurement of the Company's derivative instruments. Subject to certain restrictions in each indenture, the Company's debt instruments contain certain provisions whereby holders may require the Company to purchase all or any portion of the convertible debt instrument upon a change of control. A change of control will occur upon certain changes in the ownership of the Company or certain events relating to the trading of the Company's common stock. The simulated fair value of the derivative liabilities above is sensitive to changes in the assumed probabilities of a change of control. Increases in the assumed probability of a change of control in the

short-term would generally result in a lower fair value measurement, while increases in the assumed probability of a change in control in the long-term would generally result in a higher fair value measurement.

In addition to the inputs described above, the valuation model used to calculate the fair value measurement of the compound embedded derivatives within the Company's 2013 8.00% Notes and Loan Agreement with Thermo included the following inputs and features: payment in kind interest payments, make whole premiums, a 40-day stock issuance settlement period upon conversion, estimated maturity date, and the principal balance of each loan at the balance sheet date. There are also certain put and call features within the 2013 8.00% Notes that impact the valuation model.

The following table presents a rollforward for all liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) (in thousands):

	Year	Year Ended December 31		
	2	018	2017	
Balance at beginning of period	\$ (2	227,985) \$	(281,171)	
Derivative adjustment related to conversions		_	32,000	
Unrealized gain, included in derivative gain (loss)		81,120	21,186	
Balance at end of period	\$ (146,865) \$	(227,985)	

Fair Value of Debt Instruments

The Company believes it is not practicable to determine the fair value of the Facility Agreement without incurring significant additional costs. Unlike typical long-term debt, interest rates and other terms for the Facility Agreement are not readily available and generally involve a variety of factors, including due diligence by the debt holders. The following table sets forth the carrying values and estimated fair values of the Company's other debt instruments, which are classified as Level 3 financial instruments (in thousands):

	December 31, 2018			 December 31, 2017			
		Carrying Value		Estimated Tair Value	Carrying Value		Estimated Fair Value
Loan Agreement with Thermo	\$	97,037	\$	67,452	\$ 79,721	\$	54,936
2013 8.00% Notes		1,379		734	1,348		1,295

Nonrecurring Fair Value Measurements

The Company follows the authoritative guidance regarding non-financial assets and non-financial liabilities that are remeasured at fair value on a nonrecurring basis. On August 24, 2017, a holder of \$16.0 million principal amount of its 2013 8.00% Notes converted the notes into shares of the Company's common stock. As a result of this conversion, the Company wrote off a portion of the compound embedded derivative with the 2013 8.00% Notes based on the value of the derivative on the conversion date. As of the date of conversion, the fair value of the compound embedded derivative with the 2013 8.00% Notes was \$34.7 million. The significant quantitative Level 3 inputs utilized in the valuation models as of the conversion date are shown in the table below:

	August 24, 2017:						
	Stock Price Volatility	Risk-Free Interest Rate	Note Conversion Price	Discount Rate	Market Price of Common Stock		
Compound embedded derivative with the 2013 8.00% Notes	65%	1.1%	0.73	26%	2.03		

See further discussion in Note 6: Derivatives for other valuation inputs used in the valuation model of the 2013 8.00% Notes and the impact these inputs have on the fair value measurement.

Long-Lived Assets

Long-lived assets and intangible and other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable.

During 2017, the Company recorded a reduction in value of long-lived assets related to its satellite construction contract with Thales. Under the terms of the contract, the Company paid to Thales €12 million in purchase price plus an additional €3.1 million in procurement costs for the prepaid long-lead items ("LLI") to be procured by Thales on the Company's behalf. The LLI were to be used in the construction of the Phase 3 satellites for the Company. The Company believes that it owns the LLI and that title to the LLI transferred to the Company upon payment. Despite historical statements to the contrary, Thales currently disputes the Company's ownership of the LLI and has asserted that the Company released its title to the LLI pursuant to that certain Release Agreement, dated as of June 24, 2012, which is described more fully in Note 9: Contingencies. Thales further asserts that the LLI belong to Thales and that Thales has no obligation to turn over possession of the LLI to the Company. The Company recorded a reduction in the carrying value of long-lived assets of \$17.0 million in its consolidated statement of operations during the fourth quarter of 2017 when circumstances changed impacting the fair value that is probable of being recovered from these assets in the construction of Phase 3 satellites.

During 2018, a reduction in the value of long-lived assets and/or intangible and other assets was not required.

The following table presents the location on the Company's consolidated balance sheet and the amount of the reduction in the value of long-lived assets recorded in 2017 (in thousands):

	Fair Va	Fair Value Measurements at December 31, 2017:					
	(Level 1)	(Level 2)	(Level 3)	Total Losses			
Property and equipment, net:	<u> </u>	\$	\$ 971,119	\$ 17,040			
Total	<u> </u>	<u>s</u> —	\$ 971 119	\$ 17,040			

8. COMMITMENTS

Contractual Obligations - Next-Generation Gateways and Other Ground Facilities

As of December 31, 2018, the Company had purchase commitments with certain vendors related to the procurement, deployment and maintenance of the second-generation network, including gateway acquisitions.

The Company has a purchase commitment with MIL-SAT LLC for the procurement and production of new antennas for substantially all of the Company's gateways. As of December 31, 2018, the Company's remaining purchase obligations under this commitment are approximately \$16.0 million; the timing of payments is driven by work performed under the contract over an approximate three-year period.

In December 2018, the Company entered into a binding asset purchase agreement with Tesam Argentina, S.A., the owners of the Company's IGO in Argentina, to establish a ground station in Argentina. The Company will purchase certain fixed assets and related government authorizations in connection with the operation of this gateway. The Company is obligated to make a payment under this purchase agreement of approximately \$1.2 million in 2019, which is net of recoverable taxes of \$0.2 million, and was recorded in accrued expenses on its consolidated balance sheet as of December 31, 2018.

Other Commitments

The Company has inventory purchase commitments with its third party product manufacturers in the normal course of business. These commitments are generally non-cancelable and are based on internal twelve-month sales forecasts. The Company estimates that its open inventory purchase commitments as of December 31, 2018 were approximately \$15.9 million. As of December 31, 2018, approximately \$0.6 million related to these commitments was recorded in prepaid expenses and other current assets on the Company's consolidated balance sheet.

Future Minimum Lease Obligations

The Company has non-cancelable operating leases for facilities and equipment throughout the United States and around the world, including Louisiana, California, Florida, Nevada, Texas, Canada, Ireland, France, Brazil, Panama, Singapore and Botswana. The leases expire on various dates through 2031. The following table presents the future minimum lease payments for leases having an initial or remaining non-cancelable lease term in excess of one year (in thousands) as of December 31, 2018, excluding possible lease payment reimbursement from the State of Louisiana pursuant to the Cooperative Endeavor Agreement the Company entered into with the Louisiana Department of Economic Development (See Note 10: Accrued Expenses and Other Non-Current Liabilities):

2019	\$ 766
2020	694
2021	495
2022	404
2023	408
Thereafter	2,730
Total minimum lease payments	\$ 5,497

As of December 31, 2018, the Company had certain leases which had a remaining lease term of less than one year. These leases included the Company's current headquarters in Covington, Louisiana and one of its gateways in Singapore. The Company moved into a new headquarter location in February 2019 and is leasing this location from Thermo Covington, LLC; as the former lease had a remaining term of less than one year and the new lease was not signed as of December 31, 2018, amounts for either location are not reflected in the table above. The Company's new headquarters lease will have a total lease term of ten years with annual base lease payments of approximately \$1.4 million, which will increase at a rate of 2.5% per year. The Company renewed its lease agreement with its gateway in Singapore in February 2019; as this lease agreement was month to month as of December 31, 2018, amounts for this location were not included in the table above. The Singapore gateway lease will have a total lease term of two years with annual base lease payments of approximately \$0.5 million per year.

Total rent expense for 2018, 2017 and 2016 was approximately \$1.4 million, \$1.4 million and \$1.3 million, respectively.

9. CONTINGENCIES

Arbitration

On June 3, 2011, Globalstar filed a demand for arbitration against Thales before the American Arbitration Association to enforce certain rights to order additional satellites under the 2009 Contract. The Company did not include within its demand any claims that it had against Thales for work previously performed under the contract to design, manufacture and timely deliver the first 25 second-generation satellites. On May 10, 2012, the arbitration tribunal issued its award in which it determined that the Company had terminated the 2009 Contract "for convenience" and had materially breached the contract by failing to pay to Thales the €51.3 million in termination charges required under the contract. The tribunal additionally determined that absent further agreement between the parties, Thales had no further obligation to manufacture or deliver satellites under Phase 3 of the 2009 Contract. Based on these determinations, the tribunal directed the Company to pay Thales approximately €53 million in termination charges, plus interest by June 9, 2012. On May 23, 2012, Thales commenced an action in the United States District Court for the Southern District of New York by filing a petition to confirm the arbitration award (the "New York Proceeding"). Thales and the Company entered into tolling agreements under which Thales dismissed the New York Proceeding without prejudice. These tolling agreements have expired. Accordingly, as of May 10, 2018, Thales's right to enforce the arbitration award pursuant to the Federal Arbitration Act is now time-barred.

On June 24, 2012, the Company and Thales agreed to settle their prior commercial disputes, including those disputes that were the subject of the arbitration award. In order to effectuate this settlement, the Company and Thales entered into a Release Agreement, a Settlement Agreement and a Submission Agreement. Under the terms of the Release Agreement, Thales agreed unconditionally and irrevocably to release and forever discharge the Company from any and all claims and obligations (with the exception of those items payable under the Settlement Agreement or in connection with a new contract for the purchase of any additional second-generation satellites), including, without limitation, a full release from paying €35.6 million of the termination charges awarded in the arbitration together with all interest on the award amount effective upon the earlier of December 31, 2012. and the effective date of the financing for the purchase of any additional second-generation satellites. Under the terms of the Release Agreement, the Company agreed unconditionally and irrevocably to release and forever discharge Thales from any and all claims (with limited exceptions), including, without limitation, claims related to Thales's work under the 2009 satellite construction contract, including any obligation to pay liquidated damages, effective upon the earlier of December 31, 2012, and the effective date of the financing for the purchase of any additional second-generation satellites. The releases became effective on December 31, 2012. In connection with the Release Agreement and the Settlement Agreement, the Company recorded a contract termination charge of approximately €17.5 million on its consolidated balance sheet during the second quarter of 2012. As discussed above, the statute of limitations for Thales to enforce the arbitration award pursuant to the Federal Arbitration Act has expired. As such, the Company believes that payment of the contract termination charge is not probable and removed this liability from its consolidated balance sheet during the second quarter of 2018. The Company recorded a \$20.5 million revision to this contract termination charge on its consolidated income statement during the second quarter of 2018. Nevertheless, there can be no assurance that Thales would not or could not seek some alternative means to pursue all or a portion of the €17.5 million contract termination charge, which would be defended vigorously by the Company.

Under the terms of the Settlement Agreement, the Company agreed to pay €17.5 million to Thales, representing one-third of the termination charges awarded to Thales in the arbitration, subject to certain conditions, on the later of the effective date of the new contract for the purchase of any additional second-generation satellites and the effective date of the financing for the purchase of these satellites. As of December 31, 2018, this condition had not been satisfied. Because the effective date of the new contract for the purchase of additional second-generation satellites did not occur on or prior to February 28, 2013, any party may terminate the Settlement Agreement. If any party terminates the Settlement Agreement, all parties' rights and obligations under the Settlement Agreement shall terminate. The Release Agreement is a separate and independent agreement from the Settlement Agreement and provides that it supersedes all prior understandings, commitments and representations between the parties with respect to the subject matter thereof; therefore, it would survive any termination of the Settlement Agreement. As of December 31, 2018, no party had terminated the Settlement Agreement.

Securities Claim

As previously disclosed, on September 25, 2018, a shareholder action was filed against Globalstar, Inc. (the "Company" or "Globalstar"), members of the Board of Directors, Thermo Companies, Inc., and certain members of Globalstar management in the Court of Chancery of the State of Delaware (the "Court"), captioned Mudrick Capital Management, LP, et al. v. Monroe, et al., C.A. No. 2018-0699-TMR (the "Action"). As previously disclosed, on December 14, 2018, all parties to the Action, including plaintiffs Mudrick Capital Management, L.P. ("Mudrick Capital") and Warlander Asset Management ("Warlander", and, together with Mudrick Capital, the "Plaintiffs"), entered into a stipulation and agreement of settlement, compromise and release of stockholder derivative action (the "Settlement Agreement") to settle all claims asserted against all defendants in the Action. The material provisions of the Settlement Agreement are described below.

- The Plaintiffs released and dismissed with prejudice all claims in the Action.
- The Company agreed to conduct an equity offering pursuant to which shares of its common stock were sold to investors at market price (as defined in the Settlement Agreement), in an amount of not more than \$60 million (excluding the underwriter's over-allotment option), that was open to all the qualified and readily identifiable holders of the Company's common stock on a pro rata basis based on their ownership (such offering, the "Financing"). The Company completed the Financing on December 21, 2018.
- Each of the Plaintiffs and Thermo agreed to support the Financing by (i) committing to purchase, upon the signing of the Settlement Agreement, their pro rata share of the financing, on equal terms and based on their respective ownership of the Company's outstanding shares and (ii) upon signing the Settlement Agreement, providing a backstop commitment to purchase the shares offered to persons other than the Plaintiffs and Thermo but not purchased by such persons, on a pro rata basis based on their current respective ownership of the Company's outstanding shares.
- The Company agreed to amend its Certificate of Incorporation and Bylaws to provide that, so long as Thermo and its affiliates beneficially own at least 45% of the Company's outstanding common stock, two of the seven members of the Company's Board of Directors (the "Minority Directors") will be elected by the vote of a plurality of the holders of the Company's Common Stock other than Thermo and its affiliates (the "Independent Stockholders").
- The initial Minority Directors, Benjamin Wolff and Keith Cowan, were designated by the Plaintiffs and appointed to the Board of Directors in December 2018. In addition, Michael Lovett was appointed to the Board as an independent director and Timothy Taylor was appointed to the Board as a director in December 2018. Mr. Wolff and Mr. Lovett have been appointed to the Company's Compensation Committee, Mr. Cowan has been appointed to Nominating & Corporate Governance Committee and Mr. Wolff and Mr. Lovett have been appointed to the Audit Committee. To permit the addition to the Board of Mr. Wolff, Mr. Cowan, Mr. Lovett and Mr. Taylor, four of the Company's current directors agreed upon by the parties departed.
- The Company agreed to amend its Certificate of Incorporation and Bylaws to provide that so long as Thermo and its affiliates beneficially own at least 45% of the Company's common stock, subject to certain exceptions, approval by a majority of shares held by Independent Stockholders is required for any related-party transaction with a value of \$5 million or more between the Company and Thermo and its affiliates, subject to certain exclusions specified in the Settlement Agreement.
- The Company also agreed to amend its Certificate of Incorporation and Bylaws to provide that so long as Thermo and its affiliates beneficially own at least 45% of the Company's outstanding common stock, the Company will maintain a strategic review committee of its Board of Directors (the "Strategic Review Committee"). The Strategic Review Committee consists of the two then-serving Minority Directors and two independent directors appointed by the then-serving Board; provided, however, that, subject to the Minority Directors' right to remove him with or without cause, Mr. Taylor has been appointed an initial member of the Strategic Review Committee. The other initial members of the Strategic Review Committee are Mr. Wolff, Mr. Cowen and Mr. Hasler.

- To the extent permitted by applicable law, the Strategic Review Committee will have exclusive responsibility for the oversight, review and approval of (i) subject to certain exceptions, any acquisition by Thermo and its affiliates of additional newly-issued securities of the Company; (ii) any extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Company or any of its subsidiaries; (iii) any sale or transfer of a material amount of assets of Company or any sale or transfer of assets of any of its subsidiaries which are material to the Company; (iv) any further change in the Board, including any plans or proposals to change the number or term of directors (provided that only elections of Minority Directors shall be within the authority of the Strategic Review Committee); (v) subject to certain exceptions, any material change in the present capitalization or dividend policy of the Company; (vi) any other material changes in the Company and Thermo and its affiliates with a value in excess of \$250,000. The approval of any of the foregoing transactions will require the vote of at least three members of the Strategic Review Committee.
- Thermo agreed that it will convert all its outstanding subordinated debt to equity at the contractual conversion price within five business days after any of the following events: (i) the refinancing of 85% or more of the Company's bank debt; (ii) extension of the maturity of all of the Company's bank debt of two years or more; (iii) a refinancing of at least \$150 million of the Company's bank debt with a minimum two year extension on the remaining balance, or (iii) an amortization holiday or holidays pursuant to which the Company is relieved of the obligation to make principal payments on the Company's bank debt for two years or longer.
- An agreement that the Plaintiffs reserve the right to make a petition to the Court for an award of attorneys' fees and
 expenses; however, any award to Plaintiffs' counsel for fees and expenses shall be determined by the court of the State
 of Delaware.

The effectiveness of the Settlement Agreement is subject to approval by the Court of Chancery of the State of Delaware. The Court of Chancery has scheduled a hearing for April 1, 2019, to determine whether it should issue an order approving the proposed settlement pursuant to the Settlement Agreement. Accordingly, as of the date of this Report, the Settlement Agreement was not yet effective.

In connection with the Action described above, the Plaintiffs' claims for monetary relief from the Company are now limited to attorneys' fees and expenses incurred in connection with and related to pursuing the Action, as well as in connection with and related to a shareholder demand to inspect certain of the Company's books and records and a lawsuit seeking to enforce that demand. The Company evaluated the facts and circumstances under applicable accounting guidance and determined that a loss with respect to such Plaintiffs' attorneys' fees and costs is probable and reasonably estimable. In accordance with ASC 450, as of December 31, 2018, the Company estimated a range of loss and recorded a reserve based on the low end of the range, as there were no facts and circumstances to support a different point in the range. The estimated loss for damages did not exceed the Company's retention limit of \$1.5 million for a "securities claim" under its directors and officers insurance policy. This amount is accrued as a current liability on the Company's consolidated balance sheet and recorded in marketing, general and administrative expenses on the Company's consolidated statement of operations. The Company believes it is probable that any losses in excess of the Company's retention limit will be covered under the terms of its insurance policy.

Business Economic Loss Claim

In May 2018, the Company concluded the settlement of a business economic loss claim in which it was an absent member in a tort class action lawsuit. The Company will receive proceeds of \$7.4 million, net of legal fees, related to this settlement. The Company received the first installment of \$3.7 million in January 2019; the final installment is expected to be received in January 2020. During the second quarter of 2018, the Company recorded the present value of the proceeds of \$6.8 million and a discount of \$0.6 million, which was recorded in prepaid expenses and other current assets as well as intangible and other assets, net, on the Company's consolidated balance sheet. The present value of the net proceeds of \$6.8 million was recorded in other income on the Company's consolidated statement of operations. The discount of \$0.6 million was recorded on the Company's consolidated balance sheet and is being accreted to interest income over the term of the receivable using the effective interest method.

Other Litigation

Due to the nature of the Company's business, the Company is involved, from time to time, in various litigation matters or subject to disputes or routine claims regarding its business activities. Legal costs related to these matters are expensed as incurred.

In management's opinion, there is no pending litigation, dispute or claim, other than those described in this report, which could be expected to have a material adverse effect on the Company's financial condition, results of operations or liquidity.

10. ACCRUED EXPENSES AND OTHER NON-CURRENT LIABILITIES

Accrued expenses consist of the following (in thousands):

	December 31,		
		2018	2017
Accrued interest	\$	97 \$	228
Accrued compensation and benefits		3,027	3,913
Accrued property and other taxes		3,069	3,944
Accrued customer liabilities and deposits		4,802	4,529
Accrued professional and other service provider fees		5,224	3,386
Accrued commissions		1,224	1,162
Accrued telecommunications expenses		1,528	1,565
Accrued satellite and ground costs		428	634
Accrued inventory		561	102
Accrued asset purchase (See Note 8 for further discussion)		1,401	_
Other accrued expenses		1,724	1,291
Total accrued expenses	\$	23,085 \$	20,754

Other accrued expenses include primarily advertising costs, capital lease obligations, vendor services, warranty reserve, occupancy costs and estimated payroll shortfall under the Cooperative Endeavor Agreement with the Louisiana Department of Economic Development ("LED").

The following is a summary of the activity in the warranty reserve account, which is included in other accrued expenses above (in thousands):

	 Year Ended December 31,				
	 2018	2017	2016		
Balance at beginning of period	\$ 143 \$	132 \$	101		
Provision	372	273	272		
Utilization	 (362)	(262)	(241)		
Balance at end of period	\$ 153 \$	143 \$	132		

Other non-current liabilities consist of the following (in thousands):

		er 31,	
		2018	2017
Asset retirement obligation		1,459	1,451
Deferred rent and other deferred expense		147	274
Capital lease obligations		77	154
Liability related to the Cooperative Endeavor Agreement with the State of Louisiana		248	460
Foreign tax contingencies		1,435	3,634
Total other non-current liabilities	\$	3,366 \$	5,973

The Company relocated its headquarters to Louisiana in 2011. In connection with its relocation, the Company entered into a Cooperative Endeavor Agreement with the LED whereby the Company would be reimbursed for certain qualified relocation costs and lease expenses. In accordance with the terms of the agreement, these reimbursement costs, not to exceed \$8.1 million, will be reimbursed to the Company as incurred provided the Company maintains required annual payroll levels in Louisiana through 2019. Under the terms of the agreement, the Company was reimbursed a total of \$5.6 million for qualifying relocation and lease expenses and \$1.3 million for facility improvements and replacement equipment in connection with the relocation through December 31, 2018.

11. RELATED PARTY TRANSACTIONS

Payables to Thermo and other affiliates related to normal purchase transactions were \$0.7 million and \$0.2 million as of December 31, 2018 and 2017, respectively. This increase is related to the timing of payment of expenses incurred by Thermo on behalf of the Company related to the shareholder litigation discussed in Note 9: Contingencies.

Transactions with Thermo

Certain general and administrative expenses are incurred by Thermo on behalf of the Company. These expenses, which include non-cash expenses that the Company accounts for as a contribution to capital, related to services provided by certain executive officers of Thermo and those expenses incurred by Thermo on behalf of the Company which are charged to the Company. The expenses charged are based on actual amounts (with no mark-up) incurred by Thermo or upon allocated employee time. The expenses charged to the Company were \$1.5 million, \$0.8 million, and \$0.7 million for the periods ended December 31, 2018, 2017 and 2016, respectively; the increase in 2018 was driven by approximately \$0.7 million of expenses incurred by Thermo on behalf of the Company related to the shareholder litigation.

In February 2019, the Company entered into a lease agreement with Thermo Covington, LLC for the Company's new headquarters office. As previously discussed in Note 8: Commitments, the Company's former lease agreement terminated in December 2018; as such, prior to this termination date, the Company began a process to search for a new headquarters location. Annual lease expense for the new location will be \$1.4 million per year, increasing at a rate of 2.5% per year, for a lease term of ten years.

As of December 31, 2018, the principal amount outstanding under the Loan Agreement with Thermo was \$119.7 million, and the fair value of the compound embedded derivative liability associated with the Loan Agreement was \$146.1 million. During 2018 and 2017, interest accrued on the Loan Agreement was approximately \$13.6 million and \$12.1 million, respectively.

On April 24, 2018, Globalstar entered into the Merger Agreement with GBS Acquisitions, Inc., a Delaware corporation and wholly owned subsidiary of Globalstar ("Merger Sub"), Thermo Acquisitions, Inc., a Delaware corporation ("Thermo Acquisitions"), the stockholders of Thermo Acquisitions (collectively, the "Thermo Stockholders," and each, individually, a "Thermo Stockholder"), and Thermo Development, Inc., in its capacity as the representative of the Thermo Stockholders as set forth therein (the "Stockholders' Representative"). Thermo Acquisitions is controlled by James Monroe III, Executive Chairman

of the Board of Directors of Globalstar and former Chief Executive Officer of Globalstar. Pursuant to the terms of the Merger Agreement, Merger Sub would merge with and into Thermo Acquisitions with Thermo Acquisitions continuing as the surviving corporation and a wholly owned subsidiary of Globalstar (the "Merger"). The transaction was unanimously recommended by the Special Committee of the Board of Directors of Globalstar, consisting entirely of disinterested independent directors, and unanimously approved by the full Board of Directors. On July 31, 2018, Globalstar, following the unanimous recommendation of its Special Committee of independent directors, and the Stockholders' Representative, terminated the Merger Agreement by mutual written agreement by entering into a Termination of Agreement and Plan of Merger, between Globalstar and the Stockholders' Representative. In addition, on July 31, 2018, the Voting Agreement between Globalstar and certain of its stockholders terminated in accordance with its terms as a result of the termination of the Merger Agreement. No termination fees are payable in connection with the termination of the Merger Agreement.

In December 2018, the Company entered into an underwriting agreement relating to the sale of its common stock at a public offering. Thermo participated in the stock offering and purchased a total of 141.0 million shares of common stock at a purchase price of \$49.3 million.

The Facility Agreement requires Thermo to maintain minimum and maximum ownership levels in the Company's common stock. Thermo may convert shares of voting common stock into shares of nonvoting common stock, or vice versa, as needed to comply with these ownership limitations.

In addition, the Company's Board of Directors maintains a special committee consisting solely of disinterested independent directors of the Company, represented by independent legal counsel. This special committee serves as an independent board to review and approve certain transactions between the Company and Thermo.

See Note 5: Long-Term Debt and Other Financing Arrangements for further discussion of the Company's debt and financing transactions with Thermo.

12. PENSIONS AND OTHER EMPLOYEE BENEFITS

Defined Benefit Plan

Until June 1, 2004, substantially all Old and New Globalstar employees and retirees who participated and/or met the vesting criteria for the plan were participants in the Retirement Plan of Space Systems/Loral (the "Loral Plan"), a defined benefit pension plan. The accrual of benefits in the Old Globalstar segment of the Loral Plan was curtailed, or frozen, by the administrator of the Loral Plan in 2003. Prior to 2003, benefits for the Loral Plan were generally based upon contributions, length of service with the Company and age of the participant. On June 1, 2004, the assets and frozen pension obligations of the Globalstar Segment of the Loral Plan were transferred into a new Globalstar Retirement Plan (the "Globalstar Plan"). The Globalstar Plan remains frozen and participants are not currently accruing benefits beyond those accrued as of October 23, 2003. The Company's funding policy is to fund the Globalstar Plan in accordance with the Internal Revenue Code and regulations.

Defined Benefit Pension Obligation and Funded Status

Below is a reconciliation of projected benefit obligation, plan assets and the funded status of the Company's defined benefit plan (in thousands):

	Y	Year Ended December 3		
		2018	2017	
Change in projected benefit obligation:				
Projected benefit obligation, beginning of year	\$	18,637 \$	17,778	
Service cost		194	195	
Interest cost		663	722	
Actuarial (gain) loss		(1,332)	916	
Benefits paid		(1,012)	(974)	
Projected benefit obligation, end of year	\$	17,150 \$	18,637	
Change in fair value of plan assets:				
Fair value of plan assets, beginning of year	\$	14,248 \$	12,895	
Return on plan assets		(870)	1,682	
Employer contributions		295	645	
Benefits paid		(1,012)	(974)	
Fair value of plan assets, end of year	\$	12,661 \$	14,248	
Funded status, end of year-net liability	\$	(4,489) \$	(4,389)	

Net Benefit Cost and Amounts Recognized

Components of the net periodic benefit cost of the Company's defined benefit pension plan were as follows (in thousands):

	Year Ended December 31,				
	 2018	2017		2016	
Net periodic benefit cost:					
Service cost	\$ 194 \$	195	\$	195	
Interest cost	663	722		758	
Expected return on plan assets	(901)	(825)		(808)	
Amortization of unrecognized net actuarial loss	374	443		473	
Total net periodic benefit cost	\$ 330 \$	535	\$	618	

Amounts recognized in the consolidated balance sheet were as follows (in thousands):

	December 31,		
		2018	2017
Amounts recognized:			
Funded status recognized in other non-current liabilities	\$	(4,489) \$	(4,389)
Net actuarial loss recognized in accumulated other comprehensive loss		5,622	5,558
Net amount recognized in retained deficit	\$	1,133 \$	1,169

The estimated net actuarial loss that will be amortized from accumulated other comprehensive loss into net periodic benefit cost in 2019 is \$0.4 million. No amounts are expected to be amortized from accumulated other comprehensive loss into net periodic benefit cost in 2019 related to prior service costs or net transition obligations.

Assumptions

The weighted-average assumptions used to determine the benefit obligation and net periodic benefit cost were as follows:

	For the Yea	For the Year Ended December 31,			
	2018	2017	2016		
Benefit obligation assumptions:					
Discount rate	4.25%	3.63%	4.15%		
Rate of compensation increase	N/A	N/A	N/A		
Net periodic benefit cost assumptions:					
Discount rate	3.63%	4.15%	4.38%		
Expected rate of return on plan assets	6.50%	6.50%	6.50%		
Rate of compensation increase	N/A	N/A	N/A		

The Globalstar Plan Committee. The Globalstar Plan Committee is responsible for ensuring the investments of the plans are managed in a prudent and effective manner. Amounts related to the pension plan are derived from actuarial and other assumptions, including discount rates, mortality, expected rate of return, participant data and termination. The Company reviews assumptions on an annual basis and makes adjustments as considered necessary.

The expected long-term rate of return on pension plan assets is selected by taking into account the expected duration of the projected benefit obligation for the plan, the asset mix of the plan and the fact that the plan assets are actively managed to mitigate risk. Discount rates are determined annually based on the Plan administrator's yield curve index, which considers expected benefit payments and is discounted with rates from the yield curve to determine a single equivalent discount rate.

Plan Assets and Investment Policies and Strategies

The plan assets are invested in various mutual funds which have quoted prices. The plan has a target allocation. On a weighted-average basis, target allocations for equity securities range from 50% to 60%, for debt securities 25% to 50% and for other investments 0% to 15%. The defined benefit pension plan asset allocations as of the measurement date presented as a percentage of total plan assets were as follows:

		December 31,		
	201	8	2017	
Equity securities		54%	58%	
Debt securities		46	42	
Total		100%	100%	

The fair values of the Company's pension plan assets by asset category were as follows (in thousands):

	 December 31, 2018					
	 Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
United States equity securities	\$ 5,509	\$ —	\$ 5,509	\$ —		
International equity securities	1,288	_	1,288	_		
Fixed income securities	4,158	_	4,158	_		
Other	 1,706		1,706			
Total	\$ 12,661	\$ —	\$ 12,661	\$ <u> </u>		

	December 31, 2017						
	Total		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
United States equity securities	\$	6,597	\$ -	_ :	\$ 6,597	\$	_
International equity securities		1,615	_	_	1,615		
Fixed income securities		4,119	_	_	4,119		
Other		1,917	_	_	1,917		_
Total	\$	14,248	\$ -		\$ 14,248	\$	_

Accumulated Benefit Obligation

The accumulated benefit obligation of the defined benefit pension plan was \$17.2 million and \$18.6 million at December 31, 2018 and 2017, respectively.

Benefits Payments and Contributions

The benefit payments to retirees over the next ten years are expected to be paid as follows (in thousands):

2019	\$ 1,023
2020	1,025
2021	1,026
2022	1,052
2023	1,070
2024 - 2028	5,623

For 2018 and 2017, the Company contributed \$0.3 million and \$0.6 million, respectively, to the Globalstar Plan. For 2019, the Company's expected contributions to the Globalstar Plan will be \$0.2 million.

The Company has a defined contribution employee savings plan, or "401(k)," which provides that the Company may match the contributions of participating employees up to a designated level. Under this plan, the matching contributions were approximately \$0.6 million, \$0.4 million and \$0.3 million for 2018, 2017, and 2016, respectively. The increase in matching contributions in 2018 is driven by increased headcount as well as an increase to the matching contribution percentage by the Company during 2018.

13. TAXES

The components of income tax expense (benefit) were as follows (in thousands):

	Year Ended December 31,				
	2	2018	2017		2016
Current:					
Federal tax	\$	_	\$	- \$	_
State tax		30		25	18
Foreign tax		95	1	65	(6,561)
Total		125	1	90	(6,543)
Deferred:					
Federal and state tax		_	-	_	
Foreign tax provision (benefit)					
Total					<u> </u>
Income tax expense (benefit)	\$	125	\$ 1	90 \$	(6,543)

U.S. and foreign components of income (loss) before income taxes are presented below (in thousands):

	 Year Ended December 31,				
	 2018	2017	2016		
U.S. income (loss)	\$ 28,699 \$	(60,964) \$	(103,494)		
Foreign loss	 (35,090)	(27,920)	(35,695)		
Total loss before income taxes	\$ (6,391) \$	(88,884) \$	(139,189)		

As of December 31, 2018, the Company had cumulative U.S. and foreign net operating loss carryforwards for income tax reporting purposes of approximately \$1.8 billion and \$228.9 million, respectively. As of December 31, 2017, the Company had cumulative U.S. and foreign net operating loss carryforwards for income tax reporting purposes of approximately \$1.7 billion and \$232.5 million, respectively. The current net operating loss carryforwards expire from 2019 through 2038, with less than 1% expiring prior to 2026.

The components of net deferred income tax assets were as follows (in thousands):

	December 31,		
		2018	2017
Federal and foreign net operating loss, interest limitation and credit carryforwards	\$	489,815 \$	464,288
Property and equipment and other long-term assets		(80,830)	(45,373)
Accruals and reserves		7,152	12,754
Deferred tax assets before valuation allowance		416,137	431,669
Valuation allowance		(416,137)	(431,669)
Net deferred income tax assets	\$	<u> </u>	

The change in the valuation allowance during 2018 of \$15.5 million was due to the Company providing valuation allowances against all of the tax benefit generated from its consolidated net losses. The change in property and equipment and other long-term assets was driven primarily by depreciation due to the difference between tax and book depreciable lives.

The actual provision for income taxes differs from the statutory U.S. federal income tax rate as follows (in thousands):

	Year Ended December 31,				
		2018	2017	2016	
Provision at U.S. statutory rate of 21% for 2018 and 35% for each of 2017 and 2016	\$	(1,349) \$	(31,118) \$	(48,722)	
State income taxes, net of federal benefit		890	(1,804)	(6,193)	
Change in valuation allowance (excluding impact of foreign exchange rates)		(8,228)	(245,304)	36,631	
Effect of foreign income tax at various rates		(237)	3,739	4,844	
Permanent differences		7,031	11,166	10,331	
Change in unrecognized tax benefit		_		(6,313)	
Net change in permanent items due to provision to tax return		1,813	(3,565)	3,222	
Remeasurement of U.S. deferred tax assets (Federal and State)		_	266,864	_	
Other (including amounts related to prior year tax matters)		205	212	(343)	
Total	\$	125 \$	190 \$	(6,543)	

Tax Audits

The Company operates in various U.S. and foreign tax jurisdictions. The process of determining its anticipated tax liabilities involves many calculations and estimates which are inherently complex. The Company believes that it has complied in all material respects with its obligations to pay taxes in these jurisdictions. However, its position is subject to review and possible challenge by the taxing authorities of these jurisdictions. If the applicable taxing authorities were to challenge successfully its current tax positions, or if there were changes in the manner in which the Company conducts its activities, the Company could become subject to material unanticipated tax liabilities. It may also become subject to additional tax liabilities as a result of changes in tax laws, which could in certain circumstances have a retroactive effect.

In July 2018, the Company's Canadian subsidiary was notified that its income tax returns for the years ended October 31, 2015 and 2016 had been selected for audit. The Company has provided all requested information to the Canada Revenue Agency ("CRA") and is working with the CRA to complete the audit.

Except for the audit noted above, neither the Company nor any of its subsidiaries is currently under audit by the IRS or by any state income tax jurisdiction in the United States. The Company's corporate U.S. tax returns for 2015 and subsequent years remain subject to examination by tax authorities. State income tax returns are generally subject to examination for a period of three to five years after filing of the respective return. The state impact of any federal changes remains subject to examination by various states for a period of up to one year after formal notification to the states.

The Company acquired a tax liability for which the Company has been indemnified by the previous owners. As of December 31, 2018, and 2017, the Company had recorded a tax liability of \$0.4 million and \$1.4 million, respectively, to the foreign tax authorities with an offsetting tax receivable from the previous owners, which is included in Intangible and Other Assets in the accompanying balance sheets. The Company may be exposed to other liabilities in the future if its subsidiary in Brazil, after making use of all available tax benefits and fiscal losses, incurs additional tax liabilities for which it may not be fully indemnified by the seller, or the seller may fail to perform its indemnification obligations.

In the Company's international tax jurisdictions, numerous tax years remain subject to examination by tax authorities, including tax returns for 2010 and subsequent years in most of the Company's international tax jurisdictions.

There are no unrecognized tax benefits as of December 31, 2017 and 2018.

Change in Tax Regulations

On December 22, 2017, the United States ("U.S.") enacted significant changes to the U.S. tax law following the passage and signing of the Tax Act. The Tax Act included significant changes to existing tax law substantially effective January 1, 2018, including a permanent reduction to the U.S. federal corporate income tax rate from 35% to 21%, changes to the NOL utilization regulations, repeal of alternative minimum tax, a one-time deemed repatriation tax on deferred foreign income ("Transition Tax"), implementation of a territorial tax system, implementation of anti-deferral and anti-base erosion provisions, and provisions to both accelerate and limit certain deductions. The Company has revalued its deferred tax assets and liabilities based on the new corporate tax rate. As the Company's deferred tax assets have a full valuation allowance, the Company has not recorded any income statement impact as a result of the remeasurement of net deferred tax assets. Accordingly, the tax law changes did not have a material impact to the financial statements of the Company.

Also, on December 22, 2017, the SEC staff issued Staff Accounting Bulletin (SAB) 118 to provide guidance for companies that are not able to complete their accounting for the income tax effects of the Tax Act in the period of enactment. SAB 118 provides for a measurement period of up to one year from the date of enactment. During the measurement period, companies need to reflect adjustments to any provisional amounts if it obtains, prepares or analyzes additional information about facts and circumstances that existed as of the enactment date that, if known, would have affected the income tax effects initially reported as provisional amounts. The Company completed its analysis of the Tax Act and no adjustments were made to the provisional amounts recorded in the Company's financial statements for the period ending on December 31, 2017.

As of December 31, 2018, the Company had not provided foreign withholding taxes on approximately \$2.2 million of undistributed earnings from certain foreign subsidiaries indefinitely invested outside the U.S.

In January 2018, the FASB released guidance on the accounting for tax on the global intangible low-taxed income ("GILTI") provisions of the Tax Act. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The guidance indicates that either accounting for deferred taxes related to GILTI inclusions or treating any taxes on GILTI inclusions as period costs are both acceptable methods subject to an accounting policy election. The Company has elected to account for GILTI tax in the period in which it is incurred, and therefore has not provided any deferred tax impacts of GILTI in its consolidated financial statements for the year ended December 31, 2018.

14. STOCK COMPENSATION

The Company's 2006 Equity Incentive Plan ("Equity Plan") provides long-term incentives to the Company's key employees, including officers, directors, consultants and advisers ("Eligible Participants"), and is designed to align stockholder and employee interests. Under the Equity Plan, the Company may grant incentive stock options, nonstatutory stock options, restricted stock awards, restricted stock units, and other stock based awards or any combination thereof to Eligible Participants. The Compensation Committee of the Company's Board of Directors establishes the terms and conditions of any awards granted under the plans. As of December 31, 2018, and 2017, the number of shares of common stock that was authorized and remained available for issuance under the Equity Plan was 11.4 million and 24.1 million, respectively.

Stock Options

The Company has granted incentive stock options under the Equity Plan. These options have various vesting terms, but generally vest in equal installments over three or four years and expire in ten years. Non-vested options are generally forfeited upon termination of employment.

The Company recognizes compensation expense for stock option grants based on the fair value at the date of grant using the Black-Scholes option pricing model. The Company uses historical data, among other factors, to estimate the expected stock price volatility, the expected option life and the expected forfeiture rate. The market price of common stock has been volatile at times in recent years. The Company makes judgmental adjustments to project volatility during the expected term of the options, considering, among other things, historical volatility of the share prices of its peer group and expectations with regard to business conditions that may impact stock price fluctuations or stability. The Company estimates the expected term considering factors such as historical exercise patterns and the recipients of the options granted. The risk-free rate is based on the United States Treasury Department yield curve in effect at the time of grant for the expected life of the option. The Company assumes an expected dividend yield of zero for all periods. The table below summarizes the assumptions for the indicated periods:

	Year Ended December 31,				
		2018	2017	2016	
Risk-free interest rate		2 - 3%	2%	1 - 2%	
Expected term of options (years)		5	5	5	
Volatility		63%	67%	65%	
Weighted average grant-date fair value per share	\$	0.26 \$	0.85 \$	1.04	

The following table represents the Company's stock option activity for the year ended December 31, 2018:

	Shares	Weighted Average Exercise Price
Outstanding at January 1, 2018	9,390,498	\$ 1.41
Granted	708,400	0.48
Exercised	(850,000)	0.38
Forfeited or expired	(1,033,668)	1.32
Outstanding at December 31, 2018	8,215,230	1.45
Exercisable at December 31, 2018	7,184,081	\$ 1.51

The following table summarizes the aggregate intrinsic value of stock options exercised during the years indicated below (in thousands):

	 Year Ended December 31,			
	2018	2017	2016	
Intrinsic value of stock options exercised	\$ 35	\$ 94	\$ 199	

The intrinsic value of a stock option is the amount by which the market value of the underlying stock exceeds the exercise price of the option. Net cash proceeds during the year ended December 31, 2018 from the exercise of stock options were \$0.3 million. The aggregate intrinsic value of all outstanding stock options at December 31, 2018 was \$0.3 million with a remaining contractual life of 7.3 years. The aggregate intrinsic value of all vested stock options at December 31, 2018 was \$0.2 million with a remaining contractual life of 6.2 years.

The following table presents compensation expense related to stock options for the years indicated below (in millions):

	 Year Ended December 31,						
	 2018	2017	2016				
Total compensation expense	\$ 1.1 \$	1.2 \$	1.4				

As of December 31, 2018, unrecognized compensation expense related to nonvested stock options outstanding was approximately \$0.8 million to be recognized over a weighted-average period of 2.4 years.

The Company adjusts its estimates of expected forfeitures of equity awards based upon its review of recent forfeiture activity and expected future employee turnover. The Company considers the impact of both pre-vesting forfeitures and post-vesting cancellations for purposes of evaluating forfeiture estimates. The effect of adjusting the forfeiture rate is recognized in the period in which the forfeiture estimate is changed.

Restricted Stock

Shares of restricted stock generally may vest immediately, one year from the grant date or in equal annual installments over three years. Non-vested shares are generally forfeited upon the termination of employment. Holders of restricted stock awards are entitled to all rights of a stockholder of the Company with respect to the restricted stock, including the right to vote the shares and receive any dividends or other distributions. Compensation expense associated with restricted stock is measured based on the grant date fair value of the common stock and is recognized on a straight line basis over the vesting period. The table below summarizes the weighted average grant date fair value of restricted stock for the indicated periods:

	 Year Ended December 31,						
	2018		2017		2016		
Weighted average grant date fair value	\$ 0.49	\$	1.37	\$	1.56		

The following is a rollforward of the activity in restricted stock for the year ended December 31, 2018:

	Shares	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2018	3,630,817	\$ 1.41
Granted	13,117,386	0.49
Vested	(5,804,742)	0.86
Forfeited	(132,445)	1.19
Nonvested at December 31, 2018	10,811,016	\$ 0.59

The following table represents the compensation expense related to restricted stock for the years indicated below (in millions):

	 Year Ended December 31,						
	2018		2017		2016		
compensation expense	\$ 3.9	\$	2.3	\$	2.2		

The total fair value of restricted stock awards vested during 2018, 2017 and 2016 was \$3.1 million, \$3.4 million, and \$1.4 million, respectively. As of December 31, 2018, unrecognized compensation expense related to unvested restricted stock outstanding was approximately \$5.6 million to be recognized over a weighted-average period of 2.2 years.

Modifications

As a result of the departure of four members of the Board of Directors in December 2018, the Company modified certain terms for all stock options outstanding for the four departing directors and the three members of the Board of Directors who were not departing (collectively, the "Former Board"). In connection with this modification, all unvested stock options held by members of the Former Board vested and the term of all stock options held by such members was extended to a new ten-year period. Additionally, the Company accelerated the vesting of outstanding restricted stock awards for three of the four departing members of the Board of Directors.

In total, the seven members of the Former Board had options to purchase approximately 3.4 million shares outstanding. Additionally, three departing members of the Board of Directors had unvested restricted stock awards of 0.5 million shares in total.

The incremental compensation cost recognized upon modification of the stock options was \$0.6 million and the incremental compensation cost recognized upon acceleration of the vesting of the restricted stock awards was \$0.1 million, both of which were recognized during the year ended December 31, 2018 in accordance with applicable accounting guidance. As substantially all stock options held by members of the Former Board had vested as of December 31, 2018, the impact of this vesting of remaining outstanding stock options was not meaningful.

Key Employee Bonus Plan

The Company has an annual bonus plan designed to reward designated key employees' efforts to exceed the Company's financial performance goals for the designated calendar year ("Plan Year"). The bonus pool available for distribution is determined based on the Company's adjusted EBITDA performance during the Plan Year. The bonus may be paid in cash or the Company's common stock, as determined by the Compensation Committee. For the 2018 Plan Year, the Company's adjusted EBITDA performance was within the bonus payout threshold according to the bonus plan document. As of December 31, 2018, \$1.3 million was accrued on the Company's consolidated balance sheet related to this bonus payment, which will be made in the form of common stock in March 2019.

Employee Stock Purchase Plan

The Company has an Employee Stock Purchase Plan (the "Plan") which provides eligible employees of the Company and its subsidiaries with an opportunity to acquire shares of its common stock at a discount. The maximum aggregate number of shares of common stock that may be purchased through the Plan is 7,000,000 shares. The number of shares that may be purchased through the Plan will be subject to proportionate adjustments to reflect stock splits, stock dividends, or other changes in the Company's capital stock.

The Plan permits eligible employees to purchase shares of common stock during two semi-annual offering periods beginning on June 15 and December 15 (the "Offering Periods"), unless adjusted by the Company's Board of Directors or one of its designated committees. Eligible employees may purchase shares of up to 15% of their total compensation per pay period, but may purchase in any calendar year no more than the lesser of \$25,000 in fair market value of common stock or 500,000 shares of common stock, as measured as of the first day of each applicable Offering Period. The price an employee pays is 85% of the fair market value of common stock. Fair market value is equal to the lesser of the closing price of a share of common stock on either the first day or the last day of the Offering Period.

For the years ended December 31, 2018 and 2017, the Company received \$0.5 million and \$0.7 million, respectively, related to shares issued under this plan. For each of 2018 and 2017, the Company recorded compensation expense of approximately \$0.5 million, which is reflected in marketing, general and administrative expenses. Additionally, the Company has issued approximately 6.0 million shares through December 31, 2018 related to the Plan.

The fair value of the employees' stock purchase rights granted under the ESPP was estimated using the Black-Scholes option pricing model with the following assumptions for the following years:

	 Year Ended December 31,			
	2018	2017		
Risk-free interest rate	2.00%	1.00%		
Expected term (months)	6	6		
Volatility	104%	100%		
Weighted average grant-date fair value per share	\$ 0.35 \$	0.61		

15. ACCUMULATED OTHER COMPREHENSIVE LOSS

Accumulated other comprehensive loss includes all changes in equity during a period from non-owner sources. The change in accumulated other comprehensive loss for all periods presented resulted from foreign currency translation adjustments and minimum pension liability adjustments.

The components of accumulated other comprehensive loss were as follows (in thousands):

	 December 31,			
	2018	2017		
Accumulated minimum pension liability adjustment	\$ (5,622) \$	(5,558)		
Accumulated net foreign currency translation adjustment	 1,783	(1,381)		
Total accumulated other comprehensive loss	\$ (3,839) \$	(6,939)		

No amounts were reclassified out of accumulated other comprehensive loss for the periods shown above.

16. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

The following is a summary of consolidated quarterly financial information (amounts in thousands, except per share data):

	Quarter Ended											
2018		March 31		June 30		Sept. 30		Dec. 31				
Total revenue	\$	28,749	\$	33,726	\$	35,692	\$	31,946				
Operating income (loss)	\$	(12,958)	\$	1,948	\$	(17,962)	\$	(18,407)				
Net income (loss)	\$	87,930	\$	(7,012)	\$	9,019	\$	(96,453)				
Basic income (loss) per common share	\$	0.07	\$	(0.01)	\$	0.01	\$	(0.07)				
Diluted income (loss) per common share	\$	0.06	\$	(0.01)	\$	0.01	\$	(0.07)				
Shares used in basic per share calculations		1,262,336		1,263,372		1,264,516		1,287,742				
Shares used in diluted per share calculations		1,437,328		1,263,372		1,427,800		1,287,742				

	Quarter Ended								
2017		March 31		June 30		Sept. 30		Dec. 31	
Total revenue	\$	24,652	\$	28,123	\$	30,458	\$	29,427	
Loss from operations	\$	(15,131)	\$	(12,439)	\$	(10,721)	\$	(30,155)	
Net income (loss)	\$	(20,161)	\$	(98,734)	\$	52,406	\$	(22,585)	
Basic income (loss) per common share	\$	(0.02)	\$	(0.09)	\$	0.04	\$	(0.02)	
Diluted income (loss) per common share	\$	(0.02)	\$	(0.09)	\$	0.04	\$	(0.02)	
Shares used in basic per share calculations		1,113,968		1,128,985		1,169,993		1,251,826	
Shares used in diluted per share calculations		1,113,968		1,128,985		1,345,905		1,251,826	

17 CONDENSED CONSOLIDATING FINANCIAL INFORMATION

In connection with the Company's issuance of the 2013 8.00% Notes, certain of the Company's 100% owned domestic subsidiaries (the "Guarantor Subsidiaries") fully, unconditionally, jointly, and severally guaranteed the payment obligations under these notes. The following condensed financial information sets forth, on a consolidating basis, the balance sheets, statements of operations and comprehensive income (loss) and statements of cash flows for Globalstar, Inc. ("Parent Company"), the Guarantor Subsidiaries and the Parent Company's other subsidiaries (the "Non-Guarantor Subsidiaries").

Globalstar, Inc. Condensed Consolidating Balance Sheet As of December 31, 2018

		Parent		Guarantor	Guarantoi					
	_	Company	S	ubsidiaries		Subsidiaries	_	Elimination	<u>C</u>	onsolidated
ASSETS					(In thousands	s)			
Current assets:										
Cash and cash equivalents	\$	11,312	¢	2,126	Ф	1,774	\$		\$	15,212
Restricted cash	Ψ	60,278	Ψ	2,120	Ψ	1,//4	Ψ		Φ	60,278
Accounts receivable, net of allowance		7,138		7,826		4,363				19,327
Intercompany receivables		1,047,320		824,920		105,819		(1,978,059)		17,527
Inventory		6,747		6,149		1,378		(1,770,037)		14,274
Prepaid expenses and other current assets		7,765		2,987		2,658				13,410
Total current assets	_	1,140,560		844,008	_	115,992	_	(1,978,059)		122,501
Property and equipment, net	_	850,790	_	1,242	_	30,658	_	(1,976,039)	_	882,695
Intercompany notes receivable		5,600		1,242		6,436		(12,036)		002,093
Investment in subsidiaries		(255,187)		42,481		50,220		162,486		<u></u>
Intangibles and other assets, net		36,275		324		3,698		(11)		40,286
Total assets	\$	1,778,038	•	888,055	•	207,004	•	(1,827,615)	•	1,045,482
LIABILITIES AND STOCKHOLDERS'	Φ	1,770,030	Ψ	000,033	Φ	207,004	Φ	(1,027,013)	Φ	1,043,462
EQUITY										
Current liabilities:										
Current portion of long-term debt	\$	96,249	\$	_	\$	_	\$	_	\$	96,249
Accounts payable		2,420		3,378		1,197		_		6,995
Accrued expenses		8,904		6,747		7,434		_		23,085
Intercompany payables		778,340		832,284		367,396		(1,978,020)		_
Payables to affiliates		656		_		_		_		656
Derivative liabilities		757		_		_		_		757
Deferred revenue		1,699		23,943		6,296		_		31,938
Total current liabilities		889,025		866,352		382,323		(1,978,020)		159,680
Long-term debt, less current portion		367,202		_		_		_		367,202
Employee benefit obligations		4,489		_		_		_		4,489
Intercompany notes payable		6,436		_		5,600		(12,036)		_
Derivative liabilities		146,108		_		_		_		146,108
Deferred revenue		5,339		335		18		_		5,692
Other non-current liabilities		494		323		2,549				3,366
Total non-current liabilities		530,068		658		8,167		(12,036)		526,857
Stockholders' equity (deficit)		358,945		21,045		(183,486)		162,441		358,945
Total liabilities and shareholders' equity	\$	1,778,038	\$	888,055	\$	207,004	\$	(1,827,615)	\$	1,045,482

Globalstar, Inc. Condensed Consolidating Balance Sheet As of December 31, 2017

		Parent Company	Guarantor Guaranto			Non- Guarantor Subsidiaries	ī	Elimination	Consolidated		
	_	company		ibsidiai ies		(In thousands			Consolidated		
ASSETS						in thousands	'				
Current assets:											
Cash and cash equivalents	\$	32,864	\$	4,942	\$	3,838	\$	_	\$ 41,644		
Restricted cash		63,635		_		_		_	63,635		
Accounts receivable, net of allowance		7,129		6,524		3,460		_	17,113		
Intercompany receivables		979,942		755,847		64,477		(1,800,266)			
Inventory		1,182		4,610		1,481		_	7,273		
Prepaid expenses and other current assets		3,149		2,414		1,182		_	6,745		
Total current assets		1,087,901		774,337		74,438		(1,800,266)	136,410		
Property and equipment, net		962,756		3,855		4,503		5	971,119		
Intercompany notes receivable		5,600		_		6,436		(12,036)	_		
Investment in subsidiaries		(280,745)		84,244		38,637		157,864			
Intangible and other assets, net		18,353		47		3,348		(12)	21,736		
Total assets	\$	1,793,865	\$	862,483	\$	127,362	\$	(1,654,445)	\$ 1,129,265		
LIABILITIES AND STOCKHOLDERS' EQUITY											
Current liabilities:											
Current portion of long-term debt	\$	79,215	\$	_	\$	_	\$	_	\$ 79,215		
Accounts payable		2,257		2,736		1,055		_	6,048		
Accrued contract termination charge		21,002		_		_		_	21,002		
Accrued expenses		7,627		6,331		6,796		_	20,754		
Intercompany payables		711,159		799,565		289,503		(1,800,227)	_		
Payables to affiliates		225		_					225		
Derivative liabilities		1,326		_		_		_	1,326		
Deferred revenue		1,164		23,282		7,301		_	31,747		
Total current liabilities		823,975		831,914		304,655		(1,800,227)	160,317		
Long-term debt, less current portion		434,651		_		_		_	434,651		
Employee benefit obligations		4,389		_		_		_	4,389		
Intercompany notes payable		6,436		_		5,600		(12,036)	 _		
Derivative liabilities		226,659		_		_		_	226,659		
Deferred revenue		5,625		410		17		_	6,052		
Other non-current liabilities		906		325		4,742		_	5,973		
Total non-current liabilities		678,666		735		10,359		(12,036)	677,724		
Stockholders' equity (deficit)		291,224		29,834		(187,652)		157,818	291,224		
Total liabilities and shareholders' equity	\$	1,793,865	\$	862,483	\$	127,362	\$	(1,654,445)	\$ 1,129,265		

Globalstar, Inc.
Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Year Ended December 31, 2018

	Parent Company	Guarantor Subsidiaries	Non- Guarantor Subsidiaries	Eliminations	Consolidated
D			(In thousands	s)	
Revenue:	Ф 00.002	Φ 40.670	ф <i>(</i> 5.054	Φ (04.617)	Ф 111 000
Service revenue	\$ 89,992			` ' '	
Subscriber equipment sales	711	16,963	5,676	(4,326)	19,024
Total revenue	90,703	57,621	70,730	(88,941)	130,113
Operating expenses:					
Cost of services (exclusive of depreciation, amortization and accretion shown separately below)	26,795	5,932	10,050	(5,129)	37,648
Cost of subscriber equipment sales	552	13,964	4,253	(4,328)	14,441
Marketing, general and administrative	38,007	5,221	91,758	(79,543)	55,443
Revision to contract termination charge	(20,478)	_	_	_	(20,478)
Depreciation, amortization and accretion	88,783	264	1,391	<u> </u>	90,438
Total operating expenses	133,659	25,381	107,452	(89,000)	177,492
Income (loss) from operations	(42,956)	32,240	(36,722)	59	(47,379)
Other income (expense):					
Interest income and expense, net of amounts capitalized	(43,742)	4	72	54	(43,612)
Derivative gain	81,120	_	_	_	81,120
Gain on legal settlement	6,779	_	_	_	6,779
Equity in subsidiary earnings (loss)	(7,617)	(16,655)	_	24,272	_
Other	(100)	206	(3,349)	(56)	(3,299)
Total other income (expense)	36,440	(16,445)	(3,277)	24,270	40,988
Income (loss) before income taxes	(6,516)	15,795	(39,999)	24,329	(6,391)
Income tax expense		30	95		125
Net income (loss)	\$ (6,516)	\$ 15,765	\$ (40,094)	\$ 24,329	\$ (6,516)
Defined benefit pension plan liability adjustment	(64)	_	_	_	(64)
Net foreign currency translation adjustment			3,072	92	3,164
Total comprehensive income (loss)	\$ (6,580)	\$ 15,765	\$ (37,022)	\$ 24,421	\$ (3,416)

Globalstar, Inc.
Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Year Ended December 31, 2017

		Parent ompany		arantor sidiaries		Non- Guarantor Subsidiaries	Eliminations		Conso	lidated
					(1	In thousands)			
Revenue:	Ф	76.006	Ф	20.245	Φ	54.100	Φ (71 070)	ф	00.472
Service revenue	\$	76,096	\$	39,347	\$	54,102	,	71,072)	\$	98,473
Subscriber equipment sales		264		11,459		6,141		(3,677)		14,187
Total revenue		76,360		50,806		60,243		74,749)		112,660
Operating expenses:										
Cost of services (exclusive of depreciation, amortization and accretion shown separately below)		25,664		5,981		10,740		(5,363)		37,022
Cost of subscriber equipment sales		97		9,211		4,311		(3,675)		9,944
Cost of subscriber equipment sales - reduction in the value of inventory		843		_		_		_		843
Marketing, general and administrative		22,588		4,792		77,099	(65,720)		38,759
Reduction in the value of long-lived assets		17,040		_		_		_		17,040
Depreciation, amortization and accretion		76,625		629		244				77,498
Total operating expenses		142,857		20,613		92,394	(74,758)	1	181,106
Income (loss) from operations		(66,497)		30,193		(32,151)		9		(68,446)
Other income (expense):										
Loss on extinguishment of debt		(6,306)		_		_		_		(6,306)
Gain (loss) on equity issuance		2,706		_		(36)		_		2,670
Interest income and expense, net of amounts capitalized		(34,570)		(8)		(198)		5		(34,771)
Derivative gain		21,182		_		_		_		21,182
Equity in subsidiary earnings (loss)		(2,735)		(13,906)		_		16,641		_
Other		(2,854)		(700)		345		(4)		(3,213)
Total other income (expense)		(22,577)		(14,614)		111		16,642		(20,438)
Income (loss) before income taxes		(89,074)		15,579		(32,040)		16,651		(88,884)
Income tax expense				25		165		_		190
Net income (loss)	\$	(89,074)	\$	15,554	\$	(32,205)	\$	16,651	\$	(89,074)
Defined benefit pension plan liability adjustment		384				_		_		384
Net foreign currency translation adjustment		_		_		(1,944)		(1)		(1,945)
Total comprehensive income (loss)	\$	(88,690)	\$	15,554	\$	(34,149)	\$	16,650	\$	(90,635)

Globalstar, Inc.
Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Year Ended December 31, 2016

		Parent Company		arantor sidiaries	S	Non- Guarantor Subsidiaries		iminations	Consolidated
Revenue:					(1	In thousands)		
Service revenue	\$	70,460	•	34,428	\$	43,130	¢	(64,949)	\$ 83,069
Subscriber equipment sales	Φ	584	ψ	9,380	Ψ	6,545	Ψ	(2,717)	13,792
Total revenue		71,044		43,808		49,675		(67,666)	96,861
Operating expenses:	_	/1,044		43,606	_	49,073		(07,000)	90,801
Cost of services (exclusive of depreciation, amortization and accretion shown separately below)		20,569		5,929		10,976		(5,566)	31,908
Cost of subscriber equipment sales		207		7,481		4,931		(2,712)	9,907
Marketing, general and administrative		21,268		4,847		73,679		(59,235)	40,559
Reduction in the value of long-lived assets		350		_		_			350
Depreciation, amortization and accretion		75,896		802		1,054		(362)	77,390
Total operating expenses		118,290		19,059		90,640		(67,875)	160,114
Income (loss) from operations		(47,246)		24,749		(40,965)		209	(63,253)
Other income (expense):								_	
Gain (loss) on equity issuance		2,789		_		(389)		_	2,400
Interest income and expense, net of amounts capitalized		(35,754)		(24)		(164)		(10)	(35,952)
Derivative loss		(41,531)		_		_		_	(41,531)
Equity in subsidiary earnings (loss)		(9,803)		(15,670)				25,473	_
Other		(1,101)		92		17		139	(853)
Total other income (expense)		(85,400)		(15,602)		(536)		25,602	(75,936)
Income (loss) before income taxes		(132,646)		9,147		(41,501)		25,811	(139,189)
Income tax expense (benefit)				18		(6,561)			(6,543)
Net income (loss)	\$	(132,646)	\$	9,129	\$	(34,940)	\$	25,811	\$ (132,646)
Defined benefit pension plan liability adjustment		221		_		_		_	221
Net foreign currency translation adjustment		_		_		(759)		(7)	(766)
Total comprehensive income (loss)	\$	(132,425)	\$	9,129	\$	(35,699)	\$	25,804	\$ (133,191)

Globalstar, Inc. Condensed Consolidating Statement of Cash Flows Year Ended December 31, 2018

	Parent Company	Guarantor Subsidiaries	Non- Guarantor Subsidiaries	Eliminations	Consolidated	
			(In thousands)			
Net cash provided by (used in) operating activities:	\$ 7,933	\$ (1,842)	\$ (171)	<u>\$</u>	\$ 5,920	
Cash flows used in investing activities:						
Second-generation network costs (including interest)	(5,730)	_	(1,302)	_	(7,032)	
Property and equipment additions	(5,938)	(974)	(437)	_	(7,349)	
Purchase of intangible assets	(2,978)		(42)		(3,020)	
Net cash used in investing activities	(14,646)	(974)	(1,781)		(17,401)	
Cash flows provided by (used in) financing activities: Principal payments of the Facility	(55.000)				77. 0.40	
Agreement	(77,866)	_	_	_	(77,866)	
Net proceeds from common stock offering	59,100	_	_	_	59,100	
Payments for financing costs	(276)	_	_	_	(276)	
Proceeds from issuance of common stock and exercise of options and warrants	846				846	
Net cash used in financing activities	(18,196)				(18,196)	
Effect of exchange rate changes on cash, cash equivalents and restricted cash			(112)		(112)	
Net decrease in cash, cash equivalents and restricted cash	(24,909)	(2,816)	(2,064)	_	(29,789)	
Cash, cash equivalents and restricted cash, beginning of period	96,499	4,942	3,838		105,279	
Cash, cash equivalents and restricted cash, end of period	\$ 71,590	\$ 2,126	\$ 1,774	<u>\$</u>	\$ 75,490	

Globalstar, Inc. Condensed Consolidating Statement of Cash Flows Year Ended December 31, 2017

	 Parent Company	Guarantor ubsidiaries	Non- Guarantor Subsidiaries	ŀ	Eliminations	,	Consolidated
			(In thousands	s)			
Net cash provided by operating activities:	\$ 6,010	\$ 4,361	\$ 3,486	\$	_	\$	13,857
Cash flows provided by (used in) investing activities:							
Second-generation network costs (including interest)	(11,856)	_	(54)		_		(11,910)
Property and equipment additions	(3,674)	(746)	(1,105)		_		(5,525)
Purchase of intangible assets	(3,468)		(328)		_		(3,796)
Investment in businesses	455	_	_		_		455
Net cash used in investing activities	(18,543)	(746)	(1,487)		_		(20,776)
Cash flows provided by (used in) financing activities:							
Principal payments of the Facility Agreement	(75,755)	_	_		_		(75,755)
Net proceeds from common stock offering	114,993	_			_		114,993
Proceeds from Thermo Common Stock Purchase Agreement	33,000	_	_		_		33,000
Payment of debt restructuring fee	(20,795)		_		_		(20,795)
Payments for financing costs	(654)	_	_		_		(654)
Proceeds from issuance of stock to Terrapin	12,000	_			_		12,000
Proceeds from issuance of common stock and exercise of options and warrants	1,001	_	_		_		1,001
Net cash provided by financing activities	63,790				_		63,790
Effect of exchange rate changes on cash, cash equivalents and restricted cash	 	_	 195		_		195
Net increase in cash, cash equivalents and restricted cash	51,257	3,615	2,194		_		57,066
Cash, cash equivalents and restricted cash, beginning of period	45,242	1,327	1,644		_		48,213
Cash, cash equivalents and restricted cash, end of period	\$ 96,499	\$ 4,942	\$ 3,838	\$		\$	105,279

Globalstar, Inc. Condensed Consolidating Statement of Cash Flows Year Ended December 31, 2016

	Parent	Guarantoi		Non- Guarantor		
	ompany	Subsidiarie		Subsidiaries	Eliminations	Consolidated
				(In thousand	s)	
Net cash provided by (used in) operating activities	\$ 8,642	\$ 1,30	7	\$ (1,136)	<u> </u>	\$ 8,813
Cash flows used in investing activities:						
Second-generation network costs (including interest)	(12,901)	_	_	(269)	_	(13,170)
Property and equipment additions	(8,453)	(69	9)	(233)	_	(9,385)
Purchase of intangible assets	(1,996)	_	_	_	_	(1,996)
Net cash used in investing activities	(23,350)	(69	9)	(502)		(24,551)
Cash flows provided by (used in) financing activities:						
Principal payments of the Facility Agreement	(32,835)	_	_	_	_	(32,835)
Proceeds from issuance of stock to Terrapin	48,000	_	_	_	_	48,000
Proceeds from issuance of common stock and exercise of options and warrants	3,337	_	_	_	_	3,337
Net cash provided by financing activities	18,502	_			_	18,502
Effect of exchange rate changes on cash, cash equivalents and restricted cash	_	_		55	_	55
Net increase (decrease) in cash, cash equivalents and restricted cash	3,794	60	8	(1,583)	_	2,819
Cash, cash equivalents and restricted cash, beginning of period	41,448	71	9	3,227	_	45,394
Cash, cash equivalents and restricted cash, end of period	\$ 45,242	\$ 1,32	7	\$ 1,644	\$ —	\$ 48,213

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

(a) Evaluation of disclosure controls and procedures

Our management, with the participation of our Principal Executive Officer and Principal Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934 as of December 31, 2018, the end of the period covered by this Report. This evaluation was based on the guidelines established in *Internal Control - Integrated Framework* issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.

Based on this evaluation, each of our Principal Executive Officer and Principal Financial Officer concluded that as of December 31, 2018 our disclosure controls and procedures were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Principal Executive Officer and Principal Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

We believe that the Consolidated Financial Statements included in this Report fairly present, in all material respects, our consolidated financial position and results of operations as of and for the year ended December 31, 2018.

(b) Changes in internal control over financial reporting

As of December 31, 2018, our management, with the participation of our Principal Executive Officer and Principal Financial Officer, evaluated our internal control over financial reporting. Based on that evaluation, our Principal Executive Officer and Principal Financial Officer concluded that no changes in our internal control over financial reporting occurred during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control over Financial Reporting

Management of the Company, including our Principal Executive Officer and Principal Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended. The Company's internal controls were designed to provide reasonable assurance as to the reliability of our financial reporting and the preparation and presentation of the Consolidated Financial Statements for external purposes in accordance with accounting principles generally accepted in the United States and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

The Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on the criteria in *Internal Control - Integrated Framework* issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls,

testing of the operating effectiveness of controls and a conclusion on this evaluation. Through this evaluation, management did not identify any material weakness in the Company's internal control over financial reporting. There are inherent limitations in the effectiveness of any system of internal control over financial reporting; however, based on the evaluation, management has concluded the Company's internal control over financial reporting was effective as of December 31, 2018.

The Company's internal control over financial reporting as of December 31, 2018 has been audited by Crowe LLP, an independent registered public accounting firm, as stated in their report, which appears herein.

Item 9B. Other Information

On February 26, 2019, the Company entered into a substantially identical indemnification agreement with each of its directors. The indemnification agreements require the Company to indemnify the directors and to advance expenses on behalf of such directors to the fullest extent permitted by applicable law, set forth certain exemptions from the Company's indemnification obligations, and establish the procedures by which a director may request and receive indemnification. The agreements are in addition to other rights to which a director may be entitled under the Company's certificate of incorporation, bylaws and applicable law.

The foregoing summary description of the indemnification agreements is not intended to be complete and is qualified in its entirety by the complete text of the form indemnification agreement filed as Exhibit 10.50 to this Form 10-K and incorporated herein by reference.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference from the applicable information set forth in "Executive Officers," "Election of Directors," "Information about the Board of Directors and its Committees," and "Security Ownership of Directors and Executive Officers - Section 16(a) Beneficial Ownership Reporting Requirements" which will be included in our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders to be filed with the SEC, and Part I, Item 1. Business - Additional Information in this Report.

Item 11. Executive Compensation

The information required by this item is incorporated by reference from the applicable information set forth in "Compensation of Executive Officers", "Compensation of Directors" and "2018 Pay Ratio" which will be included in our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders to be filed with the SEC.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference from the applicable information set forth in "Security Ownership of Principal Stockholders and Management" and "Equity Compensation Plan Information" which will be included in our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders to be filed with the SEC.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference from the applicable information set forth in "Other Information - Related Person Transactions" and "Information about the Board of Directors and its Committees" which will be included in our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders to be filed with the SEC.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference from the applicable information set forth in "Other Information - Globalstar's Independent Registered Accounting Firm" which will be included in our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders to be filed with the SEC.

PART IV

Item 15. Exhibits, Financial Statement Schedules

- (a) The following documents are filed as part of this Report:
 - (1) Financial Statements and Report of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm

Consolidated balance sheets at December 31, 2018 and 2017

Consolidated statements of operations for the years ended December 31, 2018, 2017 and 2016

Consolidated statements of comprehensive income (loss) for the years ended December 31, 2018, 2017 and 2016

Consolidated statements of stockholders' equity for the years ended December 31, 2018, 2017 and 2016

Consolidated statements of cash flows for the years ended December 31, 2018, 2017 and 2016

Notes to Consolidated Financial Statements

(2) Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is in the financial statements or notes thereto.

(3) Exhibits

See Exhibit Index

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

GLOBALSTAR, INC.

By: /s/ David B. Kagan

David B. Kagan

Chief Executive Officer

POWER OF ATTORNEY

Date: February 28, 2019

KNOW BY ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints James Monroe III and Rebecca S. Clary, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated as of February 28, 2019.

Signature	Title
/s/ David B. Kagan	Chief Executive Officer
David B. Kagan	(Principal Executive Officer)
/s/ Rebecca S. Clary	Chief Financial Officer
Rebecca S. Clary	(Principal Financial and Accounting Officer)
/s/ James Monroe III	
James Monroe III	Director
/s/ William A. Hasler	
William A. Hasler	Director
/s/ James F. Lynch	
James F. Lynch	Director
/s/ Michael J. Lovett	
Michael J. Lovett	Director
/s/ Keith O. Cowan	
Keith O. Cowan	Director
/s/ Benjamin G. Wolff	
Benjamin G. Wolff	Director
/s/ Timothy E. Taylor	
Timothy E. Taylor	Director

EXHIBIT INDEX

Exhibit Number	Description
2.1*	Agreement and Plan of Merger dated as of April 24, 2018 by and among Globalstar, Inc., GBS Acquisitions, Inc., Thermo Acquisitions, Inc., Stockholders of Thermo Acquisitions, Inc. and Thermo Development, Inc. (Exhibit 2.1 to Form 8-K filed April 25, 2018)
3.1*	Amended and Restated Certificate of Incorporation of Globalstar, Inc. (Exhibit 3.1 to Form 8-K filed September 29, 2009)
3.2*	Amendment #2 to the Amended and Restated Certificate of Incorporation of Globalstar, Inc. (Appendix A to Definitive Information Statement filed June 14, 2013)
3.3*	Amendment #3 to the Amended and Restated Certificate of Incorporation of Globalstar, Inc. (Exhibit 3.1 to Form 10-O filed August 3, 2017)
3.4*	Second Amended and Restated Bylaws of Globalstar, Inc. (Exhibit 3.1 to Form 10-Q filed August 4, 2016)
3.5*	Third Amended and Restated Bylaws of Globalstar, Inc. (Exhibit 3.1 to Form 8-K filed on May 4, 2018)
4.1*	Indenture between Globalstar, Inc. and U.S. Bank, National Association as Trustee dated as of April 15, 2008 (Exhibit 4.1 to Form 8-K filed April 16. 2008)
4.2*	Fourth Supplemental Indenture between Globalstar, Inc. and U.S. Bank, National Association as Trustee dated as of May 20, 2013, including Form of Global 8% Convertible Senior Note due 2028 (Exhibit 4.1 to Form 8-K filed May 20, 2013)
10.1*†	Contract between Globalstar, Inc. and Hughes Network Systems LLC dated May 1, 2008 (Exhibit 10.1 to Form 10-O filed August 11, 2008)
10.2*	Amendment No.2 to Contract between Globalstar, Inc. and Hughes Network Systems LLC effective as of August 28, 2009 (Amendment No. 1 Superseded.) (Exhibit 10.2 to Form 10-O filed November 6, 2009)
10.3*	Amendment No.3 to Contract between Globalstar, Inc. and Hughes Network Systems LLC effective as of September 21, 2009 (Exhibit 10.3 to Form 10-O filed November 6, 2009)
10.4*†	Amendment No.4 to Contract between Globalstar, Inc. and Hughes Network Systems LLC dated as of March 24, 2010 (Exhibit 10.2 to Form 10-O filed May 7, 2010)
10.5* †	Amendment No.5 to Contract between Globalstar, Inc. and Hughes Network Systems LLC dated as of April 5, 2011 (Exhibit 10.24 to Form 10-K filed March 13, 2012)
10.6* †	Amendment No.6 to Contract between Globalstar, Inc. and Hughes Network Systems LLC dated as of November 4, 2011 (Exhibit 10.25 to Form 10-K/A filed June 25, 2012)
10.7 *†	Amendment No. 7 to Contract between Globalstar and Hughes Network Systems LLC dated as of February 1, 2012 (Exhibit 10.1 to Form 10-O filed May 10, 2012)
10.8*†	Letter Agreement dated March 30, 2012 between Globalstar, Inc. and Hughes Network Systems, LLC (Exhibit 10.2 to Form 10-O filed May 10, 2012)
10.9*†	Letter Agreement dated June 26, 2012 between Globalstar, Inc. and Hughes Network Systems, LLC (Exhibit 10.1 to Form 10-O filed August 9, 2012)
10.10*†	Letter Agreement by and between Globalstar, Inc. and Hughes Network Systems, LLC dated September 27, 2012 (Exhibit 10.2 to Form 10-O filed November 14, 2012)
10.11*†	Letter Agreement by and between Globalstar, Inc. and Hughes Network Systems, LLC dated December 20, 2012 (Exhibit 10.30 to Form 10-K filed March 15, 2013)
10.12*†	Amendment No. 9 to Contract between Globalstar and Hughes Network Systems LLC dated as of January 13, 2013 (Exhibit 10.1 to Form 10-O filed May 10, 2013)
10.13*†	Letter Agreement by and between Globalstar, Inc. and Hughes Network Systems, LLC dated March 26, 2013 (Exhibit 10.4 to Form 10-O filed May 10, 2013)
10.14*†	Letter Agreement by and between Globalstar, Inc. and Hughes Network Systems, LLC dated June 28, 2013 (Exhibit 10.2 to Form 10-O filed August 14, 2013)
10.15*	Letter Agreement by and between Globalstar, Inc. and Hughes Network Systems, LLC dated August 7, 2013 (Exhibit 10.8 to Form 10-O filed November 14, 2013)
10.16*†	Amendment No. 10 to Contract between Globalstar and Hughes Network Systems LLC dated as of August 7, 2013 (Exhibit 10.9 to Form 10-O filed November 14, 2013)

- 10.17* Amendment No. 11 to Contract between Globalstar and Hughes Network Systems LLC dated as of December 17, 2013 (Exhibit 10.37 to Form 10-K filed March 11, 2014)
- 10.18*† Letter Agreement by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of May 30, 2014 (Exhibit 10.1 to Form 10-Q filed August 11, 2014)
- 10.19* Letter Agreement regarding equity payment by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of May 30, 2014 (Exhibit 10.2 to Form 10-Q filed August 11, 2014)
- 10.20*† Amendment No.12 to Contract between Globalstar, Inc. and Hughes Network Systems LLC dated as of October 16, 2014 (Exhibit 10.2 to Form 10-Q filed November 6, 2014)
- 10.21*† Amendment No.13 to Contract between Globalstar, Inc. and Hughes Network Systems LLC dated as of July 16, 2015 (Exhibit 10.1 to Form 10-Q filed August 10, 2015)
- Amendment No.14 to Contract between Globalstar, Inc. and Hughes Network Systems LLC dated as of December 10.22† 16, 2016 (Exhibit 10.22 to Form 10-K filed February 23, 2017)
- 10.23* Amendment to Letter Agreement regarding equity payment by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of December 3, 2015 (Exhibit 10.22 to Form 10-K filed February 26, 2016)
- 10.24* Amendment to Letter Agreement regarding equity payment by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of March 7, 2016 (Exhibit 10.1 to Form 10-Q filed May 5, 2016)
- 10.25* Amendment to Letter Agreement regarding equity payment by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of June 14, 2016 (Exhibit 10.1 to Form 10-O filed August 4, 2016)
- 10.26* Amendment to Letter Agreement regarding equity payment by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of September 21, 2016 (Exhibit 10.1 to Form 10-Q filed November 3, 2016)
- 10.27* Amendment to Letter Agreement regarding equity payment by and between Globalstar, Inc. and Hughes Network Systems, LLC dated as of December 6, 2016 (Exhibit 10.27 to Form 10-K filed February 23, 2017)
- 10.28*† Amendment #15 to Contract between Globalstar, Inc. and Hughes Network Systems, LLC dated as of June 1, 2017 (Exhibit 10.1 to Form 10-Q filed August 3, 2017)
- 10.28*† Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated October 1, 2008 (Exhibit 10.1 to Form 10-Q filed November 10, 2008)
- 10.29*† Amendment No. 1 to Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated April 2, 2015 (Exhibit 10.1 to Form 10-O filed May 8, 2015)
- 10.30*† Amendment No.1 to Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated as of December 1, 2008 (Exhibit 10.28 to Form 10-K filed March 12, 2010)
- 10.31* † Amendment No.2 to Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated as of March 30, 2010 (Exhibit 10.3 to Form 10-Q filed May 7, 2010)
- 10.32* † Amendment No.3 to Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated as of December 10, 2010 (Exhibit 10.30 to Form 10-K filed March 31, 2011)
- 10.33*† Amendment No.4 to Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated as of October 31, 2011 (Exhibit 10.30 to Form 10-K filed March 13, 2012)
- 10.34*† Amendment No.5 to Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. dated as of December 20, 2011 (Exhibit 10.31 to Form 10-K filed March 13, 2012)
- 10.35*† Letter Agreement by and between Globalstar, Inc. and Ericsson, Inc. dated as of March 8, 2012 (Exhibit 10.3 to Form 10-Q filed May 10, 2012)
- 10.36*† Letter Agreement by and between Globalstar, Inc. and Ericsson, Inc. dated as of July 23, 2012 (Exhibit 10.2 to Form 10-O filed August 9, 2012)
- 10.37*† Letter Agreement by and between Globalstar, Inc. and Ericsson, Inc. dated as of January 30, 2013 (Exhibit 10.3 to Form 10-Q filed May 10, 2013)
- 10.38*† Letter Agreement by and between Globalstar, Inc. and Ericsson, Inc. dated as of June 20, 2013 (Exhibit 10.1 to Form 10-Q filed August 14, 2013)
- 10.39*† Letter Agreement by and between Globalstar, Inc. and Ericsson, Inc. dated as of September 1, 2013 (Exhibit 10.7 to Form 10-Q filed November 14, 2013)
- 10.40*† Purchase Agreement by and between Globalstar, Inc. and Ericsson Inc. effective as of July 22, 2014 (Exhibit 10.1 to Form 10-Q filed November 6, 2014)

Amendment No.1 to Contract between Globalstar, Inc. and Ericsson Inc. effective as of April 2, 2015 (Exhibit 10.41*† 10.1 to Form 10-Q filed May 8, 2015) Amendment No. 2 to Contract between Globalstar, Inc. and Ericsson Inc. effective as of August 11, 2015 (Exhibit 10.42*† 10.1 to Form 10-Q filed November 5, 2015) Amended and Restated Loan Agreement between Globalstar, Inc., and Thermo Funding Company LLC dated as 10.43* of July 31, 2013 (Exhibit 10.4 to Form 8-K filed August 22, 2013) 10.44* Third Global Amendment and Restatement Agreement dated as of June 30, 2017 between Globalstar, Inc., Thermo Funding Company LLC, BNP Paribas and the other lenders thereto (Exhibit 10.1 to Current Report on Form 8-K filed July 7, 2017) 10.45* Third Amended and Restated Facility Agreement dated as of June 30, 2017 between Globalstar, Inc., Thermo Funding Company LLC, BNP Paribas and the other lenders party thereto (Exhibit 10.2 to Current Report on Form 8-K filed July 7,2017) 10.46* Common Stock Purchase Agreement dated as of June 30, 2017 between Globalstar, Inc. and Thermo Funding II LLC (Exhibit 10.3 to Current Report on Form 8-K filed July 7, 2017) 10.47* Voting Agreement dated as of April 24, 2018 (Exhibit 10.1 to Form 8-K filed on April 25, 2018) 10.48* Termination of Agreement and Plan of Merger dated as of July 31, 2018 (Exhibit 10.1 to Form 8-K filed on August 1, 2018) 10.49* Settlement Agreement dated December 14, 2018 (Exhibit 10.1 to form 8-K filed December 17, 2018) 10.50 Form of Indemnification Agreement between Globalstar, Inc. and its Directors dated February 26, 2019 Executive Compensation Plans and Agreements 10.51* Second Amended and Restated Globalstar, Inc. 2006 Equity Incentive Plan (Appendix A to Definitive Proxy Statement filed April 29, 2016) 10.52* Form of Restricted Stock Units Agreement for Non-U.S. Designated Executives under the Globalstar, Inc. 2006 Equity Incentive Plan (Exhibit 10.2 to Form 10-Q filed August 14, 2007) 10.53* Form of Notice of Grant and Restricted Stock Agreement under the Globalstar, Inc. 2006 Equity Incentive Plan (Exhibit 10.29 to Form 10-K filed March 17, 2008) 10.54* Form of Non-Qualified Stock Option Award Agreement for Members of the Board of Directors under the Globalstar, Inc. 2006 Equity Incentive Plan (Exhibit 10.1 to Form 8-K filed November 20, 2008) Form of Stock Option Award Agreement for use with executive officers (Exhibit 10.45 to Form 10-K filed March 10.55* 31, 2011) 10.56*† 2016 Key Employee Cash Bonus Plan (Exhibit 10.53 to Form 10-K filed February 26, 2016) 10.57*† 2017 Key Employee Cash Bonus Plan (Exhibit 10.59 to Form 10-K filed February 23, 2017) 2018 Key Employee Cash Bonus Plan (Exhibit 10.54 to Form 10-K filed February 23, 2018) 10.58*† 10.59* Letter Agreement with David Kagan dated November 27, 2017 (Exhibit 10.55 to Form 10-K filed February 23, 2018) 10.60 Letter Agreement with David Kagan dated September 4, 2018 21.1 Subsidiaries of Globalstar, Inc. 23.1 Consent of Crowe LLP 24.1 Power of Attorney (included as part of page titled "Signatures") 31.1 Section 302 Certification of Principal Executive Officer of Globalstar, Inc. 31.2 Section 302 Certification of Principal Financial Officer of Globalstar, Inc. Section 906 Certification of Principal Executive Officer of Globalstar, Inc. 32.1 Section 906 Certification of Principal Financial Officer of Globalstar, Inc. 32.2 XBRL Instance Document 101.INS

101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
*	Incorporated by reference.
†	Portions of the exhibit have been omitted pursuant to a request for confidential treatment filed with the Commission. The omitted portions have been filed with the Commission.

Certification of Principal Executive Officer of Globalstar, Inc. Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended

I, David B. Kagan, certify that:

- 1. I have reviewed this annual report on Form 10-K of Globalstar, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report my conclusion about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2019

By: /s/ David B. Kagan

Certification of Principal Financial Officer of Globalstar, Inc. Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended

- I, Rebecca S. Clary, certify that:
- 1. I have reviewed this annual report on Form 10-K of Globalstar, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report my conclusion about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2019

By: /s/ Rebecca S. Clary

Certification of Principal Executive Officer Under Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Globalstar, Inc. (the "Company"), does hereby certify that:

This annual report on Form 10-K for the year ended December 31, 2018 of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2019

By: /s/ David B. Kagan

David B. Kagan

Chief Executive Officer (Principal Executive Officer)

Certification of Principal Financial Officer Under Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Globalstar, Inc. (the "Company"), does hereby certify that:

This annual report on Form 10-K for the year ended December 31, 2018 of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

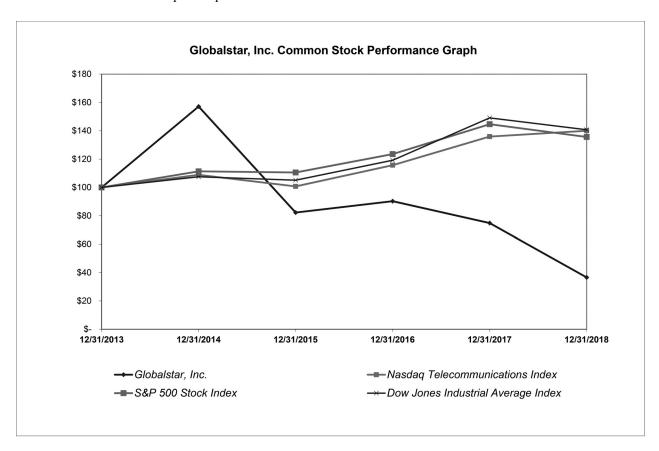
February 28, 2019

By: /s/ Rebecca S. Clary

Rebecca S. Clary
Chief Financial Officer (Principal Financial Officer)

Stock Performance Graph

The following graph shows a comparison from December 31, 2013 through December 31, 2018 of cumulative total return for our Common Stock, the NASDAQ Telecommunications Index, the S&P 500 Stock Index and the Dow Jones Industrial Average Index, assuming \$100 had been invested in each on December 31, 2013. Such returns are based on historical results and are not intended to suggest future performance. The calculation of cumulative total return is based on the change in stock price and assumes reinvestment of dividends for the NASDAQ Telecommunications Index and the Dow Jones Industrial Average Index. We have never paid dividends on our Common Stock and have no present plans to do so.



Executive Office

Globalstar, Inc. 1351 Holiday Square Blvd. Covington, LA 70433 USA (985) 335-1500

Company Home Page

www.globalstar.com

Stockholder Information

For further information about the Company, hard copies of this report, SEC filings, and other published corporate information, please visit the Company's website noted above.

Transfer Agent

Computershare PO BOX 505000 Louisville, KY 40233-5000 1-800-962-4284 www.computershare.com

Independent Auditors

Crowe LLP Oak Brook, IL

Legal Counsel

Taft Stettinius & Hollister LLP Cincinnati, OH

Investor Relations

Kyle Pickens
Vice President, Strategy and
Communications

Board of Directors

James Monroe III

Executive Chairman
of the Board
Thermo Companies

James F. Lynch
Director
Thermo Companies
FiberLight LLC

William A. Hasler Director Ataraxis Biosciences and Rubicon Ltd.

Benjamin G. Wolff Director Sarcos Robotics

Keith O. Cowan Director Cowan Consulting Corporation LLC

Timothy E. Taylor Director Globalstar, Inc. Thermo Companies

Michael J. Lovett

Director

Eagle River Partners LLC

Executive Officers

David B. Kagan
Chief Executive Officer

Rebecca S. Clary Vice President, Chief Financial Officer

L. Barbee Ponder IV General Counsel and Vice President, Regulatory Affairs

Richard S. Roberts

Corporate Secretary

Common Stock

The Company's voting common stock is traded on the NYSE American under the symbol "GSAT." As of April 2, 2019, the Company had 1,450,069,483 voting shares outstanding and 245 holders of record.





1351 HOLIDAY SQUARE BLVD. • COVINGTON, LA 70433

GLOBALSTAR.COM