UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
☒
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2020
OR

☐
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Transition Period from to

Commission File Number 001-33117

GLOBALSTAR, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**41-2116508**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

1351 Holiday Square Blvd.
Covington, Louisiana 70433
(Address of Principal 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	Trading Symbol	Name of exchange on which registered
Common Stock, par value $0.0001 per share	**GSAT**	**NYSE American**

Securities registered pursuant 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 pursuant to Section 13 or Section 15(d) of the Act.
Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every 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 shorter period that the registrant was required to submit such files).
Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Yes ☒ No ☐

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act)

Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates at June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $200.2 million.

As of February 26, 2021, 1,677,878,734 shares of voting common stock were outstanding, and no shares of nonvoting common stock were authorized or 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 2021 Annual Meeting of Stockholders are incorporated by reference in Part III of this Report.

FORM 10-K

For the Fiscal Year Ended December 31, 2020

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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, business interruptions due to natural disasters, unexpected events or public health crises, including viral pandemics such as the COVID-19 coronavirus, 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

Mobile Satellite Services Business

Globalstar, Inc. (“we,” “us” or the “Company”) provides Mobile Satellite Services (“MSS”) including voice and data communications services globally via satellite. We offer these services over our network of in-orbit satellites and our active ground stations (“gateways”), which we refer to collectively as the Globalstar System. In addition to supporting Internet of Things ("IoT") data transmissions in a variety of applications, we provide reliable connectivity 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. By providing wireless communications services across the globe, we meet our customers' increasing desire for connectivity.

Recent Developments: COVID-19

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus (“COVID-19”) a global pandemic. Various levels of governmental agencies and authorities have taken measures to reduce the spread of COVID-19, including “stay at home” orders, social distancing and closures of non-essential businesses. The success of our business depends on our global operations, including the performance of our satellites and ground stations as well as our supply chain and consumer demand, among other things. As a result of COVID-19, we have experienced a reduction in the volume of sales of our subscriber equipment, particularly from our customers that operate in the oil and gas industry, have received requests for service pricing concessions from certain customers, and expect an impact on the ability of certain of our customers to pay outstanding balances. Our results of operations for the year ended December 31, 2020 partially reflect this impact; however, we expect that this trend may continue and the full extent of the impact is unknown. In recent months, some governmental agencies have lifted certain restrictions. However, if customer demand continues to be low, our future equipment sales, subscriber activations and sales margin will be impacted. We have implemented several measures to minimize the impact on our operations and sustain our liquidity position, including:

- Receiving economic relief and support under the Coronavirus Aid, Relief and Economic Security (“CARES”) Act, including a $5.0 million forgivable payroll protection program loan (the "PPP Loan") and the deferral of certain payroll taxes,
- Refocusing internal resources on high-value opportunities, such as working with federal agencies that may require our equipment and services in times of crisis,

- Working with our product manufacturers to ensure we will continue to have sufficient inventory levels on hand to meet consumer demand, and
- Supporting both consumer and commercial customers, particularly those that operate in the retail and oil and gas industries, to adjust pricing where necessary, whether under e-commerce promotions or temporary service pricing concessions.

Satellite Network

Our constellation of Low Earth Orbit ("LEO") satellites includes second-generation satellites and certain first-generation satellites, which are currently being used as in-orbit spares. We also have one on-ground spare second-generation satellite that we may include in a future launch. We designed our satellite network to maximize the probability that at least one satellite is visible from any point on the Earth's surface between the latitudes 70° north and 70° south. 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.

Our goal is to provide service levels and call or message success rates equal to or better than our MSS competitors, so our products and services are attractive to potential customers. We believe that our system outperforms geostationary (“GEO”) satellites used by some of our competitors. GEO satellite signals must travel approximately 42,000 additional miles on average, which introduces considerable delay and signal degradation to GEO calls.

Ground Network

Our satellites communicate with a network of gateways, each of which serves an area of approximately 700,000 to 1,000,000 square miles. 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 provide coverage over most of the Earth's land and human population and continue to evaluate and expand our gateway footprint to optimize coverage. We own and operate the majority of these gateways and the rest are owned by independent gateway operators ("IGOs").

Each of our gateways has multiple antennas that communicate with our satellites and pass communications 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”), a cellular or another wireless network or the internet for data communications including Commercial IoT. In 2019, we signed a contract with MIL-SAT LLC for the procurement and production of new antennas for certain of our gateways around the world, and all antennas have been delivered under the terms of that contract. Although we currently do not have any remaining contractual obligations with MIL-SAT, we expect to purchase additional antennas in the future directly from the manufacturer.

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, localized 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 for lost coverage from a disabled gateway or to handle increased call capacity resulting from surges in demand.

Our ground network includes our ground equipment, which uses patented CDMA technology to permit communication to multiple satellites. Patented receivers in our handsets track the pilot channel and 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 satellite diversity (which maximizes quality) and network capacity as we can reuse the assigned spectrum in every satellite beam in every satellite. In addition, we have developed a proprietary technology for our SPOT and Commercial IoT services. We designed our second-generation ground network to provide our customers with enhanced services featuring speeds up to 72 kbps as well as increased capacity, when combined with our next-generation products. 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").

Communications Products and Services

We currently provide the following communications services:

- two-way voice communication and data transmissions using mobile or fixed devices, including our GSP-1700 phone, 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 X ®, SPOT Gen4™ and SPOT Trace®, that transmit messages and the location of the device ("SPOT");
- 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 IoT products, such as our battery- and solar-powered SmartOne, STX-3 and ST100 ("Commercial IoT"); and
- engineering services to assist certain customers in developing new applications to operate on our network, enhancements to our ground network and other communication services using our MSS and terrestrial spectrum licenses ("Engineering and Other").

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.

As technological advancements are made, 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. We are currently pursuing initiatives that we expect to expand our satellite communications business by effectively leveraging our network capabilities and distribution relationships. Among our current initiatives is the development of a two-way reference design module to expand our Commercial IoT offerings.

Customers

The specialized needs of our global customers span many industries. As of December 31, 2020, we had approximately 745,000 subscribers worldwide, principally within 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 system is able to offer our customers cost-effective communications solutions completely independent of cellular coverage. Although traditional users of wireless telephony and broadband data services have access to these services in developed locations, our customers often operate, travel 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, oil and gas, recreation and personal telecommunications. In recent years, the portion of our customers using Commercial IoT devices has increased significantly. No one customer was responsible for more than 10% of our revenue in 2020, 2019 or 2018.

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 individual customers for remote business continuity, recreational usage, safety, emergency preparedness and 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, which we believe provides superior voice quality when compared to competitors' 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, or subscribers that have upgraded to our Sat-Fi® device, in order to address demand for handsets.

We offer another voice and data solution, Sat-Fi2®, which is the next-generation model of our original Sat-Fi®. Sat-Fi2® is the first product to operate using our second-generation ground infrastructure, resulting in higher data speeds, enhanced applications and improved performance. With Sat-Fi2®, our customers can use their Wi-Fi-enabled smartphones and tablets to send and receive communications via the Globalstar System when traveling beyond cellular coverage. We believe Sat-Fi2® provides fast and affordable mobile satellite data speeds. Through a convenient smartphone app that enables connectivity between Wi-Fi-enabled devices and Sat-Fi® satellite hot spots, subscribers in range of a Sat-Fi2® device can easily send and receive email and SMS messages and make voice calls from their own device at any time.

Fixed Voice and Data Satellite Communications Services and Equipment and Data Modem Services and Equipment

Among other places, we provide fixed voice and data services in rural villages, at remote industrial, commercial and residential sites and on ships at sea. Fixed voice and data satellite communications services are an attractive alternative to mobile satellite communications services in environments where multiple users will access the services within a defined geographic area and cellular or ground phone service is not available. Our fixed voice and data service plans are similar to our mobile voice and data plans and offer similar flexibility.

In addition to data utilization through fixed and mobile services described above, we offer data-only services through Duplex devices with two-way transmission capabilities. Duplex asset-tracking applications enable customers to directly control 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.

Product Distribution

Our sales group is responsible for conducting direct sales with key accounts and for managing indirect agent, dealer and reseller relationships. Our typical dealer is a communications services business-to-business equipment retailer. In addition to buying through our distribution managers, agents, dealers and resellers, customers also place orders through our existing sales force and through our direct e-commerce website.

SPOT Consumer Retail Products

The SPOT product family has initiated approximately 7,500 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 differentiate ourselves from other MSS providers by offering affordable, high-utility mobile satellite products that appeal to both businesses and the mainstream consumer market. We believe that we are the only vertically-integrated mobile satellite company. Our vertical integration results in decreased pre-production costs, greater 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. We continue to innovate this product and have released multiple generations of our SPOT Satellite GPS Messenger to the market. The most recent generations of SPOT devices which we currently sell include SPOT Gen4™ and SPOT X®. Compared to earlier generations of our SPOT Satellite GPS Messenger, SPOT Gen4™ offers enhanced functionality with more tracking features in a new mapping interface and improved product specifications for water resistance. The product also enables users to transmit predefined messages to a specific preprogrammed email address, phone or data device, including requests for assistance and “SOS” messages in the event of an emergency.

SPOT X®, which was launched in May 2018, is our first two-way SPOT Satellite GPS Messenger with keyboard functionality allowing subscribers to send and receive SMS messages and improved tracking and SOS functions. An upgraded version of SPOT X® was launched in September 2019 with enhanced performance and features, including the flexibility to use the SPOT X® device to connect to a smartphone via Bluetooth® wireless technology through the SPOT X® app to send and receive satellite messages.

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 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 anytime movement is detected, 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 Amazon, Bass Pro Shops, Cabela's, Camping World, Gander Outdoors, REI, Sportsman's Warehouse, Academy, and West Marine. 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 IoT One-Way Transmission Products

Commercial IoT service is currently a one-way data service from an IoT device over the Globalstar System that can be used to track and monitor assets. Our subscribers use our Commercial IoT devices for a host of applications: to track assets, such as cargo containers and rail cars; to monitor utility meters; and to monitor oil and gas assets. At the heart of the Commercial IoT service is a demodulator and RF interface, called an appliqué, which is located at a gateway and an application server 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 Commercial IoT service to address demand in 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 realize an efficiency advantage from tracking assets on a single global system as compared to several regional systems.

Satellite Transmitter Modules and Chips

We offer small satellite transmitter modules, such as the STX-3 and ST100, and chips, such as the ASIC, which enable an integrator’s products to access our Commercial IoT network. We have sales arrangements with major resellers to market our IoT services, including some value-added resellers that integrate our modules into their proprietary solutions designed to meet certain specialized niche market applications. The STX3 provides additional opportunities to integrate satellite connectivity into products used for vehicle and asset tracking, remote data reporting and data logger reporting that have limited size requirements. Affordable pricing, low power consumption and its small size make the STX3 a highly efficient device ready for integration in a wide variety of applications. The ST100, or ST100 Satellite Transmitter, is a small, lightweight and low power IoT board with embedded antennas. The ST100 offers a customizable approach to new commercial IoT product innovations and can be used by simply adding power, a mechanical enclosure and configuring the settings within the device firmware. For more advanced technical requirements, third parties can write their own firmware on the ST100 and utilize Globalstar APIs, Bluetooth® wireless technology and the serial connector to expand the use of the board and integrate it with other devices or hardware. The ASIC provides a single chip one-way solution that can be embedded in a customer's owns solution.

SmartOne Asset Managers

We also offer complete products that utilize the STX-3 and ST100 transmitter modules. Our Commercial IoT 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 products to connect existing and new users and accelerate deployment of an expanded Globalstar IoT product suite.

Launched in March 2018, our SmartOne Solar™ device was the first of these 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 over an expected life of up to ten years. These features will result in a longer field life than existing devices. Solar-powered devices also take advantage of our network's ability to support multiple billions of daily transmissions. The SmartOne Solar™ also has unparalleled safety and environmental certifications including ATEX, IECEx, North America (NEC & CEC), IP68/69K, and HERO.

Product Distribution

The reseller channel for Commercial IoT 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 expect that demand for our Commercial IoT products and services will increase as more applications are developed and deployed that utilize our technology.

We are also developing Commercial IoT products that support two-way communications allowing for both tracking and control of assets.

Engineering and Other

We provide engineering services to assist certain customers in developing new applications to operate on our network and to enhance our ground network. These services include hardware and software designs to develop specific applications operating over our network, as well as the installation of gateways and antennas.

In February 2020, we entered into an agreement (i) providing for a potential customer to pay us for non-recurring engineering (NRE) services in connection with the assessment of a potential service utilizing certain of our assets and capacity, and (ii) setting forth the primary terms for the potential development and operation of the service (the “Terms Agreement”). The Terms Agreement does not provide for material payments to us or impose material obligations on us unless, among other things, we and the potential customer have achieved certain technical milestones. The Terms Agreement includes certain binding protective provisions, including an exclusivity provision not affecting current services, access rights related to the affected assets, certain information rights and certain provisions for future financings. The Terms Agreement may be terminated by the customer at any time in its sole discretion.

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.

As of December 31, 2020, we had four IGOs that own gateways in Australia, South Korea, Russia and Turkey. 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. During 2020, we entered into an agreement to acquire the outstanding 51% equity interest in our joint venture in South Korea and expect the acquisition to close in 2021.

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.

Satellite Network

In the United States, the Federal Communications Commission ("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 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 Telecommunications Regulatory Board.

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.

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 our authorization to operate the second-generation satellites, 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 frequency assignments filed on the behalf of Globalstar by the French National Frequencies Agency (“ANFR”), with the ITU in 2009, have been recorded in the Master international Frequency Register ("MIFR"). This recording of the Globalstar frequency assignments in the MIFR provides international recognition of these assignments and facilitates the use of these assignments while the frequency coordination process with the two remaining systems is completed.

During 2020, our French authorizations to provide MSS and operate the gateway in Aussaguel, France were renewed for an additional 10-year term.

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. In August 2017, the FCC modified Globalstar's MSS licenses, granting us authority to provide terrestrial broadband services over that 11.5 MHz portion of our satellite spectrum. Specifically, the FCC modified our space station authorization and our blanket mobile earth station license to permit a terrestrial network using 11.5 MHz of our licensed mobile-satellite service spectrum. We will need to comply with certain conditions in order to provide terrestrial broadband service over this spectrum.

In December 2018, we successfully completed the Third Generation Partnership Project (“3GPP”) standardization process for the 11.5 MHz of spectrum terrestrially authorized by the FCC. The 3GPP designated the band as Band 53. Additionally, in March 2020, we announced that the 3GPP approved the 5G variant of our Band 53, which is known as n53. This new band class provides 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. In February 2021, Qualcomm Technologies announced its new Snapdragon X65 modem-RF System, which includes support for Band n53. By having global 5G band support for n53 in Qualcomm Technologies’ 5G solutions, our potential device ecosystem expands significantly to include the most popular smartphones, laptops, tablets, automated equipment and other IoT modules.

During 2019, we executed a spectrum managers lease with Nokia in order to permit Nokia to utilize Band 53 within its equipment domestically and have such equipment type-certified for sale and deployment.

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 various countries. including Brazil, Canada and South Africa, among others. 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 private LTE networks as well as the densification of cellular networks. 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 distinguishes it from other current and anticipated allocations, and that it is well positioned to balance favorable range, capacity and attenuation characteristics.

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 or 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.

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. 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 services is driven by the declining cost of these services, the diminishing size and lower cost of the devices, 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, ORBCOMM, Inmarsat PLC ("Inmarsat") and Iridium Communications Inc. ("Iridium"), focus more on voice and/or 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 largest global competitors are ORBCOMM, 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.

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 our system. 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 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.

ORBCOMM owns and operates a fleet of low earth orbit satellites. ORBCOMM primarily provides asset tracking, monitoring and control solutions for its customers in the IoT market, which directly compete with our IoT products and services.

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 industry specifications.

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.

Governmental Regulations

Please refer to Item 1A: Risk Factors - "*Risks Related to Government Regulations*" for further discussion of the impact of governmental regulations on our business.

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 fuels 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.

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 and various other countries. In 2020, approximately 28% 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 2021 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 decided to allow some previously granted foreign patents to lapse based on (a) the relative 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 “First Lien Facility Agreement”) and second lien credit facility agreement (the "Second Lien Facility Agreement").

Human Capital

As of December 31, 2020, we had 346 employees in twelve countries around the world; 23 of our employees were located in Brazil and subject to collective bargaining agreements. We consider our relationship with our employees to be good.

Our compensation and benefit packages are designed to attract and retain employees and were developed using market research. We attract employees through various platforms, such as online job portals, in-person job fairs, local universities and employee referrals. Salaries are competitive and based on job position, physical location, experience and skills. In addition to base salary, certain employees participate in longer-term incentive programs, which includes awards of stock-based compensation. Our benefits packages include, but are not limited to, health insurance, a retirement plan, an employee stock purchase plan, flexible spending accounts, life and accidental injury insurance, long- and short-term disability, and paid time off for holidays, vacation, sick time and parental leave.

We also encourage training and development through Globalstar University, which is an online platform that hosts a variety of training programs ranging from leadership and management programs to technical, on the job training. Employee engagement is also important for us, and includes an interactive wellness program, corporate communications and employee surveys. Our commitment to diversity and inclusion is part of our worldwide culture, which our employees confirmed in our most recent employee survey with "Diversity and Inclusion" being one of the highest rated culture categories.

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 usage-based 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 sales are influenced by outdoor and leisure activity opportunities, as well as our promotional efforts.

Services and Equipment

Sales of services accounted for approximately 88%, 86% and 85% of our total revenues for 2020, 2019, and 2018, respectively. We also sell the related voice and data equipment to our customers, which accounted for approximately 12%, 14% and 15% of our total revenues for 2020, 2019, and 2018, 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 on our website at *www.globalstar.com* as soon as reasonably practical after we electronically file such material with, or furnish it to, the SEC. 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 effect of an epidemic or pandemic, including the current COVID-19 pandemic, could have an adverse impact on our operations and the operations of our customers and may have a material adverse impact on our financial condition and results of operations.

An epidemic or pandemic could significantly disrupt our operations, including, but not limited to, our workforce, supply chain, regulatory processes and market demand of our products. An epidemic or pandemic could also significantly impact our customers, including their demand for and ability to pay for our services and equipment.

In March 2020, the World Health Organization declared the outbreak of COVID-19 a global pandemic. International, federal, state and local governments have taken measures to combat this pandemic, including “stay at home” orders, social distancing and closures of non-essential businesses.

We are currently experiencing a reduction in sales of our subscriber equipment, which could result in fewer subscriber activations in future periods, and challenges in the collection of outstanding receivables from certain our customers, specifically those concentrated in the oil and gas and retail industries. These factors may negatively impact our results of operations and our ability to maintain compliance with our debt covenants.

We source our products from both domestic and foreign contract manufacturers, with the largest concentration in China. Policies were put in place in China to reduce the transmission of COVID-19, which may impact the availability of labor at our manufacturing facility as well as the interruption of components and products moving through our supply chain. If facilities close or produce low volume due to COVID-19, we may have difficulty sourcing products to sell in the future and may incur additional costs and lost revenue.

The extent to which COVID-19 could continue to impact our operations and financial condition will depend on future developments that are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of the virus and the actions to contain its impact. We are not able at this time to estimate the full impact of COVID-19 on our financial or operational results, but the impact could be material. We continue to monitor our ability to remain in compliance with financial covenants over the next twelve months. If we are not able to maintain compliance, we may need to cure the noncompliance with one or more Equity Cure Contributions or seek a waiver of the affected covenants. There is no assurance that we will be able to do this successfully, and if we do not, our lenders would be able to exercise their remedies under the First Lien Facility Agreement, including accelerating maturity of all our obligations under the First Lien Facility Agreement.

Further, the COVID-19 pandemic may also affect our operating and financial results in a manner that is not presently known to us or that we currently do not expect to present significant risks to our operations or financial results.

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 relying on 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.

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.

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. Anomalies may occur, for reasons 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 if one of these anomalies occurs.

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.

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.

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 our 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 centers 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 each satellite, including:

- the amount of propellant used in maintaining the satellite's orbital location or relocating the satellite to a new orbital location (and, for a newly-launched satellite, the amount of propellant used during orbit raising following launch);
- the durability and quality of its construction;
- the performance of its components;
- hazards and 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 be shorter than originally anticipated. Further, it is possible that the total available payload capacity of a satellite 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 revenue, the recognition of an impairment loss and an acceleration of capital expenditures. The potential impact on our revenue from a reduction in the orbital life of one or more satellites may vary depending on the satellite's orbital location as well as the type of device and service a customer is using.

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

Demand for wireless communication services may not grow, or may decrease, 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, could exert downward pressure on prices, or both. This, in turn, could decrease our revenue and profitability and adversely affect our ability to increase our revenue and profitability over time.

We plan to introduce new products and services that work over our network as well as 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 we will grow our subscriber base. If we are not able to do so, it may adversely impact our business prospects.

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 products and services;
- our ability to develop and deploy innovative network management techniques to permit mobile devices to transition between satellite and terrestrial modes;
- 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;
- 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.

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, flexibility, efficiency or capabilities, as well as continuing improvements in terrestrial wireless technologies. We must continue to keep up with technological changes and remain competitive. Customer acceptance of the services and products that we offer will continually be affected by the technology in our product and service offerings relative to competitive offerings. New technologies may be protected by patents and therefore may not be available to us. We expect to face competition 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 our hardware due to a limited number of 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, it could harm our ability to provide our services and generate revenue.

Our business is capital intensive. 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 longer-term 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 for our losses 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.

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 base our business plan 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. Our proprietary 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 costs.

We license much of the software we require to support critical gateway operations from third parties. This software was developed or customized specifically for our use. We 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 products and services. We 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 cease to support and service our software, or our licenses are no longer 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. This might require us to obtain substitute technology with lower quality or performance standards or at a greater cost.

Others may claim that our products violate their patent or intellectual property rights, which could be costly and disruptive to us.

We operate in an industry fraught with significant intellectual property litigation. Intellectual property infringement claims or litigation may be brought against us. Defending intellectual property suits is both costly and time-consuming and, even if ultimately successful, 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.

Lack of availability of components from the electronics industry, required in our retail products, gateways and 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, gateways and satellites, could be subject to disruptions, 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 Brazil, Central America, Argentina and Africa. Developing countries are more likely than industrialized countries to experience market, currency and interest rate fluctuations and high 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.

Conducting operations outside the United States involves numerous special risks and expanding our international operations would 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;
- unavailability of or difficulties in establishing relationships with distributors;
- significant investments, including the development and deployment of gateways in countries that require them 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 ("FCPA"), UK Bribery Act, sanctions laws and export controls;
- exposure to varying legal standards in other jurisdictions, including intellectual property protection 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 controls.

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 28% and 31% of our total revenue was to customers primarily located in Canada, Europe, Central America, and South America during 2020 and 2019, respectively. Our results of operations for 2020 and 2019 included net losses of approximately $0.7 million and net gains of $0.1 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, other restrictions, liabilities and exposure to penalties 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, 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. They 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, joint venture partners, independent agents, vendors, customers or subscribers have not engaged and will not engage in conduct for which we may be held responsible. We cannot 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 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 and European Union are important markets to our business. The uncertainty surrounding the United Kingdom's decision 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 UK 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 ("Brexit"). The UK withdrew from the EU on January 31, 2020. Effective January 1, 2021, the EU and UK entered into the Trade and Cooperation Agreement regarding trade policies and other political and strategic issues.

The future consequences of Brexit are unknown at this time, but Brexit 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 at least four other MSS operators providing services similar to ours on a global or regional basis: Iridium, Thuraya, Inmarsat and ORBCOMM Inc. 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 competitive pricing strategies. We also face competition with respect to network coverage and market share in specialized industries, such as maritime and governmental.

Other providers of satellite-based products could introduce their own products similar to our SPOT, Commercial IoT or Duplex products, which may materially adversely affect our business plan and sales volume. In addition, we may face competition from new competitors or new technologies. Many companies target the same customers, and we may not be able to successfully retain our existing customers or attract new customers. As a result, we 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. They provide the same general types of services and products that we provide through our satellite-based system. Many of these companies have greater resources, more 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 land-based communication service providers.

Although satellite communications services and ground-based communications services are not identical, the two compete in similar markets with similar services. Consumers may perceive cellular voice communication products and services as cheaper 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) also received 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 significant 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, 2020, our current sources of liquidity include cash on hand ($13.3 million), restricted cash ($3.6 million) and future cash flows from operations. We also have non-current restricted cash ($51.1 million), which consists primarily of a debt service reserve account, which is pledged to secure all of our obligations under the First Lien Facility Agreement. This account will be used towards the final scheduled principal payment due upon maturity. Our operating expenses for the twelve-month period ended December 31, 2020 were $187.7 million. Our short-term and long-term liquidity requirements include primarily paying our debt service obligations and funding our operating costs. We cannot provide assurance that we will not experience a liquidity shortfall in the short or long-term.

As of December 31, 2020, the principal balance of our debt obligations was $423.9 million, consisting of $187.0 million under the First Lien Facility Agreement, $230.6 million under the Second Lien Facility Agreement, $1.4 million under the 8.00% Convertible Senior Notes Issued in 2013 (the "2013 8.00% Notes") and $5.0 million under the PPP Loan. Our significant indebtedness could have several consequences. It could increase our vulnerability to adverse economic, industry or competitive developments by dictating that a substantial portion of cash flow from operations be dedicated to the payment of principal and interest on our indebtedness and therefore reducing our ability to use our cash flow to fund our operations, capital expenditures, return of capital to shareholders, and future business opportunities. Our indebtedness could restrict us from making strategic acquisitions by limiting our ability to obtain additional financing for working capital, capital expenditures, product development, debt service requirements, acquisitions and general corporate purposes. Our indebtedness could restrict us from paying dividends to our shareholders. It could limit our flexibility in planning for, or reacting to, changes in our business or industry, placing us at a competitive disadvantage compared to 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 current debt agreements place limits on our ability to incur additional debt, in the future we may incur additional debt which could further exacerbate these risks.

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

Our First Lien Facility Agreement and Second Lien Facility Agreement contain a number of significant restrictions and covenants. See Note 6: 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, including financial and non-financial covenants in our First Lien Facility Agreement and Second Lien Facility Agreement, 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 favorable business opportunities. Our facility agreements include a limitation on expenditures in connection with spectrum rights, which may prohibit us from making certain expenditures that we consider accretive to our business and would otherwise make. 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 First Lien Facility Agreement or Second Lien Facility Agreement would permit the lenders to accelerate the indebtedness under these agreements. That acceleration would permit holders of our obligations under other agreements that contain cross-acceleration provisions to accelerate our obligations to them. See Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – *Liquidity and Capital Resources* of this Report for further discussion.

Our networks and those of our third-party service providers and customers may be vulnerable to unauthorized or unlawful access. Our use of personal information could give rise to costs and liabilities arising from developing data privacy laws.

Our network and those of our third-party service providers and our customers may be vulnerable to unauthorized access, attacks, malware, data breaches and other security problems. Persons who circumvent security measures could wrongfully obtain or use information from such networks or cause interruptions, delays or malfunctions in our operations. A data breach or network disruption 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 compromised 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 increasingly becoming the subject of extensive legislation and regulations 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 ever evolving. These laws may be interpreted and applied differently 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 or change our business practices. Our services are accessible in many foreign jurisdictions, and 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, services or existing security and privacy procedures in order to comply with new or expanded regulations across numerous jurisdictions. In addition, we could face liability to end users alleging 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 customers, which could materially impact our results of operations and cash flows.

Due to fluctuations in the insurance market, we may be unable to obtain and maintain our insurance coverages, and the insurance we obtain may not cover all risks we undertake. 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. Rising premiums on insurance policies could increase our costs. 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 create an event of default under our debt agreements. Our insurance may not adequately cover losses incurred arising from claims brought against us or otherwise, which could be material.

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 caused injury to persons or damage to property. If any of our products prove to be defective, we may need to recall and 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. 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 investigate potential quality issues as part of our ongoing effort to deliver quality products to our customers.

Because consumers may use SPOT products and services in isolated or dangerous locations, users of our devices who suffer injury or death may seek to assert claims against us alleging failure of the device to facilitate timely emergency response. We cannot assure investors that any legal disclaimers will be effective or insurance coverage will be sufficient to protect us from material losses.

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 2021. 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 or interference with the use of property.

Our in-orbit insurance does not cover losses that might arise as a result of a satellite failure, other operational problems affecting our constellation, or damage resulting from de-orbiting a satellite. As a result, a failure of one or more of our satellites or the occurrence of equipment failures, collision damage, or other related problems 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.

Our ability to maneuver our satellites to avoid potential collisions with space debris 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. Some space debris is too small to be tracked, and therefore its orbital location is completely unknown. Debris that cannot be tracked is still large enough to potentially cause severe damage to or 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.

We operate in many tax jurisdictions, and 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. Our tax obligations are subject to review and possible challenge by the taxing authorities of these jurisdictions, such as the ongoing income tax return audit being conducted by the Canada Revenue Agency of our Canadian subsidiary. If taxing authorities were to successfully challenge our current tax positions, or if we changed the manner in which we conduct certain activities, we could become subject to material, unanticipated tax liabilities. We may also become subject to additional tax liabilities as a result of changes to tax laws in any of our applicable tax jurisdictions, which in certain circumstances could have a retroactive effect.

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 of their obligations to us. Some of our customers may be highly leveraged or 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, credit is less available and available on more restrictive terms. 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.

To illustrate, our Commercial IoT business is heavily concentrated in the oil and gas industry and was negatively impacted by the downturn in this industry in recent years, most specifically resulting from the COVID-19 pandemic. As an example, our largest customer for the last three years is a reseller to oil and gas companies. A high-volume customer not performing its trade obligations to us could adversely affect our cash flow and financial condition. Concentrations of customers in certain industries may further increase trade credit risk to our business if certain experience a similar economic downturn.

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

Our obligations under our First Lien Facility Agreement bear interest at a variable rate. As a result, an increase in interest rates could result in a substantial increase in interest expense.

Additionally, in July 2017, the Financial Conduct Authority in the United Kingdom ("FCA") announced that the Libor rate would be phased out and financial institutions would no longer need to make Libor submissions after 2021. Our First Lien 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.

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

Natural disasters could damage or destroy our ground stations and disrupt service to our customers. In addition, the collateral effects of disasters such as flooding may impair, damage or destroy our ground equipment. If a natural disaster were to impair, damage or destroy any of our ground facilities, we may be rendered unable to provide service to our customers in the affected area, either temporarily or indefinitely. 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, 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, and may be in the future, subject to investigations by regulators and governmental agencies, including 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 their 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 capital markets.

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 and other telecommunications devices that have transmitting antennas. Lawsuits have been filed against participants in the wireless communications 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. Courts or governmental agencies could determine that we do not comply with applicable standards for radio frequency emissions and power or that there is valid scientific evidence that use of our devices poses a health risk. 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.

Furthermore, 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 that will impact our future success.

Our MSS system is subject to significant regulation by the FCC in the United States, by the ARCEP and ANFR in France and in other foreign jurisdictions where we do business by similar authorities. Additionally, the availability of globally harmonized spectrum on which our MSS system depends is managed by the ITU. The rules and regulations of these regulatory authorities are subject to change and may not continue to permit our operations as currently conducted or as we plan to conduct them. Further, certain regulatory authorities may decide to allow additional uses within our ITU-allocation of spectrum that may be incompatible with our continued provision of MSS.

Failure to operate our satellites, ground stations, mobile earth terminals or other facilities 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 jurisdictions 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.

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, and may again be volatile in the future, 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 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 are 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 our licensed MSS spectrum to provide terrestrial wireless services, including mobile broadband applications, around the world. Our MSS licenses, including our terrestrial authority, are valid through various specified terms, which we will seek to renew. In addition, we will need to comply with certain conditions in order to provide terrestrial broadband service under our 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 have entered into agreements with multiple third parties to develop an ecosystem of radios and devices using our terrestrially authorized spectrum. These third parties intend to use our terrestrially authorized spectrum to offer wireless services to their respective customers. Our anticipated future revenues and profitability is dependent upon the commercial success of their offerings.

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.

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.

The FCC and other regulatory jurisdictions internationally are permitting expanded unlicensed use of the 5 GHz band including within our C-band Forward Link (earth station to satellite), which operates at 5091-5250 Mhz which 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 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 meet prescribed milestones. The FCC licenses are also subject to renewal and 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 any FCC licenses we hold, or if we fail to satisfy any of the conditions of our respective FCC licenses, then we may not be able to continue to provide mobile satellite communications services, which would have a material adverse effect on or business and operations.

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 subject to the continued regulatory jurisdiction of, the French Ministry in charge of Space and the 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 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 MESR, 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, then 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.

Furthermore, if we operate in any country without a valid license, we could face regulatory fines and criminal sanctions. We hold certain licenses in each country where our ground infrastructure is 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.

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

We source our products from both domestic and foreign contract manufacturers, the largest concentration of which being in China. The adoption of regulations related to the importation of products, 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, including several of our products, resulting in lower gross margin on impacted products. The current tariffs could increase or expand to additional categories of products not currently covered. We cannot predict how any future tariffs or other trade restrictions will impact our business, but further trade restrictions on our products may result in further reductions to gross margin.

Additionally, delays in goods clearing customs 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 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 and 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 it were delisted, 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.

Restrictive covenants in our First Lien Facility Agreement do not allow us to pay dividends on our common stock for the foreseeable future, which may affect the market for our shares.

We do not expect to pay cash dividends on our common stock. Our First Lien 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. Our inability to pay dividends may limit the market for our shares.

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 changes in the value of terrestrial spectrum;
- 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 further develop or persist. 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 and 100 million shares of preferred stock. As of December 31, 2020, approximately 1.7 billion shares of common stock were issued and outstanding. As of December 31, 2020, there were 321.1 million shares available for future issuance (of which 100 million are designated as preferred), of which approximately 4.2 million shares were contingently issuable upon the exercise of stock options, the conversion of convertible notes and the vesting of restricted stock awards. We have issued and expect to issue additional shares of common stock upon the exercise of the warrants issued with our Second Lien Facility Agreement. As of December 31, 2020, 115.0 million warrants were outstanding and not reflected in the 4.2 million shares contingently issuable as they were out of the money. We may issue additional shares of our common stock or other securities that are convertible into, or exercisable for, common stock for raising capital or other business purposes. Future sales of substantial amounts of common stock, or the perception that such sales could occur, may 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, priorities and liquidation premiums and have preferential voting rights to those held by the 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, debt agreements 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, amended and restated bylaws and our debt agreements 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 fact that if Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, our directors will be able to be removed for cause only with the affirmative vote of 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 First Lien Facility Agreement and Second Lien 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; 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 our stockholders to take certain 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, 2020, Thermo owned approximately 62% of our outstanding common stock; additionally, Thermo owns warrants that may be converted into additional shares of common stock. We have depended substantially on Thermo to provide capital to finance our business. Although 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.

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, 2020, our principal headquarters are located in Covington, Louisiana. 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	69,365	Corporate Offices	Leased
Milpitas, California	USA	12,375	Satellite and Ground Control Center	Leased
Sebring, Florida	USA	12,375	Gateway	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
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	Owned
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
Bosque Alegre, Argentina	Argentina	862	Gateway	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 agents under our First Lien Facility Agreement and Second Lien 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.

During 2020, we accepted an offer for the sale of our property in Nicaragua and anticipate that this sale will close in 2021. Additionally, as previously discussed, during 2020 we signed an agreement for the acquisition of the remaining ownership of our IGO in South Korea which we expect will close in 2021. As of December 31, 2020, we have executed additional agreements for new gateway locations that are expected to commence during 2021. We intend to further expand the number ground stations we operate globally.

Item 3. Legal Proceedings

For a description of our material legal and regulatory proceedings and settlements, see Note 9: Commitments and 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 26, 2021, 1,677,878,734 shares of our common stock were outstanding, held by 203 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 First Lien Facility Agreement and Second Lien Facility Agreement prohibit 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 6: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion.

Item 6. Selected Financial Data

Omitted pursuant to recent amendments to Regulation S-K.

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 long-term, high-value customers. We calculate ARPU separately for each type of our subscriber-driven revenue, including Duplex, Commercial IoT and SPOT;
- 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, 2020 and 2019

Our results of operations for the twelve months ended December 31, 2020 were impacted by COVID-19. While we cannot predict the full extent or duration of the future impact of COVID-19, certain trends or uncertainties related to COVID-19 that impact revenue or expense items are discussed below.

Revenue:

Our revenue is categorized as service revenue and equipment revenue. We provide services to customers using technology from our satellite and ground network. Equipment revenue is generated from the sale of devices that work over our network. During the twelve months ended December 31, 2020, total revenue decreased $3.2 million to $128.5 million from $131.7 million in 2019. This variance was due primarily to an out-of-period adjustment, which increased Duplex service revenue by $3.9 million during 2019, related to a change in the calculation of the estimated impact from the initial adoption of ASC 606. See below for a further discussion of the fluctuation in revenue.

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

	Year Ended December 31, 2020		Year Ended December 31, 2019	
	Revenue	% of Total Revenue	Revenue	% of Total Revenue
Service Revenue:				
Duplex [1]	$ 33,878	27 %	$ 39,794	31 %
SPOT	46,417	36 %	50,461	40 %
Commercial IoT	17,174	13 %	16,972	13 %
Engineering and Other	15,722	12 %	2,274	1 %
Total Service Revenue	$ 113,191	88 %	$ 109,501	85 %

[1] As previously disclosed, we recorded an out-of-period adjustment of $3.9 million during 2019 as a result of a change in the estimated impact of ASC 606. This adjustment, which increased Duplex service revenue, is excluded from Duplex service revenue in the table above. The percentages of total revenue calculations also exclude this adjustment.

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

	Year Ended December 31, 2020		Year Ended December 31, 2019	
	Revenue	% of Total Revenue	Revenue	% of Total Revenue
Equipment Revenue:				
Duplex	$ 1,883	1 %	$ 1,325	2 %
SPOT	8,176	7 %	7,617	6 %
Commercial IoT	5,140	4 %	9,300	7 %
Other	97	— %	90	— %
Total Equipment Revenue	$ 15,296	12 %	$ 18,332	15 %

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

	December 31, 2020	December 31, 2019
Average number of subscribers for the year ended:		
Duplex	50,116	56,856
SPOT	267,816	281,584
Commercial IoT	414,452	399,960
IGO and Other	27,264	27,481
Total	759,648	765,881
ARPU (monthly):		
Duplex [1]	$ 56.33	$ 58.33
SPOT	14.44	14.93
Commercial IoT	3.45	3.54

[1] As previously disclosed, we recorded an out-of-period adjustment of $3.9 million during 2019 as a result of a change in the estimated impact of ASC 606. This adjustment, which increased Duplex service revenue, is excluded from Duplex ARPU in the table above. When the out-of-period adjustment is included in the calculation, ARPU for the twelve months ended December 31, 2019 is $64.02.

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

During the twelve months ended December 31, 2020, gross Duplex and SPOT subscriber additions increased 1% and 12%, respectively. The increase in Duplex gross subscriber additions from 2019 to 2020 was driven primarily by activations of Sat-Fi2® due to increased demand as we launched an improved version in September 2019; fewer activations from legacy devices partially offset this increase. Also, lower service plan prices continue to drive gross Duplex activations. SPOT gross subscriber activations increased from 2019 to 2020 driven by a higher volume of unit sales, particularly of our SPOT X® device as well as SPOT Gen4™, our refreshed SPOT Satellite GPS Messenger launched in 2020. We are also seeing changes in consumer behavior resulting from COVID-19, driving more customers to purchase our SPOT products for outdoor recreational activities. Because our Commercial IoT subscribers are able to activate and deactivate their units several times during the year, gross Commercial IoT 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.

Engineering and other service revenue includes revenue generated primarily from certain governmental and engineering service contracts which are not subscriber driven. Accordingly, we do not present ARPU for engineering and other service revenue in the table above.

Service Revenue

Excluding the out-of-period adjustment discussed above, Duplex service revenue decreased 15% in 2020 due primarily to a decline in average subscribers and ARPU of 12% and 3%, respectively. The decrease in average subscribers was driven by normal churn in the subscriber base exceeding gross activations over the last twelve months. The decrease in ARPU was driven primarily by lower priced service plans and promotional pricing in place during 2020, as well as unfavorable exchange rate movements for various currencies.

SPOT service revenue decreased 8% in 2020 due to lower ARPU and average subscribers. The 5% decrease in ARPU was due primarily to lower priced service plans introduced to new subscribers in mid-2019. The 3% decrease in average subscribers (after adjusting for non-revenue-producing subscribers previously in the base) was due to elevated churn experienced during 2020, particularly in the months following the start of the COVID-19 pandemic. Although we had a record number of subscriber activations during 2020, churn more than offset these gross additions.

Commercial IoT service revenue increased 1% in 2020 due to a 3% increase in average subscribers, offset partially by a 2% decrease in ARPU. Average subscribers were higher during 2020 compared to 2019 despite end of period subscribers declining from 421,000 at December 31, 2019 to 408,000 at December 31, 2020 following higher churn from the impact of COVID-19. The decrease in ARPU was due to the impact of unfavorable exchange rate movements, specifically the strengthening of the U.S. dollar relative to the Brazilian real.

Engineering and other service revenue increased $13.4 million in 2020. This increase was driven primarily by a higher volume of engineering services contracts during 2020, including the completion of certain milestones associated with the contract previously discussed, which generated $10.0 million of revenue during 2020. Additionally, in the fourth quarter of 2020, we recognized $2.9 million of revenue associated with a contract that was executed in 2007 for the construction of a gateway in Nigeria, upon its termination due to lack of performance by the partner, and our performance of all obligations in accordance with the terms of the contract. These remaining contract proceeds were previously held in non-current deferred revenue.

Subscriber Equipment Sales

Revenue from Duplex equipment sales increased $0.6 million, or 42%, in 2020. This increase in revenue was driven primarily by sales of our second-generation Duplex devices launched in the second half of 2019; these units are sold at higher prices compared to our first generation devices. Additionally, sales of our GSP-1700 phones also increased year over year. The vast majority of our device sales during the past two years were of our first-generation phones and accessories. We are evaluating the profitability of our second-generation devices relative to our other product and service offerings and the cost to maintain our second-generation ground infrastructure and technology. While we believe that our second-generation products could contribute meaningfully to our future Duplex revenue, our past financial results are an important component of our overall profitability analysis.

Revenue from SPOT equipment sales increased $0.6 million, or 7%, in 2020. This increase in revenue during 2020 was driven by a higher sales volume of SPOT X® and SPOT Gen4™, which is our refreshed SPOT Satellite GPS Messenger launched in August 2020. Included in our SPOT Gen4™ sales were 8,500 units sold to Battlbox, a subscription box service, in December 2020. We expect to see an increase in gross subscriber activations during 2021 following distribution of these boxes to Battlbox subscribers. Offsetting the increase in volume were lower component part sales of $0.8 million. We occasionally sell component parts to our equipment manufacturer to use in final products; these sales fluctuate based on the volume and price of parts that we directly source for the production of our equipment. Compared to 2019, we sold fewer component parts to our equipment manufacturer during 2020.

Revenue from Commercial IoT equipment sales decreased $4.2 million, or 45%, in 2020. This decrease in revenue resulted from a decrease in demand following the start of the COVID-19 pandemic. We have experienced lower demand particularly from our customers operating in the oil and gas industry. Offsetting this decline were sales of our recently-launched ST100, a one-way satellite transmitter IoT board. Numerous resellers are currently conducting trials with this device and we expect additional sales in 2021.

Operating Expenses:

Total operating expenses decreased 4% to $187.7 million in 2020 from $195.8 million in 2019. Lower cost of services, cost of subscriber equipment sales, and marketing, general and administrative costs primarily contributed to the decrease in total operating expenses. The main drivers of the variance in operating expenses are explained in further detail below.

Cost of Services

Cost of services decreased $2.7 million, or 7%, to $34.8 million in 2020 from $37.5 million in 2019. The decrease in cost of services during 2020 was driven primarily by 1) lower maintenance costs of $1.3 million resulting from revisions to contract terms with certain vendors for gateway and software maintenance and 2) lower research and development costs of $1.1 million driven by the timing of new product development. Other smaller items, such as lower travel costs and costs to support our IGOs also contributed to the remaining variance.

Cost of Subscriber Equipment Sales

Cost of subscriber equipment sales decreased by $2.5 million, or 16%, to $13.3 million in 2020 from $15.8 million in 2019. This decrease is generally consistent with the decline in total revenue from subscriber equipment sales, particularly driven by the decrease in Commercial IoT equipment, as explained above.

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

During 2020, we wrote down the carrying value of inventory by $0.7 million following our decision to discontinue production of a second-generation Duplex device, as well as an evaluation of excess or obsolete inventory related to end of life products and technology. During 2019, we wrote down the value of inventory by $0.4 million after adjusting for changes in the net realizable value of gateway spare parts due to excess.

Marketing, General and Administrative

Marketing, general and administrative expenses ("MG&A") decreased $3.5 million, or 8%, to $41.7 million in 2020 from $45.2 million in 2019. MG&A expense was lower in 2020 due in part to the impact of COVID-19, including lower subscriber acquisition costs (such as advertising and trade shows) of $1.8 million and lower travel costs of $1.0 million. Other smaller items, such as personnel costs and credit losses also reduced MGA expense during 2020. Offsetting these decreases were higher professional and legal fees related to strategic opportunities of $2.3 million.

Additionally, during 2019, we wrote off $3.1 million of financing costs associated with our efforts to refinance our debt obligations. This write-off was recorded following our decision to pursue an amendment to our existing First Lien Facility Agreement instead of issuing new first lien debt.

Reduction in the Value of Long-Lived Assets

During 2019, we recorded a reduction in the carrying value of long-lived assets of $1.1 million resulting from the change in classification from held and used to held for sale of our former gateway location in Nicaragua. We reduced the carrying value to the lower of cost or fair value less estimated cost to sell during the fourth quarter of 2019. During the fourth quarter of 2020, we signed a contract for the sale of this property; the final selling price (net of estimated cost to sell) is $0.3 million and, as a result, the Company recorded an additional impairment totaling $0.2 million during 2020. Additionally, during the fourth quarter of 2020, we wrote down $0.2 million related to the ground portion of construction in progress for one of our gateways resulting from an analysis made over these balances.

Depreciation, Amortization and Accretion

Depreciation, amortization, and accretion expense increased $1.0 million to $96.8 million in 2020 compared to $95.8 million in 2019. This increase was due primarily to placing into service our new billing system implemented in 2020.

Other (Expense) Income:

Interest Income and Expense

Interest income and expense, net, decreased $14.1 million to expense of $48.4 million for 2020 compared to expense of $62.5 million for 2019. This decrease was driven by lower gross interest costs totaling $14.7 million as well as an increase to capitalized interest of $0.8 million (which decreases interest expense). Interest income and expense, net, was also impacted by a decrease in interest income totaling $1.4 million.

Gross interest costs were impacted by lower interest associated with the First Lien Facility Agreement, the Loan Agreement with Thermo, and the June 2019 Subordinated Loan Agreement; these items were offset by higher interest on the Second Lien Facility Agreement that we entered into in November 2019. Lower interest costs for the First Lien Facility Agreement were due to the modification of the First Lien Facility Agreement in November 2019, which reduced the principal balance outstanding and the balance of deferred financing costs (resulting in lower amortization of deferred financing costs), as well as a decrease in the interest rate driven by a reduction in LIBOR. Lower interest costs for the Loan Agreement with Thermo were driven by Thermo's conversion of the entire principal balance outstanding under the Loan Agreement in February 2020. Lower interest costs for the Subordinated Loan Agreement are due to the full repayment of this loan in November 2019.

Interest costs associated with the First Lien Facility Agreement decreased $24.2 million (including $11.7 million of amortization of deferred financing costs), interest costs associated with the Loan Agreement with Thermo decreased $16.6 million (including $3.4 million of accretion of debt discount) and interest costs associated with the Subordinated Loan Agreement decreased $4.5 million (including $0.5 million of amortization of deferred financing costs). These decreases were offset by $30.6 million of interest (including $4.0 million of accretion of debt discount and amortization of deferred financing costs) associated with the Second Lien Facility Agreement.

Derivative Gain

We recorded derivative gains of $2.9 million and $145.1 million in 2020 and 2019, 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. The gains recorded during 2020 were primarily impacted by fluctuations in the discount yield used in the valuation of the embedded derivative associated with our Second Lien Facility Agreement. The gains recorded during 2019 were impacted primarily by the assumed probability of conversion of the Loan Agreement with Thermo, which occurred in February 2020, and decreased the value of the associated derivative liability. See Note 8: Fair Value Measurements to our Consolidated Financial Statements for further discussion of the computation of the fair value of our derivatives.

Foreign Currency (Loss) Gain

Foreign currency (loss) gain fluctuated by $0.8 million to a loss of $0.7 million in 2020 from a gain of $0.1 million in 2019. Changes in foreign currency gains and losses are driven by the significant financial statement items we have denominated in various currencies. The strengthening of the U.S. dollar relative to the Brazilian real unfavorably impacted our consolidated statement of operations $4.0 million; this unfavorable impact was partially offset by the strengthening of the Canadian dollar and the Euro relative to the U.S. dollar, $1.3 million and $1.7 million, respectively. Other smaller items contributed to the remaining fluctuation. Foreign currency gains and losses are due primarily to the remeasurement of certain balances at the end of each reporting period.

Other

Other expense increased to $3.6 million in 2020 compared to $2.9 million in 2019. We record the non-operating components of net periodic benefit cost to other expense, including activity related to settlement of our pension liability. In December 2020 and 2019, we settled portions of our pension liability due to certain participants; these settlements resulted in losses of $2.1 million and $0.5 million for each of 2020 and 2019, respectively. Offsetting this increase in expense were lower legal and other adviser costs incurred related to the modification of our First Lien Facility Agreement, which were recorded to non-operating expense under applicable accounting guidance.

Income Tax Expense

Income tax expense increased $0.2 million to $0.7 million in 2020 compared to $0.5 million in 2019. The primary income tax expense is related to deferred state tax liabilities associated with net operating loss limitations.

Comparison of the Results of Operations for the years ended December 31, 2019 and 2018

Discussion of the results of operations for the years ended December 31, 2019 and 2018 can be found in the Globalstar Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 28, 2020.

Liquidity and Capital Resources

Our principal liquidity requirements include paying our debt service obligations and funding our operating costs. Our principal sources of liquidity include cash on hand, cash flows from operations and anticipated proceeds from the exercise of warrants held by our Second Lien Facility Agreement lenders. Our operating cash flows are likely to continue to be negatively impacted by COVID-19, as previously discussed. The uncertainties due to COVID-19 continue to evolve and we are monitoring our financial position as circumstances develop. We expect to use proceeds from the exercise of warrants to meet our obligations to raise no less than $45.0 million of equity prior to March 30, 2021. A portion of these proceeds will be used to pay the next scheduled principal payment due under the First Lien Facility Agreement in June 2021; the remaining proceeds will be used towards the following scheduled payment due in December 2021. A longer-term source of liquidity also includes restricted cash held in our debt service reserve account. Although there are uncertainties related to the future impact from COVID-19, we currently expect that sources of liquidity over the next twelve months will be sufficient for us to cover our obligations. We may also access equity and debt capital markets from time to time, as needed, such as for liquidity, to improve terms of our debt instruments and to lower our principal and interest requirements.

Overview

As of December 31, 2020, we held cash and cash equivalents of $13.3 million and restricted cash of $54.7 million, of which $3.6 million and $51.1 million are recorded as current and non-current restricted cash, respectively, on our consolidated balance sheet required under our First Lien Facility Agreement. The current portion of restricted cash on our consolidated balance sheet will be used towards the next principal payment, which is scheduled for June 2021. The non-current portion of restricted cash on our consolidated balance sheet will generally be used towards the final scheduled payment due upon maturity of the First Lien Facility Agreement in December 2022 (see below for further discussion). As of December 31, 2019, we held cash and cash equivalents of $7.6 million and had $51.5 million in restricted cash.

The carrying amount of our long-term debt outstanding was $385.4 million at December 31, 2020, compared to $464.2 million at December 31, 2019. At December 31, 2020, the current portion of our debt outstanding was $58.8 million and represents the scheduled principal payments under our First Lien Facility Agreement and the PPP Loan due within one year of the balance sheet date. We had no current debt outstanding at December 31, 2019.

The $78.8 million decrease in the carrying amount of our total debt balance was due primarily to the conversion of the Loan Agreement with Thermo in February 2020 into shares of common stock, resulting in a $116.5 million reduction in net debt. Also contributing to the decrease in the carrying amount of our total debt balance were unscheduled mandatory principal payments for the First Lien Facility Agreement totaling $3.4 million during 2020. This decrease was offset by 1) a higher carrying value of the Second Lien Facility Agreement of $32.4 million due to the accrual of PIK interest and the accretion of debt discount, 2) a higher carrying value of the First Lien Facility Agreement of $3.8 million due to amortization of deferred financing costs, and 3) the issuance of the PPP Loan in April 2020 of $4.9 million (net of debt issuance costs).

Cash Flows for the years ended December 31, 2020, 2019 and 2018

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

	Year Ended December 31,		
Statements of Cash Flows	2020	2019	2018
Net cash provided by operating activities	$ 22,215	$ 3,048	$ 5,920
Net cash used in investing activities	(14,536)	(11,491)	(17,401)
Net cash provided by (used in) financing activities	1,164	(7,923)	(18,196)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	52	4	(112)
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 8,895	$ (16,362)	$ (29,789)

Cash Flows Provided by Operating Activities

Net cash provided by operations includes primarily cash receipts from subscribers related to the purchase of equipment and satellite voice and data services as well as cash received from the performance of engineering and other 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 $22.2 million during 2020 compared to $3.0 million during 2019. This increase was due primarily to higher net income after adjusting for non-cash items due to lower interest payments and operating expenses. Partially offsetting this variance were working capital changes, which were more unfavorable in 2020 than in 2019. These unfavorable changes were due primarily to an increase in accounts receivable and a decrease in deferred revenue, which were both driven by the timing of services delivered under our subscriber and engineering service contracts relative to the timing of cash receipts. Offsetting these unfavorable items were higher inventory sales as well as fewer inventory purchases and favorable changes in prepaid and other current assets, driven in part by the final installment of $3.7 million received in January 2020 from the 2018 settlement of a business economic loss claim.

Net cash provided by operating activities was $3.0 million during 2019 compared to $5.9 million during 2018. This decrease was due primarily to lower net income after adjusting for non-cash items. Lower net income was driven by: 1) higher interest expense driven by a lower amount of cash interest capitalized during 2019 as well as higher gross interest payments due to the payment of accrued interest on the Subordinated Loan Agreement in November 2019, 2) costs associated with efforts to refinance our debt obligations, including a) the write-off of financing costs for the issuance of new first-lien debt that was ultimately not pursued, as well as third-party costs to support the modification of our First Lien Facility Agreement and b) the write-off of a portion of remaining deferred financing costs resulting from the partial paydown of the First Lien Facility Agreement, and 3) the higher cost of goods sold for tariffs resulting from a recent ruling on the classification of certain of our products. Offsetting the decrease due to lower net income were favorable working capital changes, including primarily the timing of prepaid and other assets as well as other non-current liabilities.

Cash Flows Used in Investing Activities

Net cash used in investing activities was $14.5 million during 2020 compared to $11.5 million during 2019. During both 2020 and 2019, the nature of our capital expenditures was related to the procurement and deployment of new antennas for our gateways. Additionally, in both 2020 and 2019, we incurred costs for other initiatives, including our new billing system, which was placed into service in April 2020, as well as product development, including software and other back-office efforts.

Net cash used in investing activities was $11.5 million during 2019 compared to $17.4 million during 2018. This decrease was due primarily to a reduction in the amount of cash interest capitalized of $2.9 million. As previously disclosed, our construction in progress balance has decreased significantly since 2018, specifically related to our ground network; therefore, the amount of interest eligible to be capitalized is lower. Also contributing to the variance in cash used in investing activities were fewer property and equipment purchases related to our ground network and product development, including software and other back-office efforts.

Cash Flows Provided by (Used in) Financing Activities

Net cash provided by financing activities was $1.2 million in 2020 compared to net cash used in financing activities of $7.9 million in 2019. In April 2020, we received proceeds of $5.0 million from the PPP Loan (discussed below); these proceeds were offset by mandatory prepayments of principal on our First Lien Facility Agreement totaling $3.4 million (discussed below) as well as the timing of payments for debt financing costs from our refinancing in 2019 totaling $1.1 million.

Net cash used in financing activities was $7.9 million in 2019 compared to $18.2 million in 2018. In June 2019, we entered into a $62.0 million Subordinated Loan Agreement, the proceeds from which were used in part to pay principal of $47.4 million towards our First Lien Facility Agreement. In November 2019, we completed a broad refinancing, which included the issuance of a $193.0 million Second Lien Facility Agreement. The proceeds, net of a $6.0 million, or 3% OID, combined with cash on hand and restricted cash were used to prepay a portion of our First Lien Facility Agreement of $151.6 million. Proceeds from the Second Lien Facility Agreement were also used to pay off the entire balance of the Subordinated Loan Agreement of $62.0 million plus accrued interest of $4.0 million. We incurred $6.2 million in debt financing costs associated with the November 2019 refinancing. Additionally, we issued warrants to purchase shares of our common stock to each of the Second Lien Facility Agreement lenders. In December 2019, Thermo exercised 9.5 million warrants resulting in cash proceeds to us of $3.6 million.

Indebtedness and Available Credit

First Lien Facility Agreement

In 2009, we entered into the First Lien Facility Agreement, which was amended and restated in July 2013, August 2015, June 2017 and November 2019. The First Lien Facility Agreement is scheduled to mature in December 2022. As of December 31, 2020, the principal amount outstanding under the First Lien Facility Agreement was $187.0 million, of which $57.5 million was recorded as current debt based on the contractual terms of the loan.

Our indebtedness under the First Lien Facility Agreement bears interest at a floating rate of LIBOR plus a margin that increases by 0.5% each year thereafter to a maximum rate of LIBOR plus 5.75%. Interest on the First Lien Facility Agreement is payable semi-annually in arrears in June and December of each calendar year. Ninety-five percent of our obligations under the First Lien Facility Agreement are guaranteed by Bpifrance Assurance Export S.A.S. ("BPIFAE"). Our obligations under the First Lien 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.

The First Lien 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 First Lien Facility Agreement permit us to include certain cash funds we receive from the issuance of our common stock and/or subordinated indebtedness. We refer to these funds as "Equity Cure Contributions". If we violate any covenants and are unable to obtain a sufficient Equity Cure Contribution or obtain a waiver, we would be in default under the First Lien Facility Agreement, and the lenders could accelerate payment of the indebtedness. As of December 31, 2020, we were in compliance with respect to the covenants of the First Lien Facility Agreement.

The First Lien Facility Agreement requires mandatory prepayments of principal with any Excess Cash Flow (as defined and calculated in the First Lien Facility Agreement) on a semi-annual basis. During 2020, we were required to pay $0.3 million and $3.1 million to our first lien lenders resulting from our Excess Cash Flow calculations as of December 31, 2019 and June 30, 2020, respectively. We expect to make another prepayment in 2021 from Excess Cash Flow as of December 31, 2020. These payments reduce future principal payment obligations.

The First Lien Facility Agreement requires that we maintain a debt service reserve account, which is pledged to secure our obligations under the First Lien Facility Agreement. The required balance in the debt service reserve account is fixed and must equal at least $50.9 million. As of December 31, 2020, the balance in the debt service reserve account was approximately $51.1 million and is classified as non-current restricted cash on our consolidated balance sheet as it will be used towards the final scheduled payment due upon maturity of the First Lien Facility Agreement in December 2022.

The amended and restated First Lien Facility Agreement includes a requirement that we raise no less than $45.0 million from the sale of equity prior to March 30, 2021. These proceeds will be applied towards the principal payment due on June 30, 2021 and then, if applicable, to the next scheduled principal payments. We currently expect to fulfill this requirement with proceeds from the exercise of the remaining warrants issued to the Second Lien Facility Agreement lenders in November 2019. We will access equity and debt capital markets, if necessary to fund any remaining requirements not satisfied through warrant proceeds. In December 2019, we received proceeds of $3.6 million from the exercise of a portion of warrants issued to the Second Lien Facility Agreement lenders, which is retained in the equity proceeds account under the First Lien Facility Agreement and is recorded in current restricted cash on our consolidated balance sheet as of December 31, 2020. Since December 31, 2020, certain of the Second Lien Facility Agreement lenders exercised approximately 5.5 million warrants at a price of $0.38 per share, the proceeds of which will be used to fulfill a portion of the $45.0 million requirement discussed above.

See Note 6: Long-Term Debt and Other Financing Arrangements to our Consolidated Financial Statements for further discussion of the First Lien Facility Agreement.

Subordinated Loan Agreement

On July 2, 2019, we entered into a Subordinated Loan Agreement (the “Subordinated Loan Agreement”), effective as of June 28, 2019, with Thermo Funding Company LLC (an affiliated entity to Thermo, as previously defined in this filing), and certain other unaffiliated parties (together with Thermo, the “Lenders”). Under the Subordinated Loan Agreement, we borrowed $62.0 million from the Lenders on June 28, 2019 for the primary purpose of funding the June 30, 2019 scheduled payment of

interest and principal under our First Lien Facility Agreement and maintaining compliance with the financial covenants thereunder. The Subordinated Loan Agreement accrued interest at 15% per annum, which was capitalized and added to the outstanding principal in lieu of cash payments. Prior to repayment, the Subordinated Loan Agreement had accrued a total of $4.0 million. In November 2019, the Subordinated Loan Agreement was paid in full from a portion of the proceeds from the Second Lien Facility Agreement (see further discussion below).

Second Lien Facility Agreement

In November 2019, we entered into a $199.0 million Second Lien Facility Agreement with Thermo, EchoStar Corporation and certain other unaffiliated lenders. The Second Lien Facility Agreement is scheduled to mature in November 2025. The loans under the Second Lien Facility Agreement bear interest at a blended rate of 13.5% per annum to be paid-in-kind (or in cash at our option, subject to restrictions in the First Lien Facility Agreement). The cash proceeds from this loan were net of a 3% original issue discount. As of December 31, 2020, the principal amount outstanding under the Second Lien Facility Agreement was $230.6 million.

As additional consideration for the loan, we issued the lenders warrants to purchase 124.5 million shares of common stock an exercise price of $0.38 per share. These warrants expire on March 31, 2021. As of December 31, 2020, approximately 115.0 million warrants remain outstanding. Subsequent to December 31, 2020, an additional 5.5 million warrants were exercised at price of $0.38 per share.

The Second Lien Facility Agreement contains customary events of default and requires us to satisfy various financial and non-financial covenants. As of December 31, 2020, we were in compliance with all the covenants of the Second Lien Facility Agreement.

See Note 6: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion of the Second Lien Facility Agreement.

Thermo Loan Agreement

We had an amended and restated loan agreement with Thermo (the “Loan Agreement”). Our obligations to Thermo under the Loan Agreement were subordinated to all of our obligations under the First Lien Facility Agreement and the Second Lien Facility Agreement. The Loan Agreement was convertible into shares of common stock at a conversion price of $0.69 (as adjusted) per share of common stock and accrued interest at 12% per annum, which we capitalized and added to the outstanding principal in lieu of cash payments.

On February 19, 2020, Thermo converted the entire principal balance outstanding under the Loan Agreement, which totaled $137.4 million and included accrued interest since inception of $93.9 million. This conversion resulted in the issuance of 200.1 million shares of common stock.

See Note 6: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion of the Thermo Loan Agreement.

8.00% Convertible Senior Notes Issued in 2013

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, 2020, 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. 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 to require us to purchase some or all of the 2013 8.00% Notes on 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 indenture governing the 2013 8.00% Notes provides for customary events of default. As of December 31, 2020, we were in compliance with the terms of the 2013 8.00% Notes and the Indenture.

See Note 6: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion of the 2013 8.00% Notes.

Payroll Protection Program Loan

As previously discussed, we sought relief under the CARES Act, including receiving a PPP Loan of $5.0 million loan under the payroll protection program (the "PPP") in April 2020. As of December 31, 2020, the principal amount outstanding under the PPP Loan was $5.0 million, of which $1.4 million is classified as current based on the contractual terms of the loan (as modified). The Company applied for loan forgiveness in December 2020, in accordance with the terms of the CARES Act, based on payroll and other allowable costs incurred since the date of the loan. Any amount not forgiven by the Small Business Administration (the "SBA") is subject to an interest rate of 1.00% per annum commencing on the date of the loan with principal and interest payments beginning after the SBA has concluded on forgiveness, subject to the PPP rules. Our first and second lien lenders will require us to accelerate the repayment of any portion of the loan amount that is not forgiven.

See Note 6: Long-Term Debt and Other Financing Arrangements to our Consolidated Financial Statements for further discussion of the PPP Loan.

Contractual Obligations and Commitments

Contractual obligations at December 31, 2020 are as follows (in thousands):

Contractual Obligations:	2021	2022	2023	2024	2025	Thereafter	Total
Debt obligations (1)	$ 57,468	$ 129,520	$ 1,455	$ —	$ —	$ 446,782	$ 635,225
Interest on long-term debt (2)	8,996	7,030	41	—	—	—	16,067
Purchase obligations (3)	1,585	4,220	2,280	—	—	—	8,085
Inventory purchase obligations (4)	6,430	—	—	—	—	—	6,430
Operating lease obligations (5)	2,597	2,479	2,510	2,383	2,405	8,802	21,176
Pension obligations	502	505	497	510	526	2,604	5,144
Total	$ 77,578	$ 143,754	$ 6,783	$ 2,893	$ 2,931	$ 458,188	$ 692,127

(1) These amounts include principal and payment in kind interest payments. Interest on the Second Lien Facility Agreement accrues interest at a blended rate of 13.5% per annum and is capitalized and added to the total outstanding principal in lieu of cash payments. Principal and interest under the Second Lien Facility Agreement become due and payable in November 2025.

We have $5.0 million outstanding under the PPP Loan. We applied for loan forgiveness, including both principal and interest, in accordance with the terms of the CARES Act. Any amounts not forgiven are subject to an interest rate of 1.00% per annum. As we expect the entire $5.0 million to be forgiven, this amount is excluded from the table above.

See Note 6: Long-Term Debt and Other Financing Arrangements in our Consolidated Financial Statements for further discussion of these debt arrangements.

(2) Amounts include projected interest payments to be made in cash. Debt outstanding under our First Lien Facility Agreement bears interest at a floating rate and, accordingly, we estimated our interest costs in future periods.

(3) We have purchase commitments with certain vendors related to the procurement, deployment and maintenance of our network. In prior disclosures, our contractual obligations table included a contract that we previously had with MIL-SAT LLC for the procurement and production of new antennas for our gateways. While there are no remaining purchase commitments under this contract, we expect to purchase additional antennas for certain gateways in the future directly from the manufacturer.

See Note 9: Commitments and Contingencies 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, 2020. We expect to fulfill these purchase orders during 2021 based on current forecasted equipment sales.

(5) As of December 31, 2020, we executed additional operating leases, primarily for new gateway locations, that are expected to commence during 2021. Accordingly, these leases are not included on the balance sheet as of December 31, 2020 or in the table above. We are in the process of evaluating these lease obligations.

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 one-way and two-way data transmissions between a mobile or fixed device, (ii) subscriber equipment revenue from the sale of fixed and mobile devices as well as other products and accessories, and (iii) service revenue from providing engineering and support services to certain customers. The complexities or judgements involved in revenue recognition is discussed in detail below by type of revenue.

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 Commercial IoT 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.

For 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. The estimated timing of revenue recognition for these usage-based customers is driven by historical customer usage patterns. 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.

We provide certain engineering services to assist customers in developing new applications to operate on our network. We generally recognize the revenues associated with these services when the performance obligations are performed, the timing of which may involve complex judgements by management.

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. Determination of the relative stand-alone selling prices is complex and involves judgement, as prices may vary based on many factors, such as promotions, customer, volume and/or type of equipment sold.

Property and Equipment

The vast majority of our property and equipment is costs incurred related to the construction of our second-generation constellation and ground station upgrades. Accounting for these assets requires us to make complex judgments and estimates. We capitalize costs associated with the design, manufacture, test and launch of our low earth orbit satellites. 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.

Estimating the useful life of our assets is complex and involves judgement; to the extent the useful life of our significant assets changes, this could impact our operating results. The estimated useful lives of our assets is based on many factors, including estimated design life, information from our engineering department and our overall strategy for the use of the assets. A one year reduction in the estimated useful life of our second-generation satellites and ground network would result in an annual increase to depreciation expense of $5.2 million and $1.1 million, respectively. 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 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 review the carrying value of our assets for impairment whenever events or changes in circumstances indicate that the recorded value may not be recoverable. If indicators of impairment exist, we compare future undiscounted cash flows to the carrying value of the asset group. If an asset is not recoverable, its carrying value would be adjusted down to fair value and an impairment loss would be recorded. Key assumptions in our impairment tests include projected future cash flows, the timing of network upgrades and current discount rates. Additionally, from time to time, we perform profitability analyses to determine if investments in certain products and/or services remain viable. In the event we determine to no longer support a product or service, or that an asset is not expected to generate future benefit, the asset may be abandoned and an impairment loss may be recorded.

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. For the mandatory prepayments in the Second Lien Facility Agreement, we use a probability weighted discounted cash flow model to determine fair value. The timing and amount of these cash flows involve significant judgement. 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 changes to the inputs and assumptions used in the derivative valuation models changes in these estimates.

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 First Lien 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 First Lien Facility Agreement, and with that consent the counterparties may only be the lenders to the First Lien Facility Agreement.

We also have operations in Argentina, which is considered to have a highly inflationary economy. We continue to monitor the significant uncertainty surrounding current Argentinian exchange mechanisms. Operations in this country are not considered significant to our consolidated operations.

Our interest rate risk arises from our variable rate debt under our First Lien Facility Agreement, under which loans bear interest at a floating rate based on the LIBOR. We have $187.0 million in principal outstanding under the First Lien Facility Agreement. A 1.0% change in interest rates would result in a change to interest expense of approximately $1.9 million annually.

See Note 8: 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

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Report of Independent Registered Public Accounting Firm

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Globalstar, Inc. (the Company) as of December 31, 2020, and the related consolidated statement of operations, comprehensive loss, stockholders' equity, and cash flows for the period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020, and the results of its operations and its cash flows for the year ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 4, 2021, expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit 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 audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosures to which it relates.

	Useful life of Space component assets
Description of the Matter	At December 31, 2020, the Company had $1.2 billion of Space component assets recorded as property and equipment. As discussed in Note 1 to the consolidated financial statements, the Company's Space component assets are depreciated on a straight-line basis over their estimated useful life, which is currently estimated to be 15 years. Management's estimate of the useful life of its Space component assets was based on estimated design life, information from the Company's engineering department and overall Company strategy for the use of the assets. Auditing the Company's estimate of the useful life of its Space component assets involved a high degree of subjectivity due to the application of management's judgment when evaluating the available information to determine the estimated useful life. The resulting estimated useful life has a significant effect on the timing of recognition of depreciation expense given the magnitude of the carrying amount of the Space component assets.

How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's process to determine the estimate useful life of its Space component assets, including controls over management's evaluation of the available information to determine the estimated useful life. Our testing of the Company's estimated useful life of the Space component assets included, among other procedures, evaluating the application of available information to determine their estimated useful life. We compared management's useful life to the manufacturer's estimated design life, publicly available information on the estimated useful life of similar assets, operation and performance of the assets per the Company's engineering group, and the life of its first-generation satellite constellation. Additionally, we evaluated the effect of changes, if any, in the Company's long-term strategy for use of the assets on the useful life estimate.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2020.

New Orleans, Louisiana
March 4, 2021

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders Globalstar, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Globalstar, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Globalstar, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for the year ended December 31, 2020, and the related notes and our report dated March 4, 2021, expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible 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 Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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/ Ernst & Young LLP

New Orleans, Louisiana
March 4, 2021

Report of Independent Registered Public Accounting Firm

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Globalstar, Inc. (the "Company") as of December 31, 2019, the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). 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, 2019, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements 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.

Our audits 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, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Crowe LLP

We served as the Company's auditor from 2006 to 2019.

Oak Brook, Illinois
February 28, 2020

GLOBALSTAR, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except par value and share data)

	December 31,	
	2020	**2019**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 13,330	$ 7,606
Restricted cash	3,625	622
Accounts receivable, net of allowance for credit losses of $4,352 and $2,952, respectively	22,147	21,760
Inventory	13,736	16,341
Prepaid expenses and other current assets	15,649	16,931
Total current assets	68,487	63,260
Property and equipment, net	715,909	799,914
Restricted cash	51,068	50,900
Operating lease right of use assets, net	14,400	15,871
Intangible and other assets, net of accumulated amortization of $9,998 and $9,009, respectively	38,229	35,645
Total assets	$ 888,093	$ 965,590
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 58,824	$ —
Accounts payable	2,917	8,015
Accrued expenses	25,916	24,874
Payables to affiliates	581	261
Deferred revenue	25,977	29,910
Total current liabilities	114,215	63,060
Long-term debt, less current portion	326,586	464,176
Lease liabilities	13,726	14,747
Employee benefit obligations	3,650	4,128
Derivative liabilities	123	3,792
Deferred revenue	3,280	5,273
Other non-current liabilities	3,448	3,071
Total non-current liabilities	350,813	495,187
Commitments and contingent liabilities (Note 9)		
Stockholders' equity:		
Preferred Stock of $0.0001 par value; 100,000,000 shares authorized and none issued and outstanding at December 31, 2020 and 2019, respectively	—	—
Series A Preferred Convertible Stock of $0.0001 par value; one share authorized and none issued and outstanding at December 31, 2020 and 2019, respectively	—	—
Voting Common Stock of $0.0001 par value; 1,900,000,000 shares authorized; 1,674,668,617 shares and 1,464,544,144 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	167	146
Nonvoting Common Stock of $0.0001 par value; no shares authorized and none issued and outstanding at December 31, 2020 and December 31, 2019, respectively	—	—
Additional paid-in capital	2,096,566	1,970,047
Accumulated other comprehensive loss	(2,944)	(3,449)
Retained deficit	(1,670,724)	(1,559,401)
Total stockholders' equity	423,065	407,343
Total liabilities and stockholders' equity	$ 888,093	$ 965,590

See accompanying notes to Consolidated Financial Statements.

GLOBALSTAR, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)

	Year Ended December 31,		
	2020	**2019**	**2018**
Revenue:			
Service revenue	$ 113,191	$ 113,386	$ 111,089
Subscriber equipment sales	15,296	18,332	19,024
Total revenue	128,487	131,718	130,113
Operating expenses:			
Cost of services (exclusive of depreciation, amortization and accretion shown separately below)	34,751	37,456	37,648
Cost of subscriber equipment sales	13,268	15,763	14,441
Cost of subscriber equipment sales - reduction in the value of inventory	662	416	—
Marketing, general and administrative	41,738	45,233	55,443
Reduction in the value of long-lived assets	416	1,124	—
Revision to contract termination charge	—	—	(20,478)
Depreciation, amortization and accretion	96,815	95,772	90,438
Total operating expenses	187,650	195,764	177,492
Loss from operations	(59,163)	(64,046)	(47,379)
Other (expense) income:			
Interest income and expense, net of amounts capitalized	(48,429)	(62,464)	(43,612)
Derivative gain	2,897	145,073	81,120
Gain on legal settlement	—	120	6,779
Foreign currency (loss) gain	(727)	64	(3,070)
Other	(3,555)	(2,878)	(229)
Total other (expense) income	(49,814)	79,915	40,988
(Loss) income before income taxes	(108,977)	15,869	(6,391)
Income tax expense	662	545	125
Net (loss) income	$ (109,639)	$ 15,324	$ (6,516)
Net (loss) income per common share:			
Basic	$ (0.07)	$ 0.01	$ (0.01)
Diluted	(0.07)	(0.07)	(0.01)
Weighted-average shares outstanding:			
Basic	1,642,359	1,450,768	1,269,548
Diluted	1,642,359	1,655,191	1,269,548

See accompanying notes to Consolidated Financial Statements.

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

	Year Ended December 31,		
	2020	**2019**	**2018**
Net (loss) income	$ (109,639)	$ 15,324	$ (6,516)
Other comprehensive (loss) income:			
Defined benefit pension plan liability adjustment	2,042	1,097	(64)
Net foreign currency translation adjustment	(1,537)	(707)	3,164
Total other comprehensive income	505	390	3,100
Total comprehensive (loss) income	$ (109,134)	$ 15,714	$ (3,416)

See accompanying notes to Consolidated Financial Statements.

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, 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	11,892	2	7,726	—	—	7,728
Contribution of services	—	—	428	—	—	428
Issuance and recognition of stock-based compensation of 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)
Balances – December 31, 2018	1,446,784	$ 145	$ 1,937,364	$ (3,839)	$ (1,574,725)	$ 358,945
Net issuance of restricted stock awards and recognition of stock-based compensation	6,003	—	4,118	—	—	4,118
Contribution of services	—	—	338	—	—	338
Issuance and recognition of stock-based compensation of employee stock purchase plan	2,257	—	1,096	—	—	1,096
Stock offering issuance costs	—	—	(195)	—	—	(195)
Investment in business	—	—	155	—	—	155
Fair value of warrants issued in connection with Second Lien Facility Agreement	—	—	23,562	—	—	23,562
Issuance of stock for warrant exercises	9,500	1	3,609	—	—	3,610
Other comprehensive income	—	—	—	390	—	390
Net income	—	—	—	—	15,324	15,324
Balances – December 31, 2019	1,464,544	$ 146	$ 1,970,047	$ (3,449)	$ (1,559,401)	$ 407,343
Net issuance of restricted stock awards and recognition of stock-based compensation	7,637	1	4,766	—	—	4,767
Contribution of services	—	—	232	—	—	232
Issuance and recognition of stock-based compensation of employee stock purchase plan	2,253	—	1,048	—	—	1,048
Common stock issued in connection with conversion of Loan Agreement with Thermo	200,140	20	120,441	—	—	120,461
Common stock issued in connection with conversion of 2013 8.00% Notes	95	—	32	—	—	32
Impact of adoption of Credit Loss Standard	—	—	—	—	(1,684)	(1,684)
Other comprehensive income	—	—	—	505	—	505
Net loss	—	—	—	—	(109,639)	(109,639)
Balances – December 31, 2020	1,674,669	$ 167	$ 2,096,566	$ (2,944)	$ (1,670,724)	$ 423,065

See accompanying notes to Consolidated Financial Statements.

GLOBALSTAR, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2020	2019	2018
Cash flows provided by operating activities:			
Net (loss) income	$ (109,639)	$ 15,324	$ (6,516)
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation, amortization and accretion	96,815	95,772	90,438
Change in fair value of derivative liabilities	(2,897)	(145,073)	(81,120)
Stock-based compensation expense	5,670	5,700	6,995
Amortization of deferred financing costs	4,243	15,896	8,690
Reduction in the value of long-lived assets and inventory	1,078	1,540	—
Provision for credit losses	1,656	1,747	1,398
Noncash interest and accretion expense	33,847	21,453	14,541
Revision to contract termination charge	—	—	(20,478)
Change to estimated impact upon adoption of ASC 606	—	(3,885)	—
Loss on pension settlement	2,075	455	—
Noncash revenue recognized from terminated contract	(2,916)	—	—
Unrealized foreign currency loss (gain)	1,362	(192)	3,057
Other, net	338	143	919
Changes in operating assets and liabilities:			
Accounts receivable	(8,494)	(4,299)	(3,792)
Inventory	2,176	(1,664)	(486)
Prepaid expenses and other current assets	981	(421)	(7,926)
Other assets	(890)	864	(3,794)
Accounts payable and accrued expenses	(197)	(173)	3,979
Payables to affiliates	319	(395)	431
Other non-current liabilities	(60)	359	(1,394)
Deferred revenue	(3,252)	(103)	978
Net cash provided by operating activities	22,215	3,048	5,920
Cash flows used in investing activities:			
Second-generation network costs (including interest)	(7,317)	(3,342)	(7,032)
Property and equipment additions	(5,157)	(4,594)	(7,349)
Purchase of intangible assets	(2,062)	(3,555)	(3,020)
Net cash used in investing activities	(14,536)	(11,491)	(17,401)
Cash flows provided by (used in) financing activities:			
Principal payments of the First Lien Facility Agreement	(3,373)	(199,029)	(77,866)
Proceeds from PPP Loan	4,973	—	—
Net proceeds from common stock offering and exercise of warrants	—	3,610	59,100
Payments for debt and equity issuance costs	(1,074)	(6,166)	(276)
Proceeds from Subordinated Loan Agreement	—	62,000	—
Payoff of Subordinated Loan Agreement	—	(62,000)	—
Proceeds from Second Lien Facility Agreement	—	192,990	—
Proceeds from issuance of common stock and exercise of options	638	672	846
Net cash provided by (used in) financing activities	1,164	(7,923)	(18,196)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	52	4	(112)
Net increase (decrease) in cash, cash equivalents and restricted cash	8,895	(16,362)	(29,789)
Cash, cash equivalents and restricted cash, beginning of period	59,128	75,490	105,279
Cash, cash equivalents and restricted cash, end of period	$ 68,023	$ 59,128	$ 75,490

	As of December 31,		
	2020	2019	2018
Reconciliation of cash, cash equivalents and restricted cash			
Cash and cash equivalents	$ 13,330	$ 7,606	$ 15,212
Restricted cash (See Note 6 for further discussion on restrictions)	54,693	51,522	60,278
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	$ 68,023	$ 59,128	$ 75,490

Supplemental disclosure of cash flow information:			
Cash paid for:			
Interest	$ 10,918	$ 27,353	$ 25,867
Income taxes	68	45	155

	Year Ended December 31,		
	2020	2019	2018
Supplemental disclosure of non-cash financing and investing activities:			
Increase in capitalized accrued interest for second-generation network costs	$ 1,638	$ 434	$ 2,093
Capitalized accretion of debt discount and amortization of prepaid financing costs	447	501	1,898
Principal amount of Loan Agreement with Thermo converted into common stock	137,366	—	—
Reduction of debt discount and issuance costs due to conversion of Loan Agreement with Thermo	17,963	—	—
Fair value of common stock issued upon conversion of Loan Agreement with Thermo	84,059	—	—
Reduction in derivative liability due to conversion of Loan Agreement with Thermo	1,058	—	—
Fair value of warrants issued with Second Lien Facility Agreement	—	23,562	—

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") provides Mobile Satellite Services ("MSS") including voice and data communications services through its global satellite network. The Company's only reportable segment is its MSS business. Thermo Companies, through commonly controlled 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:

- two-way voice communication and data transmissions using mobile or fixed devices, including the GSP-1700 phone, 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 X ®, SPOT Gen4™ and SPOT Trace®, that transmit messages and the location of the device ("SPOT");
- one-way data transmissions using a mobile or fixed device that transmits its location and other information to a central monitoring station, including commercial IoT products, such as the battery- and solar-powered SmartOne, STX-3 and ST100 ("Commercial IoT"); and
- engineering services to assist certain customers in developing new applications to operate on the Company's network, enhancements to the Company's ground network and other communication services using the Company's MSS and terrestrial spectrum licenses ("Engineering and Other").

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

COVID-19 Risks and Uncertainties

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus ("COVID-19") a global pandemic. The impact caused by COVID-19 for the period ended December 31, 2020 and through the release date of these consolidated financial statements included, among other effects, the accommodation of certain pricing concessions requested by customers and experienced lower demand for its products and services, particularly from its customers that operate in the oil and gas market. While the full extent and duration of the impact is unknown, the Company expects a continuation of this lower demand at least until this industry fully recovers. While the Company also initially experienced a reduction in demand from its customers that operate in the retail industry, this demand has recovered, due in part to the re-opening of most retailer store locations. Additionally, the Company began and expects to continue to operate with a remote workforce, manage a supply chain sourcing predominantly from China, and engage with international regulators remotely to advance the terrestrial spectrum authorization process. There are a number of uncertainties that could impact the Company's future results of operations, including the effectiveness of COVID-19 mitigation measures; the duration of the pandemic; global economic conditions; changes to the Company's operations; changes in consumer confidence, behaviors and spending; work from home trends; and the sustainability of supply chains.

In accordance with the Company's accounting policies disclosed in this Report, the Company reviews the carrying value of long-lived assets, amortizable intangible assets and inventory when circumstances warrant an assessment in order to evaluate whether indicators of impairment exist. No indicators of impairment of long-lived assets or intangible assets were identified; furthermore, the reduction in cash flows from the areas of the business impacted by COVID-19 are expected to be temporary. For inventory associated with the areas of the business impacted by COVID-19, the carrying value of inventory on hand was already lower than its expected net realizable value; accordingly, no impairment has been necessary in connection with

COVID-19. For accounts receivable, the Company increased its loss rate for certain receivables as discussed in more detail in this Note 1: Summary of Significant Accounting Policies.

Revised internal cash flow and financial projections have also been evaluated in light of financial covenant requirements in the Company's facility agreements. This liquidity assessment considers relief granted to the Company under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES" Act), including a $5.0 million loan the Company received in April 2020 under the payroll protection program, which the Company expects to be forgiven, and the deferral of the payment of certain payroll taxes. Additionally, the Company evaluated tax law changes pursuant to the CARES Act and revised its net operating loss carryforwards and other estimates, as necessary.

For further discussion relating to the matters discussed above, see Note 6: Long-Term Debt and Other Financing Arrangements and Note 13: Taxes.

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.

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 “First Lien Facility Agreement”) to secure the Company’s principal and interest payment obligations related to its First Lien Facility Agreement. Restricted cash is classified as either a current or non-current asset on the Company's Consolidated Balance Sheet based on when these funds are expected to be used to pay principal and interest due under the First Lien Facility Agreement.

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

On January 1, 2020, the Company adopted the provisions of ASU No. 2016-13, *Credit Losses, Measurement of Credit Losses on Financial Instruments*, and recognized the cumulative effect of initially applying the guidance as an adjustment to the opening balance of retained deficit. As a result of adopting ASU No. 2016-13, the Company recorded a net decrease to stockholders' equity of $1.7 million, which resulted in an increase to the opening retained deficit balance as of January 1, 2020. The most significant driver of this adjustment was the Company’s change in accounting policy related to expected losses (rather than incurred losses) from trade receivables applied to its portfolio based on historical and future performance.

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 credit losses based on factors such as supportable and reasonable current trends, the length of time the receivables are past due and historical collection experience. The Company believes that historical collection experience is the most reasonable basis for predicting future performance. The Company's major portfolio of contract assets are customer receivables and, as such, historical delinquency percentages are generally consistent over time. The estimate of the allowance for credit losses is computed using aging schedules by type of revenue (service and subscriber equipment), by product (Duplex, SPOT and Commercial IoT) and by country. As discussed above, accounts receivable are considered past due in accordance with the contractual terms of the applicable arrangements. The Company applies a loss rate to its portfolio of trade receivables based on past-due status and records an allowance for credit losses, which represents the expected losses of those trade receivables over their estimated contractual life. The estimated life may vary by service and product type, but is generally less than one year. Allowances are generally recorded for all aging categories of outstanding receivables, including those in the current category (which is a change from legacy GAAP). Accounts receivable balances that are determined likely to be uncollectible are included in the allowance for credit losses. After attempts to collect a receivable have failed, the receivable is written off against the allowance.

In March 2020, after the Company adopted ASU No. 2016-13, the World Health Organization declared the outbreak COVID-19 a global pandemic. COVID-19 has resulted in some disruption to the Company, primarily as it relates to the volume of equipment sales and uncertainties impacting the collection of certain outstanding receivables. Although the Company expects this disruption to be temporary, it has considered the potential impact of COVID-19 on its portfolio of trade receivables and has increased its loss rate for such receivables for the year ended December 31, 2020, in limited circumstances. The Company will continue to reassess its sales and collections of receivables each reporting period to support its allowance across its portfolio.

The following is a summary of the activity in the allowance for credit losses (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Balance at beginning of period	$ 2,952	$ 3,382	$ 3,610
Impact of adoption of ASU 2016-13	1,684	—	—
Provision, net of recoveries	1,656	1,747	1,398
Write-offs and other adjustments	(1,940)	(2,177)	(1,626)
Balance at end of period	$ 4,352	$ 2,952	$ 3,382

Inventory

Inventory consists primarily of purchased products, including subscriber equipment devices, which work on the Company's network, of approximately $9.5 million and $12.0 million as of December 31, 2020 and 2019, respectively, as well as ground infrastructure assets expected to be used as spare parts of approximately $4.3 million as of December 31, 2020 and 2019, respectively. Inventory is stated at the lower of cost or 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. 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 years ended December 31, 2020 and 2019, the Company wrote down the value of inventory by $0.7 million and $0.4 million, respectively, after adjusting for changes in net realizable value. In 2020, the Company discontinued production of a second-generation Duplex device, which was the majority of the write down recorded. The remaining reduction in value of inventory recorded during 2020 was driven by an evaluation of excess or obsolete inventory related to end of life products and technology. In 2019, the Company reduced the carrying value of gateway spare parts due to excess hardware parts. During the year ended December 31, 2018, no write down of inventory was recorded.

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.

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 - 7 or 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 estimated useful lives of the Company's Space and Ground components were based on estimated design life, information from the Company's engineering department and overall Company strategy for the use of these assets. 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 property and equipment whenever events or changes in circumstances indicate that the recorded value may not be recoverable. 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 asset is not recoverable, its carrying value would be adjusted down to fair value and an impairment loss would be recorded. Additionally, the Company routinely performs profitability analyses to determine if investments in certain products and/or services remain viable. In the event the Company decides not to support a product or service, or determines that an asset is not expected to generate future benefit, the asset may be abandoned and an impairment loss may be recorded on the associated assets.

Assets held for sale are carried at the lower of cost or fair value less estimated cost to sell; these assets are generally classified as current on the Company's consolidated balance sheets as the disposal of these assets is expected within one year. As of December 31, 2020 and 2019, the Company had approximately $0.3 million and $0.5 million, respectively, of assets classified as held for sale due to the anticipated disposal of its former gateway location in Nicaragua. The change in classification from held and used to held for sale resulted in an initial impairment of long-lived assets of $1.1 million during 2019, which was recorded in the Company's consolidated statement of operations. In the fourth quarter of 2020, the Company signed a contract for the sale of this property; the final selling price (net of estimated costs to sell) is $0.3 million and, as a result, the Company recorded an additional impairment totaling $0.2 million.

Leases

The Company has operating and finance leases for facilities and equipment throughout the United States and around the world, including corporate offices, satellite control centers, ground control centers, gateways and certain equipment.

Upon inception of a contract, the Company evaluates if the contract, or part of the contract, contains a lease. A lease conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Leases include both a right-of-use asset and a lease liability. The right-of-use asset represents the Company's right to use the underlying asset in the lease. Certain initial direct costs associated with consummating a lease are included in the initial measurement of the right-of-use asset. The right-of-use asset also includes prepaid lease payments and lease incentives. The lease liability represents the present value of the remaining lease payments discounted using the implicit rate in the lease on the lease commencement date. For leases in which the implicit rate is not readily determinable, an estimated incremental borrowing rate is used, which represents a rate of interest that the Company would pay to borrow on a collateralized basis over a similar term. The Company has elected to combine lease and nonlease components, if applicable.

For operating leases, the Company records lease expense on a straight-line basis over the lease term in either marketing, general and administrative expense or cost of services, depending on the nature of the underlying asset. For finance leases, the Company records the amortization of the right-of-use asset through depreciation, amortization and accretion expense and records the interest expense on the lease liability through interest expense, net, using the effective interest method.

Variable lease payments are payments made to a lessor due to changes in circumstances occurring after the commencement date. Variable lease payments dependent upon an index or rate are included in the measurement of the lease liability; all other variable lease payments are not included in the measurement of the lease liability and recognized when incurred. Variable lease payments excluded from the measurement of the lease liability are uncommon and, when incurred, are immaterial for the Company.

The Company's existing leases have remaining lease terms of less than 1 year to 11 years. Lease terms include renewal or termination options that the Company is reasonably certain to exercise. For leases with a term of twelve months or less, the Company does not record a right-of-use asset and associated lease liability on its consolidated balance sheet.

The Company reviews the carrying value of its right-of-use assets for impairment whenever events or changes in circumstances indicate that the recorded value may not be recoverable. Recoverability of assets is measured by comparing the carrying amounts of the assets to the estimated future undiscounted cash flows, excluding financing costs. If a right-of-use asset is not recoverable, its carrying value would be adjusted down to fair value and an impairment loss would be recorded.

Derivative Instruments

Upon inception of a contract, the Company evaluates if the contract contains a derivative instrument. The Company has 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 and assumptions developed by management 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, 2020 and 2019, the Company had net deferred financing costs of $38.5 million and $43.6 million, respectively.

Fair Value of Financial Instruments

The Company believes it is not practicable to determine the fair value of the First Lien Facility Agreement, the Second Lien Facility Agreement and the Payroll Protection Program Loan ("PPP Loan"). 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 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

Revenue consists primarily of satellite voice and data service revenue, revenue generated from the sale of fixed and mobile devices, and revenue from providing engineering and support services. 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.

Generally, 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 primarily 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 service revenue related to amounts allocated to performance obligations that were satisfied (or partially satisfied) in a previous period is not material to the Company’s financial statements. Amounts related to earned but unbilled revenue from the sale of subscriber equipment are recognized if hardware is shipped prior to the invoice being generated. This situation may result from multi-deliverable contracts, whereby equipment and service revenue are bundled and billed over time to a single customer.

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.

Duplex Service Revenue. The Company recognizes revenue for monthly access fees in the period services are rendered. 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.

Commercial IoT Service Revenue. The Company sells Commercial IoT 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.

Equipment Revenue. Subscriber equipment revenue represents the sale of fixed and mobile user terminals, SPOT and Commercial IoT 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 subscriber equipment sales.

Engineering and Other Service Revenue. Other service revenue includes primarily revenue associated with engineering services to assist customers in developing new applications to operate on its network. 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. Additionally, 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.

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 distinct 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 the fair value of stock option awards on the date of grant. For restricted stock awards and units, the fair value is determined from the stock price on the grant date. 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. For share-based awards with a performance condition that affects vesting, the Company recognizes compensation cost for awards if and when the performance condition is probable of achievement. See Note 15: Stock Compensation for a description of methods used to determine the Company's assumptions.

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 and Argentina. 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 2020, 2019 and 2018, the foreign currency translation adjustments were net losses of $1.5 million, net losses of $0.7 million and net gains of $3.2 million, respectively.

Foreign currency transaction gains/losses were approximately net losses of $0.7 million, net gains of $0.1 million and net losses of $3.1 million for each of 2020, 2019, and 2018, respectively. These were classified as other (expense) income on the consolidated statement of operations.

Asset Retirement Obligation

Liabilities arising from legal obligations associated with the retirement of gateway long-lived assets are measured at fair value and recorded as a liability. Upon initial recognition of a liability for retirement obligations, the Company also capitalizes, as part of the asset carrying amount, the estimated costs associated with its expected retirement. This asset is depreciated over the life of the gateway 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. As of both December 31, 2020 and 2019, the Company had accrued approximately $1.6 million and $1.5 million, respectively, for asset retirement obligations. The Company believes this estimate will be sufficient to satisfy the Company’s obligation under site leases to remove the gateway equipment and restore the lease 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 $1.9 million, $3.2 million and $2.7 million for 2020, 2019 and 2018, 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.

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 a full valuation allowance on its deferred tax assets, there is no impact to the consolidated statements of operations and balance sheets.

The Company 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 (Loss) Income

All components of comprehensive (loss) income, 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 (loss) income is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources.

(Loss) Earnings Per Share

The Company is required to present basic and diluted (loss) earnings per share. Basic (loss) earnings per share is computed by dividing (loss) income available to common stockholders by the weighted average number of shares of common stock outstanding during the period. The numerator used to calculate diluted EPS includes the effect of dilutive securities, including interest expense, net, and derivative gains or losses reflected in net (loss) income. Common stock equivalents are included in the calculation of diluted earnings per share only when the effect of their inclusion would be dilutive. The effect of potentially dilutive common shares for the Company's convertible notes are calculated using the if-converted method. Generally, for all other potentially dilutive common shares, the effect is calculated using the treasury stock method.

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 are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If an indicator is present, the Company would measure recoverability by comparing the carrying amount to the future undiscounted cash flows the asset is expected to generate. If the asset is not recoverable, the undiscounted cash flows do not exceed the carrying amount and the carrying amount would be adjusted down to its fair value.

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 class of intangible assets, including accumulated amortization and estimated average useful lives, see Note 5: 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. The Company received proceeds of $7.4 million, net of legal fees, related to this settlement. The Company received the two installments of $3.7 million each in January 2019 and January 2020. 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. When this receivable was recorded in 2018, the Company imputed interest in accordance with ASC 835-30-15-2 as it represented 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 was amortized as interest income over the life of the claim using the interest method.

Contract Acquisition Costs

The Company also capitalizes incremental costs to obtain a contract, or contract acquisition costs, to the extent it expects to recover them. These capitalized costs primarily include deferred subscriber acquisition costs and 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 contract acquisition cost associated with it becomes impaired and the amount is expensed.

Total contract acquisition costs were $2.4 million and $2.0 million as of December 31, 2020 and 2019, respectively, and are recorded in other assets on the Company's consolidated balance sheet. These costs are typically amortized to marketing, general and administrative expenses over three years, which considers anticipated contract renewals. For the years ended December 31, 2020, 2019 and 2018, the amount of amortization related to contract acquisition costs was $2.1 million, $1.4 million and $1.5 million, respectively.

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.

Other Information

Advertising Expenses

Advertising costs were $2.5 million, $3.4 million and $3.6 million for 2020, 2019, and 2018, respectively. These costs are expensed as incurred as marketing, general and administrative expenses.

Recently Issued Accounting Pronouncements

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 as outlined in ASU No. 2018-14. This ASU is effective for public entities for annual periods beginning after December 15, 2020. This ASU adds certain narrative disclosures and removes other disclosures as outlined in ASU No. 2018-14 related to the defined benefit plan as outlined in ASU No. 2018-14. The Company adopted this standard when it became effective on January 1, 2021. The adoption of this standard will impact certain of the Company's disclosures in future filings.

In December 2019, the FASB issued ASU No. 2019-12: *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. ASU No. 2019-12 amends the accounting treatment for income taxes by simplifying and clarifying certain aspects of the existing guidance. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2020. The Company adopted this standard when it became effective on January 1, 2021. The adoption of this standard did not have a material effect on the Company's financial statements or related disclosures.

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-06: *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*. Among other things, ASU No. 2020-06 simplifies the guidance in ASC 470 by eliminating two of the three models that require separating embedded conversion features from convertible instruments. This ASU is effective for public entities for annual and interim periods beginning after December 15, 2021. Early adoption is permitted as of the beginning of any interim or annual reporting period, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. For existing debt instruments, the Company does not expect this standard will have a material impact to its consolidated financial statements or related disclosures.

Recently Adopted 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 replaced the incurred loss approach with an expected loss model for instruments measured at amortized cost. Entities are required to 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 became effective for public entities for annual and interim periods beginning after December 15, 2019. The Company adopted this standard when it became effective on January 1, 2020. See further discussion above in "*Accounts and Notes Receivable*" in this Note for a discussion of the impact to the Company's consolidated 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 are no longer 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 are 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. The Company adopted this standard when it became effective on January 1, 2020. The adoption of this standard impacted certain of the Company's disclosures included in Note 8: Fair Value Measurements.

2. REVENUE

Disaggregation of Revenue

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

	Year Ended		
	December 31, 2020	December 31, 2019	December 31, 2018
Service revenue:			
Duplex	$ 33,878	$ 43,679	$ 41,223
SPOT	46,417	50,461	52,363
Commercial IoT	17,174	16,972	13,459
Engineering and Other	15,722	2,274	4,044
Total service revenue	113,191	113,386	111,089
Subscriber equipment sales:			
Duplex	$ 1,883	$ 1,325	$ 2,021
SPOT	8,176	7,617	8,425
Commercial IoT	5,140	9,300	8,444
Other	97	90	134
Total subscriber equipment sales	15,296	18,332	19,024
Total revenue	$ 128,487	$ 131,718	$ 130,113

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, 2020	December 31, 2019	December 31, 2018
Service revenue:			
United States	$ 84,290	$ 80,704	$ 78,918
Canada	18,217	20,709	20,186
Europe	7,040	8,628	9,190
Central and South America	2,717	2,513	2,183
Others	927	832	612
Total service revenue	113,191	113,386	111,089
Subscriber equipment sales:			
United States	$ 8,226	$ 9,937	$ 11,756
Canada	3,741	4,632	3,051
Europe	1,639	1,707	2,487
Central and South America	1,674	1,946	1,472
Others	16	110	258
Total subscriber equipment sales	15,296	18,332	19,024
Total revenue	$ 128,487	$ 131,718	$ 130,113

During the third quarter of 2019, the Company revised its calculation of the estimated impact from the initial adoption of ASC 606 to recognize additional revenue that should have been recognized under ASC 606 for contracts that were open at the adoption date. The adjustment, which totaled $3.9 million, was recorded to Duplex service revenue and was deemed immaterial to the Company’s financial statements for each period since January 1, 2018; this was reflected as an out-of-period amount.

Accounts Receivable

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, 2020 and 2019, $1.9 million and $6.5 million, respectively, related to these agreements was included in accounts receivable on the Company's consolidated balance sheet. The decrease in this balance from December 31, 2019 to 2020 was due to a net settlement with one of the Company's IGOs that reduced outstanding accounts receivable and accounts payable balances during the fiscal year end December 31, 2020.

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 from whom it has previously received consideration. The amount of revenue recognized during the years ended December 31, 2020 and 2019 from performance obligations included in the contract liability balance at the beginning of these periods was $31.2 million and $30.9 million, respectively. Additionally, during the fourth quarter of 2020, the Company recognized $2.9 million of revenue previously included in non-current deferred revenue related to a contract executed in 2007 for the construction of a gateway in Nigeria, upon its termination due to a lack of performance by the partner, and the Company's performance of all obligations in accordance with the terms of the contract.

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, 2020, the Company expects to recognize $26.0 million, or approximately 89%, of its remaining performance obligations during the next twelve months.

3. LEASES

The following tables disclose the components of the Company's finance and operating leases (amounts in thousands):

	As of: December 31, 2020	As of: December 31, 2019
Operating leases:		
Right-of-use asset, net	$ 14,400	$ 15,871
Short-term lease liability (recorded in accrued expenses)	1,330	1,634
Long-term lease liability	13,726	14,747
Total operating lease liabilities	$ 15,056	$ 16,381
Finance leases:		
Right-of-use asset, net (recorded in intangible and other current assets, net)	$ 19	$ 95
Short-term lease liability (recorded in accrued expenses)	11	68
Long-term lease liability (recorded in non-current liabilities)	9	19
Total finance lease liabilities	$ 20	$ 87

Lease Cost

The components of lease cost are reflected in the table below (amounts in thousands). For the years ended December 31, 2020 and 2019, the Company has presented financial results and applied its accounting policies under ASC 842; for the year ended December 31, 2018, financial results and accounting policies have not been adjusted and are reflected under legacy GAAP pursuant to ASC 840.

	Twelve Months Ended December 31, 2020	Twelve Months Ended December 31, 2019
Operating lease cost:		
Amortization of right-of-use assets	$ 1,880	$ 1,719
Interest on lease liabilities	1,320	1,098
Finance lease cost:		
Amortization of right-of-use assets	76	105
Interest on lease liabilities	4	11
Short-term lease cost	100	180
Total lease cost	$ 3,380	$ 3,113

As reported under legacy GAAP, total rent expense for 2018 was approximately $1.4 million. The increase in lease expense from 2018 to 2019 was due primarily to the lease entered into in February 2019 with Thermo Covington, LLC for the Company's new headquarters office.

Weighted-Average Remaining Lease Term and Discount Rate

The following table discloses the weighted-average remaining lease term and discount rate for finance and operating leases.

	As of: December 31, 2020	As of: December 31, 2019
Weighted-average lease term		
Finance leases	1.8 years	1.5 years
Operating Leases	8.3 years	8.9 years
Weighted-average discount rate		
Finance leases	7.2 %	8.1 %
Operating leases	8.4 %	8.4 %

Supplemental Cash Flow Information

The below table discloses supplemental cash flow information for finance and operating leases (in thousands). As noted above, presentation for the year ended December 31, 2018 has not been adjusted under the modified retrospective method of adoption.

	Twelve Months Ended December 31, 2020	Twelve Months Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 3,055	$ 2,647
Operating cash flows from finance leases	4	11
Financing cash flows from finance leases	68	103

Maturity Analysis

The following table reflects undiscounted cash flows on an annual basis for the Company's lease liabilities as of December 31, 2020 (amounts in thousands):

	Operating Leases	Finance Leases
2021	$ 2,597	$ 11
2022	2,478	6
2023	2,510	4
2024	2,383	—
2025	2,405	—
Thereafter	8,803	—
Total lease payments	$ 21,176	$ 21
Imputed interest	(6,120)	(1)
Discounted lease liability	$ 15,056	$ 20

As of December 31, 2020, the Company had executed additional operating leases, primarily for new gateway locations, that are expected to commence during 2021. Accordingly, these leases are not included on the balance sheet as of December 31, 2020 or in the maturity table above. The Company is in the process of evaluating these lease obligations.

4. PROPERTY AND EQUIPMENT

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

	December 31, 2020	December 31, 2019
Globalstar System:		
Space component		
First and second-generation satellites in service	$ 1,195,509	$ 1,195,509
Second-generation satellite, on-ground spare	32,443	32,443
Ground component	272,492	269,547
Construction in progress:		
Ground component	19,327	16,040
Other	3,298	5,132
Total Globalstar System	1,523,069	1,518,671
Internally developed and purchased software	23,984	18,922
Equipment	9,679	8,731
Land and buildings	3,110	3,287
Leasehold improvements	1,655	1,633
Total property and equipment	1,561,497	1,551,244
Accumulated depreciation	(845,588)	(751,330)
Total property and equipment, net	$ 715,909	$ 799,914

Amounts in the above table consist primarily of costs incurred related to the construction of the Company's second-generation constellation and ground upgrades. The remaining ground component of construction in progress represents costs (including capitalized interest) incurred for assets to upgrade the Company's ground infrastructure in certain regions around the world. These gateway assets will be deployed based on coverage optimization. The ground component of construction in progress also includes costs (including capitalized interest) associated with the Company's contract for the procurement and production of new gateway antennas. As of December 31, 2020, approximately $7.9 million of the ground component of CIP

includes costs associated with new antennas for certain of the Company's gateways around the world. The Company expects these assets to be placed into service in the near future.

Amounts included in the Company’s second-generation satellite, on-ground spare balance as of December 31, 2020 and 2019, 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, 2020, 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,		
	2020	2019	2018
Interest cost eligible to be capitalized	$ 50,721	$ 64,058	$ 51,819
Interest cost recorded in interest income (expense), net	(48,064)	(62,255)	(43,434)
Net interest capitalized	$ 2,657	$ 1,803	$ 8,385

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

	Year Ended December 31,		
	2020	2019	2018
Depreciation Expense	$ 84,853	$ 83,575	$ 81,779

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

	Year Ended December 31,		
	2020	2019	2018
Amortization Expense	$ 11,962	$ 12,197	$ 8,659

During 2018, the Company placed into service developed technology associated with the launch of its next generation of products. The amortization expense in the table above reflects primarily the 15-year life of these assets from the in-service date.

Geographic Location of Property and Equipment

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,	
	2020	2019
Property and equipment:		
United States	$ 687,302	$ 772,498
Canada	11,814	12,239
Europe	3,170	3,126
Central and South America	13,614	11,786
Other	9	265
Total property and equipment	$ 715,909	$ 799,914

5. INTANGIBLE AND OTHER ASSETS

Intangible Assets

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 primarily include efforts related to the enhancement of the Company's licensed MSS spectrum to provide terrestrial wireless services as well as costs with international regulatory agencies to obtain similar terrestrial authorizations outside of the United States. This category includes work in progress assets as well as indefinite lived assets already placed into service. The Company also has intangible assets subject to amortization, which primarily include developed technology and definite lived MSS licenses.

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

	December 31, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible Assets Not Subject to Amortization	$ 21,496	$ —	$ 21,496	$ 18,288	$ —	$ 18,288
Intangible Assets Subject to Amortization:						
Developed technology	$ 11,856	$ (7,016)	$ 4,840	$ 11,692	$ (6,232)	$ 5,460
Regulatory authorizations	1,866	(682)	1,184	1,937	(477)	1,460
	$ 13,722	$ (7,698)	$ 6,024	$ 13,629	$ (6,709)	$ 6,920
Total	$ 35,218	$ (7,698)	$ 27,520	$ 31,917	$ (6,709)	$ 25,208

As of December 31, 2020 and 2019, customer relationships totaling $2.1 million and trade names totaling $0.2 million were fully amortized and have been removed from the table above. For the twelve months ended December 31, 2020, the Company recorded amortization expense on these intangible assets of $1.1 million. Amortization expense is recorded in operating expenses in the Company’s consolidated statements of operations.

Excluding the effects of any acquisitions, dispositions or write-downs subsequent to December 31, 2020, total estimated annual amortization of intangible assets is as follows (in thousands):

2021	$ 1,110
2022	1,108
2023	840
2024	594
2025	416
Thereafter	1,956
Total	$ 6,024

Other Assets

Other assets consist of the following (in thousands):

	December 31,	
	2020	2019
Costs to obtain a contract	$ 2,404	$ 1,976
Long-term prepaid licenses and royalties	4,679	5,037
International tax receivables	619	800
Investments in businesses	1,589	2,089
Compound embedded derivative with the Second Lien Facility Agreement	286	—
Other long-term assets	1,132	535
Total other assets	$ 10,709	$ 10,437

6. LONG-TERM DEBT AND OTHER FINANCING ARRANGEMENTS

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

	December 31, 2020			December 31, 2019		
	Principal Amount	Unamortized Discount and Deferred Financing Costs	Carrying Value	Principal Amount	Unamortized Discount and Deferred Financing Costs	Carrying Value
First Lien Facility Agreement	$ 186,988	$ 6,373	$ 180,615	$ 190,361	$ 10,185	$ 180,176
Second Lien Facility Agreement	230,597	32,125	198,472	201,495	35,448	166,047
Loan Agreement with Thermo	—	—	—	135,105	18,562	116,543
8.00% Convertible Senior Notes Issued in 2013	1,376	—	1,376	1,410	—	1,410
Payroll Protection Program Loan	4,973	26	4,947	—	—	—
Total Debt	423,934	38,524	385,410	528,371	64,195	464,176
Less: Current Portion	58,824	—	58,824	—	—	—
Long-Term Debt	$ 365,110	$ 38,524	$ 326,586	$ 528,371	$ 64,195	$ 464,176

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. As of December 31, 2020, the current portion of long-term debt represents the scheduled principal repayments under the First Lien Facility Agreement and the PPP Loan due within one year of the balance sheet date.

First Lien Facility Agreement

In 2009, the Company entered into the First Lien Facility Agreement with a syndicate of bank lenders, including BNP Paribas, Société Générale, Natixis, Crédit Agricole Corporate and Investment Bank and Crédit Industriel et Commercial, as arrangers, and BNP Paribas, as the security agent. The First Lien Facility Agreement was amended and restated in July 2013, August 2015, June 2017 and November 2019.

The First Lien Facility Agreement is scheduled to mature in December 2022. Indebtedness under the First Lien Facility Agreement bears interest at a floating rate of LIBOR plus a margin that increases by 0.5% each year to a maximum rate of LIBOR plus 5.75%. The current interest rate is LIBOR plus 4.75%. Interest on the First Lien 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 First Lien Facility Agreement are guaranteed by Bpifrance Assurance Export S.A.S. ("BPIFAE"), the French export credit agency. The Company's obligations under the First Lien 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.

As previously discussed, the Company received a loan under the CARES Act in April 2020. Due to restrictions limiting the Company's ability to incur indebtedness, the execution of this loan required a waiver under the First Lien Facility Agreement, which was approved by the Company's senior lenders.

The First Lien 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 do not exceed $20.0 million;
- 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 First Lien Facility Agreement) (amounts in thousands):

Period	Minimum Amount	
1/1/20-6/30/20	$	18,245
7/1/20-12/31/20	$	23,755
1/1/21-6/30/21	$	20,524
7/1/21-12/31/21	$	26,780

- 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 3.96:1 for the December 31, 2020 measurement period and 2.50:1 for the four semi-annual measurement periods leading up to December 31, 2022;
- The Company maintains a minimum interest coverage ratio of 3.63:1 for the December 31, 2020 measurement period, increasing gradually each semi-annual period until the requirement equals 5.25:1 for the two 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.

Additionally, the covenants in the First Lien 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.

In calculating compliance with the financial covenants of the First Lien 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 maturity. If the Company violates any financial covenants and is unable to obtain a sufficient Equity Cure Contribution or obtain a waiver, it would be in default under the First Lien 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. As of December 31, 2020, the Company was in compliance with respect to the covenants of the First Lien Facility Agreement.

The First Lien Facility Agreement requires mandatory prepayments of principal with any Excess Cash Flow (as defined and calculated in the First Lien Facility Agreement) on a semi-annual basis. During 2020, the Company was required to pay $0.3 million and $3.1 million to its first lien lenders resulting from the Excess Cash Flow calculations as of December 31, 2019 and June 30, 2020, respectively. The Company expects to make another prepayment in 2021 from Excess Cash Flow as of December 31, 2020. These payments reduce future principal payment obligations.

The First Lien 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 First Lien Facility Agreement. The required balance in the debt service reserve account is fixed and must equal at least $50.9 million. As of December 31, 2020, the balance in the debt service reserve

account was approximately $51.1 million and is classified as non-current restricted cash on the Company's consolidated balance sheet as it will be used towards the final scheduled payment due upon maturity of the First Lien Facility Agreement in December 2022.

The amended and restated First Lien Facility Agreement includes a requirement that the Company raise no less than $45.0 million from the sale of equity prior to March 30, 2021. These proceeds will be applied towards the principal payment due on June 30, 2021 and then, if applicable, to the next scheduled principal payments. The Company currently expects to fulfill this requirement with proceeds from the exercise of the remaining warrants issued to the Second Lien Facility Agreement lenders in November 2019. The Company will access equity and debt capital markets, if necessary to fund any remaining requirements not satisfied through warrant proceeds. In December 2019, the Company received proceeds of $3.6 million from the exercise of a portion of warrants issued to the Second Lien Facility Agreement lenders, which is retained in the equity proceeds account under the First Lien Facility Agreement and is recorded in current restricted cash on the Company's consolidated balance sheet as of December 31, 2020. Since December 31, 2020, certain of the Second Lien Facility Agreement lenders exercised approximately 5.5 million warrants at a price of $0.38 per share, the proceeds of which will be used to fulfill a portion of the $45.0 million requirement discussed above.

Subordinated Loan Agreement

In July 2019, the Company entered into a Subordinated Loan Agreement (the "Subordinated Loan Agreement") with Thermo Funding Company LLC (an affiliated entity to Thermo), and certain unaffiliated parties. Under the Subordinated Loan Agreement, the Company received $62.0 million to fund the June 30, 2019 payment of interest and principal under the Company's First Lien Facility Agreement and for certain other purposes. The Subordinated Loan Agreement accrued interest at 15% per annum, which was capitalized and added to the outstanding principal in lieu of cash payments. Prior to repayment, the Subordinated Loan Agreement had accrued a total of $4.0 million. In November 2019, the Subordinated Loan Agreement was paid in full from a portion of the proceeds from the Second Lien Facility Agreement (see further discussion below). For further discussion on the accounting treatment of the Subordinated Loan Agreement, refer to the Globalstar Annual Report on Form 10-K for the year ended December 31, 2019.

Second Lien Facility Agreement

In November 2019, the Company entered into a $199.0 million Second Lien Facility Agreement with Thermo, EchoStar Corporation and certain other unaffiliated lenders. The Second Lien Facility Agreement is scheduled to mature in November 2025. The loans under the Second Lien Facility Agreement bear interest at a blended rate of 13.5% per annum to be paid in kind (or in cash at the option of the Company, subject to restrictions in the First Lien Facility Agreement).

The cash proceeds from this loan were net of a 3%, or $6.0 million, original issue discount (the "OID"). A portion of this OID was recorded as a debt discount of $4.0 million. This debt discount was netted against the principal amount of the loan and is being accreted using an effective interest method to interest expense over the term of the loan.

As additional consideration for the loan, the Company issued the lenders warrants to purchase 124.5 million shares of voting common stock at an exercise price of $0.38 per share. These warrants expire on March 31, 2021. As of December 31, 2020, approximately 115.0 million warrants remain outstanding. Since December 31, 2020, an additional 5.5 million warrants were exercised at a price of $0.38 per share. The Company determined that the warrants were equity instruments and recorded them as a part of stockholders' equity. A portion of the warrants fair value was recorded as a debt discount of $15.8 million. This debt discount was netted against the principal amount of the loan and is being accreted using an effective interest method to interest expense over the term of the loan.

As previously discussed, the Company received a loan under the CARES Act in April 2020. Due to restrictions limiting the Company's ability to incur indebtedness, the execution of this loan required a waiver under the Second Lien Facility Agreement, which was approved by the Company's second lien lenders.

The Second Lien Facility Agreement contains customary events of default and requires that the Company satisfy various financial and non-financial covenants. Unless shown below, covenants under the Second Lien Facility Agreement are consistent with the covenants under the Company's First Lien Facility Agreement (discussed above). The financial covenants in the Second Lien Facility Agreement require the Company to:

- maintain at all times a minimum liquidity balance of $3.6 million;

- achieve for each period the following minimum adjusted consolidated EBITDA (as defined in the Second Lien Facility Agreement) (amounts in thousands):

Period	Minimum Amount	
1/1/20-6/30/20	$	16,400
7/1/20-12/31/20	$	21,400
1/1/21-6/30/21	$	18,500
7/1/21-12/31/21	$	24,100

- maintain a minimum debt service coverage ratio of 0.90:1;

- maintain a maximum net debt to adjusted consolidated EBITDA ratio of 4.36:1 for the December 31, 2020 measurement period and 2.75:1 for the four semi-annual measurement periods leading up to December 31, 2022; and

- maintain a minimum interest coverage ratio of 3.27:1 for the December 31, 2020 measurement period, increasing gradually each semi-annual period until the requirement equals 4.73:1 for the two semi-annual measurement periods leading up to December 31, 2022.

As of December 31, 2020, the Company was in compliance with the covenants of the Second Lien Facility Agreement.

The portion of the Second Lien Facility Agreement proceeds that was used to repay the Subordinated Loan Agreement was considered a debt extinguishment pursuant to applicable accounting guidance. See discussion in the *Subordinated Loan Agreement* section above for further information. The remaining Second Lien Facility Agreement was recorded at its carrying value at inception.

The Company evaluated the various embedded derivatives within the Second Lien Facility Agreement related to certain contingently exercisable put options. Due to the substantial discount upon issuance, as calculated under applicable accounting guidance, these prepayment features were required to be bifurcated and separately valued. The Company initially recorded the 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 Second Lien Facility Agreement. The Company is accreting the debt discount associated with the compound embedded derivative liability to interest expense through the maturity date using an effective interest rate method.

Thermo's participation in the Second Lien Facility Agreement was reviewed and approved on the Company's behalf by the Strategic Review Committee, which is a committee of disinterested and independent directors who are represented by independent legal counsel. See Note 11: Related Party Transactions for further information on the role and responsibility of the Strategic Review Committee.

Thermo Loan Agreement

In connection with the amendment and restatement of the First Lien Facility Agreement in July 2013, the Company amended and restated its loan agreement with Thermo (the “Loan Agreement”). The Loan Agreement was convertible into shares of common stock at a conversion price of $0.69 (as adjusted) per share of common stock. The Loan Agreement accrued interest at 12% per annum, which was capitalized and added to the outstanding principal in lieu of cash payments.

On February 19, 2020, Thermo converted the entire principal balance outstanding under the Loan Agreement, which totaled $137.4 million and included accrued interest since inception of $93.9 million. This conversion resulted in the issuance of 200.1 million shares of common stock. In accordance with applicable accounting guidance for debt extinguishment with related parties, upon conversion, the remaining debt discount was written off and recorded as a contribution to capital though equity and the associated derivative liability was marked to market at the conversion date and then extinguished through equity as a contribution to capital.

The Company evaluated the various embedded derivatives within the Loan Agreement (See Note 8: 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 Company recorded this compound embedded derivative liability as a non-current liability on its consolidated balance sheets with a corresponding debt discount, which was netted against the face value of the Loan Agreement. Prior to conversion in February 2020, the Company was 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 stated maturity was used as the expected term for purposes of amortizing the debt discount, despite the Company's expectation of an earlier conversion, based on the applicable accounting rules.

8.00% Convertible Senior Notes Issued in 2013

In 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 per share of common stock, as adjusted pursuant to the terms of the indenture (the “Indenture”). The 2013 8.00% Notes are senior unsecured debt obligations that mature on April 1, 2028, subject to various call and put features, and bear interest at a rate of 8.00% per annum. Interest is paid in cash at a rate of 5.75% and in additional notes at a rate of 2.25%. Since issuance, $55.5 million of principal amount of the 2013 8.00% Notes have been converted resulting in the issuance of 98.6 million shares of Globalstar common stock.

The Company may redeem the 2013 8.00% Notes, with the prior approval of the majority lenders under the First Lien Facility Agreement and the Second Lien Facility Agreement, in whole or in part, at a price equal to the principal amount of the 2013 8.00% Notes to be redeemed plus all accrued and unpaid interest thereon. A holder of the 2013 8.00% Notes has the right to require the Company to purchase some or all of the 2013 8.00% Notes held by it on April 1, 2023, or at any time if there is a Fundamental Change (as defined in the Indenture), at a price equal to the principal amount of the 2013 8.00% Notes to be purchased plus accrued and unpaid interest. A holder may convert its 2013 8.00% Notes at its option at any time prior to April 1, 2028 into shares of common stock.

The Indenture provides for customary events of default. As of December 31, 2020, 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 recorded this compound embedded derivative liability as a liability on its consolidated balance sheets with a corresponding debt discount which was netted against the face value of the 2013 8.00% Notes. The debt discount has been fully accreted as of September 30, 2017.

Payroll Protection Program Loan

In April 2020, the Company sought relief under the CARES Act and received a $5.0 million loan under the PPP. The PPP Loan is an unsecured debt obligation and is scheduled to mature in April 2022. As permitted under the CARES Act, the Company applied for loan forgiveness in December 2020, inclusive of both principal and accrued interest, in accordance with the terms of the CARES Act, based on payroll costs incurred since disbursement of the PPP Loan. Any amount not forgiven by the Small Business Administration (the "SBA") is subject to an interest rate of 1.00% per annum commencing on the date of the PPP Loan. Principal and interest payments due under the PPP Loan are generally deferred until the review and approval of any forgiveness is made by the SBA, subject to the PPP rules. Furthermore, the Company's first and second lien lenders would require the Company to accelerate the repayment of any portion of the loan amount that is not forgiven.

The Company evaluated the applicable accounting guidance relative to the PPP Loan and accounted for the proceeds of the PPP Loan as debt under ASC 470. The Company expects the PPP Loan to be forgiven, but cannot provide assurance of such forgiveness until it has been approved by the Company's lender and the SBA. Any portion of the PPP Loan that is forgiven will be recorded in the Company's condensed consolidated statement of operations as a gain on extinguishment of debt in the period of forgiveness.

Debt maturities

Annual debt maturities for each of the five years following December 31, 2020 and thereafter are as follows (in thousands):

2021	$	58,824
2022		132,857
2023		1,656
2024		—
2025		230,597
Thereafter		—
Total	$	423,934

Amounts in the above table are calculated based on amounts outstanding at December 31, 2020, and therefore exclude paid-in-kind interest payments that will be made in future periods.

7. DERIVATIVES

The Company has identified various embedded derivatives resulting from certain features in the Company's existing borrowing arrangements, requiring recognition 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):

	December 31, 2020	December 31, 2019
Derivative assets:		
Compound embedded derivative with the Second Lien Facility Agreement	$ 286	$ —
Total derivative assets	$ 286	$ —
Derivative liabilities:		
Compound embedded derivative with the 2013 8.00% Notes	$ (123)	$ (522)
Compound embedded derivative with the Loan Agreement with Thermo	—	(1,270)
Compound embedded derivative with the Second Lien Facility Agreement	—	(2,000)
Total derivative liabilities	$ (123)	$ (3,792)

As of December 31, 2020, the derivative asset recorded for the Compound embedded derivative with the Second Lien Facility Agreement was included in Intangible and other assets, net on the Company's consolidated balance sheets.

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

	Year ended December 31,		
	2020	2019	2018
Compound embedded derivative with the 2013 8.00% Notes	399	235	569
Compound embedded derivative with the Loan Agreement with Thermo	212	144,838	80,551
Compound embedded derivative with the Second Lien Facility Agreement	2,286	—	—
Total derivative gain	$ 2,897	$ 145,073	$ 81,120

The fair value of each embedded derivative 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 classifies its derivatives consistent with the classification of the underlying debt on the Company's consolidated balance sheet. See Note 8: Fair Value Measurements for further discussion. Each liability or asset 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. The Company classifies this derivative liability consistent with the classification of the 2013 8.00% Notes on the Company's consolidated balance sheet.

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 2013, the Company recorded a compound embedded derivative liability on its consolidated balance sheets with a corresponding debt discount that was 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. During the first quarter of 2020, the compound embedded derivative with the Loan Agreement with Thermo was extinguished. See Note 6: Long-Term Debt and Other Financing Arrangements for further discussion.

Compound Embedded Derivative with the Second Lien Facility Agreement

As a result of certain contingently exercisable put features within the Second Lien Facility Agreement, the Company initially recorded a compound embedded derivative liability on its consolidated balance sheet with a corresponding debt discount that is netted against the face value of the Second Lien Facility Agreement. The Company determined the fair value of the compound embedded derivative liability using a probability weighted discounted cash flow model.

8. 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 assets and liabilities measured at fair value on a recurring basis (in thousands):

	Fair Value Measurements at December 31, 2020:			
	(Level 1)	(Level 2)	(Level 3)	Total Balance
Assets:				
Compound embedded derivative with the Second Lien Facility Agreement	$ —	$ —	$ 286	$ 286
Total assets measured at fair value	$ —	$ —	$ 286	$ 286
Liabilities:				
Compound embedded derivative with the 2013 8.00% Notes	$ —	$ —	$ (123)	$ (123)
Total liabilities measured at fair value	$ —	$ —	$ (123)	$ (123)

	Fair Value Measurements at December 31, 2019:			
	(Level 1)	(Level 2)	(Level 3)	Total Balance
Compound embedded derivative with 8.00% Notes Issued in 2013	$ —	$ —	$ (522)	$ (522)
Compound embedded derivative with the Loan Agreement with Thermo	—	—	(1,270)	(1,270)
Compound embedded derivative with the Second Lien Facility Agreement	—	—	(2,000)	(2,000)
Total liabilities measured at fair value	$ —	$ —	$ (3,792)	$ (3,792)

All of the Company's derivative assets and liabilities are classified as Level 3. The Company marks-to-market these assets and 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 7: Derivatives for further discussion.

2013 8.00% Notes and Loan Agreement with Thermo

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

	December 31, 2020:				
	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 - 85%	0.1%	$0.69	19%	$0.34

During the first quarter of 2020, the compound embedded derivative with the Loan Agreement with Thermo was extinguished and, therefore, as of December 31, 2020, the value was zero. See Note 6: Long-Term Debt and Other Financing Arrangements and Note 7: Derivatives for further discussion.

	December 31, 2019:				
	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	70 - 130%	1.6%	$0.69	27%	$0.52
Compound embedded derivative with the Loan Agreement with Thermo	70 - 130%	1.6%	$0.69	27%	$0.52

Second Lien Facility Agreement

The compound embedded derivative with the Second Lien Facility Agreement is valued using a probability weighted discounted cash flow model. The most significant observable input used in the fair value measurement is the discount yield, which was 13% and 18% at December 31, 2020 and 2019, respectively. As of December 31, 2020, the discount yield utilized in the valuation was lower than the blended interest rate of the underlying debt. As a result, the features embedded in the underlying debt resulted in an asset for the Company.

Decreases in the discount yield generally will result in a lower fair value measurement in the model. The unobservable inputs used in the fair value measurement include the probability of change of control and the estimated timing and amounts of cash flows associated with certain mandatory prepayments within the debt agreement.

Rollforward of Recurring Level 3 Assets and Liabilities

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

	Year Ended December 31,	
	2020	2019
Balances at beginning of period	$ (3,792)	$ (146,865)
Derivative adjustment related to conversions	1,058	—
Issuance of compound embedded derivative with the Second Lien Facility Agreement	—	(2,000)
Unrealized gain, included in derivative gain	2,897	145,073
Balances at end of period	$ 163	$ (3,792)

Fair Value of Debt Instruments

The Company believes it is not practicable to determine the fair value of the First Lien Facility Agreement, the Second Lien Facility Agreement and the PPP Loan without incurring significant additional costs. Unlike typical long-term debt, interest rates and other terms for these instruments 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, 2020		December 31, 2019	
	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Loan Agreement with Thermo	$ —	$ —	$ 116,543	$ 88,886
2013 8.00% Notes	1,376	1,122	1,410	875

Nonrecurring Fair Value Measurements

Compound Embedded Derivative with the Loan Agreement with Thermo

The Company follows the authoritative guidance regarding non-financial assets and liabilities that are remeasured at fair value on a nonrecurring basis. On February 19, 2020, Thermo converted the entire principal balance outstanding under the Loan Agreement with Thermo into shares of common stock. See further discussion in Note 6: Long-Term Debt and Other Financing Arrangements. As a result of the conversion, the Company wrote off the total fair value of the compound embedded derivative liability with the Loan Agreement with Thermo based on the derivative value on the conversion date of $1.1 million. This embedded derivative was classified as a Level 3 fair value measurement on the Company's consolidated balance sheet. The significant quantitative Level 3 inputs utilized in the valuation model are shown in the table below:

	February 19, 2020				
	Stock Price Volatility	Risk-Free Interest Rate	Note Conversion Price	Discount Rate	Market Price of Common Stock
Compound embedded derivative with the Loan Agreement with Thermo	70 - 130%	1.4 %	$ 0.69	27 %	$ 0.42

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 2019, the Company reclassified its former gateway location in Nicaragua from held and used to held for sale. This asset was originally recorded at a total fair value of $1.6 million prior to the reduction in its value, resulting in a total loss of $1.1 million during 2019. As of December 31, 2019, the fair value less estimated cost to sell was $0.5 million. During the fourth quarter of 2020, the Company signed a contract for the sale of this property; the final selling price (net of estimated cost to sell) is $0.3 million and, accordingly, the Company recorded an additional impairment totaling $0.2 million during 2020. Additionally, during the fourth quarter of 2020, the Company wrote down $0.2 million related to of the ground portion of construction in progress for one of its gateways resulting from an analysis made over these balances.

9. COMMITMENTS AND CONTINGENCIES

Network Obligations

The Company has purchase commitments with certain vendors related to the procurement, deployment and maintenance of the Company's network. As of December 31, 2020, the Company's remaining purchase obligations under certain of these noncancellable commitments are approximately $8.1 million; the timing of payments is driven by work performed under the contracts over the remaining contract periods, which range from approximately one to three years.

Inventory Purchase 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 sales forecasts. The Company estimates that its open inventory purchase commitments as of December 31, 2020 were approximately $6.4 million.

Credit Card Processor Reserve

The Company is required to maintain a reserve of $5.0 million with its credit card processor to address any liability arising from potential charge-backs. The balance at December 31, 2020 was $5.0 million and is recorded in prepaid expenses and other current assets on the Company's consolidated balance sheet as the required reserve is held with the credit card processor.

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 received proceeds of $7.4 million, net of legal fees, related to this settlement. The Company received the two installments of $3.7 million each in January 2019 and January 2020.

Customer Bankruptcy Claim

During 2020, one of the Company's customers filed for Chapter 11 of the United States Bankruptcy Code resulting in the Company reserving all open receivables due from the customer. This customer's plan of reorganization was confirmed by the bankruptcy court and the order was issued in January 2021. The cure payment is expected to be made to Globalstar in early 2021 totaling $0.3 million. As of December 31, 2020, the confirmation was not yet made and accordingly the Company is accounting for this matter as a gain contingency and has recorded such gain in 2021, when the contingency was resolved and payment was made.

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, 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,	
	2020	2019
Accrued compensation and benefits	$ 4,270	$ 3,455
Accrued property and other taxes	4,702	3,864
Accrued customer liabilities and deposits	6,551	5,751
Accrued professional and other service provider fees	2,705	3,192
Accrued commissions	1,722	1,829
Accrued telecommunications expenses	1,284	610
Accrued inventory	499	702
Accrued tariffs	1,795	1,795
Short-term lease liability	1,330	1,634
Other accrued expenses	1,058	2,042
Total accrued expenses	$ 25,916	$ 24,874

Accrued compensation and benefits include primarily accrued vacation, payroll, benefits and taxes. The increase in this balance from December 31, 2019 to 2020 is due primarily to higher accrued vacation balances as well as deferred payroll taxes (as discussed below).

Accrued tariffs represent amounts payable to U.S Customs and Border Protection for a ruling issued in September 2019 related to the classification of certain of the Company's core products imported from China. The Company plans on filing a protest against this ruling to challenge the classification and reduce the amounts owed.

Other accrued expenses include primarily vendor services, warranty reserve, occupancy costs and accrued network costs. For the year ended December 31, 2019, other accrued expenses also included the estimated payroll shortfall under the Cooperative Endeavor Agreement with the Louisiana Department of Economic Development.

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,		
	2020	2019	2018
Balance at beginning of period	$ 186	$ 153	$ 143
Provision	543	525	372
Utilization	(517)	(492)	(362)
Balance at end of period	$ 212	$ 186	$ 153

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

	December 31,	
	2020	2019
Asset retirement obligation	$ 1,629	$ 1,467
Deferred tax liability	755	395
Deferred payroll taxes under CARES Act	423	—
Foreign tax contingencies	633	1,086
Other	8	123
Total other non-current liabilities	$ 3,448	$ 3,071

Asset retirement obligations reflect the estimated liability arising from legal obligations associated with the retirement of certain long-lived assets; for further discussion, refer to Note 1: Summary of Significant Accounting Policies.

Deferred payroll taxes under the CARES Act reflect the Company's employer share of social security taxes that were originally due during a portion of 2020. The Company expects these amounts will be repaid in two installments in December 2021 and December 2022; amounts in the table above reflect the portion due in December 2022.

Foreign tax contingencies reflect primarily amounts owed by the Company's Brazilian subsidiary pursuant to refinancing programs in country.

11. RELATED PARTY TRANSACTIONS

Payables to Thermo and other affiliates related to normal purchase transactions were $0.6 million and $0.3 million as of December 31, 2020 and 2019, respectively.

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 expenses incurred by Thermo on behalf of the Company that 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 $0.6 million, $0.5 million, and $1.5 million for the periods ended December 31, 2020, 2019 and 2018, respectively.

In February 2019, the Company entered into a lease agreement with Thermo Covington, LLC for the Company's headquarters office. Annual lease payments started at $1.4 million per year, increasing at a rate of 2.5% per year, for a lease term of ten years. During the twelve months ended December 31, 2020 and 2019, the Company incurred lease expense of $1.6 million and $1.5 million, respectively, due to Thermo under this lease agreement.

On February 19, 2020, Thermo converted the entire principal balance outstanding under the Loan Agreement resulting in the issuance of 200.1 million shares of common stock.

In July 2019, the Company entered into a Subordinated Loan Agreement, effective June 28, 2019, with Thermo and certain unaffiliated parties. Thermo's participation in the Subordinated Loan Agreement was $53.8 million and $3.4 million of interest had accrued prior to its pay down. In November 2019, the Company entered into the Second Lien Facility Agreement. Thermo's participation in the Second Lien Facility Agreement was $95.1 million. This principal balance earns paid-in-kind interest at a rate of 13% per annum. Interest accrued since inception with respect to Thermo's portion of the debt outstanding on the Second Lien Facility Agreement was approximately $14.5 million, of which $13.4 million was accrued during the twelve months ended December 31, 2020. In connection with the issuance of the Second Lien Facility Agreement, the holders received warrants to purchase shares of voting common stock, of which Thermo received 59.5 million warrants with an exercise price of $0.38 per share. As of December 31, 2020, approximately 50.0 million warrants remain outstanding and expire on March 31, 2021.

Additionally, the First Lien Facility Agreement requires Thermo to maintain minimum and maximum ownership levels in the Company's common stock.

The Company has a Strategic Review Committee that is required to remain in existence for as long as Thermo and its affiliates beneficially own forty-five percent (45%) or more of Globalstar’s outstanding common stock. To the extent permitted by applicable law, the Strategic Review Committee has exclusive responsibility for the oversight, review and approval of, among other things and subject to certain exceptions, any acquisition by Thermo and its affiliates of additional newly-issued securities of the Company and any transaction between the Company and Thermo and its affiliates with a value in excess of $250,000.

See Note 6: 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.

In each of December 2020 and 2019, the Company settled a portion of the pension liability related to retirees and terminated vested employees in the Globalstar Plan as a de-risking strategy. The total settlements for 2020 and 2019 were $7.7 million and $1.7 million, respectively, and were paid out through the assets held in the Globalstar Plan. The settlements resulted in a reduction to the projected benefit obligation and a corresponding decrease to plan assets as of both December 31, 2020 and 2019. Additionally, in accordance with ASC 715 *Compensation — Retirement Benefits*, the Company recognized losses totaling $2.1 million and $0.5 million, respectively, and these losses are included in other income (expense) in its consolidated statement of operations during the twelve-month periods ended December 31, 2020 and 2019 associated with these settlements. The losses represent the pro rata portion of actuarial losses that were previously deferred in other comprehensive income.

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):

	Year Ended December 31,	
	2020	2019
Change in projected benefit obligation:		
Projected benefit obligation, beginning of year	$ 16,509	$ 17,150
Service cost	176	195
Interest cost	521	706
Actuarial loss	671	1,147
Settlement	(7,669)	(1,660)
Benefits paid	(1,029)	(1,029)
Projected benefit obligation, end of year	$ 9,179	$ 16,509
Change in fair value of plan assets:		
Fair value of plan assets, beginning of year	$ 12,381	$ 12,661
Return on plan assets	1,131	2,179
Employer contributions	715	230
Settlement	(7,669)	(1,660)
Benefits paid	(1,029)	(1,029)
Fair value of plan assets, end of year	$ 5,529	$ 12,381
Funded status, end of year-net liability	$ (3,650)	$ (4,128)

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,		
	2020	2019	2018
Net periodic benefit cost:			
Service cost	$ 176	$ 195	$ 194
Interest cost	521	706	663
Expected return on plan assets	(793)	(794)	(901)
Amortization of unrecognized net actuarial loss	300	404	374
Settlement	2,075	455	—
Total net periodic benefit cost	$ 2,279	$ 966	$ 330

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

	December 31,	
	2020	2019
Amounts recognized:		
Funded status recognized in other non-current liabilities	$ (3,650)	$ (4,128)
Net actuarial loss recognized in accumulated other comprehensive loss	2,483	4,525
Net amount recognized in retained deficit	$ (1,167)	$ 397

The estimated net actuarial loss that will be amortized from accumulated other comprehensive loss into net periodic benefit cost in 2021 is $0.2 million. No amounts are expected to be amortized from accumulated other comprehensive loss into net periodic benefit cost in 2021 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 Year Ended December 31,		
	2020	2019	2018
Benefit obligation assumptions:			
Discount rate	2.50 %	3.28 %	4.25 %
Rate of compensation increase	N/A	N/A	N/A
Net periodic benefit cost assumptions:			
Discount rate	3.28 %	4.25 %	3.63 %
Expected rate of return on plan assets	6.50 %	6.50 %	6.50 %
Rate of compensation increase	N/A	N/A	N/A

The assumptions, investment policies and strategies for the Globalstar Plan are determined by 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,	
	2020	2019
Equity securities	55 %	55 %
Debt securities	45	45
Total	100 %	100 %

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

	December 31, 2020			
	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	$ 2,426	$ —	$ 2,426	$ —
International equity securities	619	—	619	—
Fixed income securities	1,553	—	1,553	—
Other	931	—	931	—
Total	$ 5,529	$ —	$ 5,529	$ —

	December 31, 2019			
	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	$ 5,501	$ —	$ 5,501	$ —
International equity securities	1,366	—	1,366	—
Fixed income securities	3,725	—	3,725	—
Other	1,789	—	1,789	—
Total	$ 12,381	$ —	$ 12,381	$ —

Accumulated Benefit Obligation

The accumulated benefit obligation of the defined benefit pension plan was $9.2 million and $16.5 million at December 31, 2020 and 2019, respectively.

Benefits Payments and Contributions

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

2021	$	502
2022		505
2023		497
2024		510
2025		526
2026 - 2030		2,605

For 2020 and 2019, the Company contributed $0.7 million and $0.2 million, respectively, to the Globalstar Plan. For 2021, the Company's expected contributions to the Globalstar Plan will be $0.5 million.

401(k) Plan

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 for each of 2020, 2019, and 2018.

13. TAXES

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

	Year Ended December 31,		
	2020	2019	2018
Current:			
Federal tax	$ —	$ —	$ —
State tax	54	56	30
Foreign tax	248	94	95
Total	302	150	125
Deferred:			
Federal and state tax	360	395	—
Foreign tax	—	—	—
Total	360	395	—
Income tax expense	$ 662	$ 545	$ 125

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

	Year Ended December 31,		
	2020	2019	2018
U.S. income (loss)	$ (82,740)	$ 47,545	$ 28,699
Foreign income (loss), net	(26,237)	(31,676)	(35,090)
Total income (loss) before income taxes	$ (108,977)	$ 15,869	$ (6,391)

As of December 31, 2020 and 2019, the Company had cumulative U.S. and foreign net operating loss ("NOL") carryforwards for income tax reporting purposes of approximately $1.8 billion and $0.2 billion, respectively. The vast majority of these NOL carryforwards were generated prior to 2018 and expire from 2021 through 2040, with less than 1% expiring prior to 2025, and the remaining NOL carryforwards do not expire.

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

	December 31,	
	2020	2019
Federal and foreign NOL and credit carry-forwards	$ 507,105	$ 475,171
Property and equipment and other long-term assets	(133,086)	(153,049)
Reserves and disallowed interest	6,349	2,310
Deferred tax assets before valuation allowance	380,368	324,432
Valuation allowance	(381,123)	(324,827)
Net deferred income tax liability	$ (755)	$ (395)

The change in the valuation allowance during 2020 of $56.3 million was due to the Company providing valuation allowances against all of the tax benefit generated from its consolidated net losses. Due to the remeasurement of the state impact on U.S. deferred tax assets and the Company's reconciliation of various deferred tax assets to reflect the remaining cumulative differences, the Company has remeasured all U.S. deferred tax assets resulting in an increase in both the deferred tax asset and the associated valuation allowance. 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. Due to the limitation on utilization of state NOLs, the Company recorded deferred tax liabilities of $0.8 million and $0.4 million as of December 31, 2020 and 2019.

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

	Year Ended December 31,		
	2020	2019	2018
Provision at U.S. statutory rate of 21%	$ (22,885)	$ 3,333	$ (1,349)
State income taxes, net of federal benefit	(1,386)	1,055	890
Change in valuation allowance (excluding impact of foreign exchange rates)	61,540	(89,998)	(8,228)
Effect of foreign income tax at various rates	(53)	(84)	(237)
Permanent differences	5,809	7,942	7,031
Net change in permanent items due to provision to tax return	1,914	2,475	1,813
Adjustment to reserved deferred assets	(48,485)	62,085	—
Adjustment to state deferred rate	4,200	13,639	—
Other (including amounts related to prior year tax matters)	8	98	205
Total	$ 662	$ 545	$ 125

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 2017 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.

In the Company's international tax jurisdictions, numerous tax years remain subject to examination by tax authorities, including tax returns for 2012 and subsequent years in most of the Company's international tax jurisdictions.

There are no unrecognized tax benefits as of December 31, 2020 and December 31, 2019.

Other

As of December 31, 2020, the Company had not provided foreign withholding taxes on approximately $3.0 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 Company 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 years ended December 31, 2020 and 2019.

As previously discussed in Note 1: Summary of Significant Accounting Policies, the CARES Act was enacted in March 2020 to provide economic relief to eligible business and individuals impacted by COVID-19. The Company evaluated the impact the CARES Act legislation has on its liquidity and tax positions. The net impact to the Company's NOL carryforwards as of December 31, 2019 was $14.8 million due to the change in the interest limitations permitted under the CARES Act.

14. (LOSS) EARNINGS PER SHARE

Basic (loss) earnings per share is computed by dividing (loss) income available to common stockholders by the weighted average number of shares of common stock outstanding during the period. The numerator used to calculate diluted EPS includes the effect of dilutive securities, including interest expense, net, and derivative gains or losses reflected in net (loss) income. Common stock equivalents are included in the calculation of diluted earnings per share only when the effect of their inclusion would be dilutive. The effect of potentially dilutive common shares for the Company's convertible notes are calculated using the if-converted method. Generally, for all other potentially dilutive common shares, the effect is calculated using the treasury stock method.

The following table sets forth the calculation of basic and diluted (loss) earnings per share and reconciles basic weighted average shares to diluted weighted average shares of common stock outstanding for the periods indicated (in thousands):

	Year ended December 31,		
	2020	2019	2018
Net (loss) income	$ (109,639)	$ 15,324	$ (6,516)
Effect of dilutive securities:			
2013 8.00% Notes	—	(127)	—
Loan Agreement with Thermo	—	(125,880)	—
Loss to common stockholders plus assumed conversions	$ (109,639)	$ (110,683)	$ (6,516)
Weighted average common shares outstanding:			
Basic shares outstanding	1,642,359	1,450,768	1,269,548
Incremental shares from assumed exercises, conversions and other issuance of:			
Stock options, restricted stock, restricted stock units and Employee Stock Purchase Plan	—	4,743	—
2013 8.00% Notes	—	2,044	—
Loan Agreement with Thermo	—	195,805	—
Warrants issued in connection with Second Lien Facility Agreement	—	1,831	—
Diluted shares outstanding	1,642,359	1,655,191	1,269,548
Net (loss) income per common share:			
Basic	$ (0.07)	$ 0.01	$ (0.01)
Diluted	$ (0.07)	$ (0.07)	$ (0.01)

For the years ended December 31, 2020 and 2018, 4.2 million shares and 201.7 million shares, respectively, of potential common stock were excluded from diluted shares outstanding because the effects of potentially dilutive securities would be anti-dilutive. Additionally, as of December 31, 2020, 115.0 million warrants issued to the lenders of the Second Lien Facility Agreement were outstanding and not reflected in the 4.2 million potentially dilutive security amount above as they were out of the money as of December 31, 2020.

15. STOCK COMPENSATION

The Company’s 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, 2020 and 2019, the number of shares of common stock that was authorized and remained available for issuance under the Equity Plan was 26.7 million and 34.4 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 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 over the employee's requisite service period, which is generally based on the vesting period, 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,		
	2020	2019	2018
Risk-free interest rate	1.7 %	2.5 %	2% - 3%
Expected term of options (years)	5	5	5
Volatility	72 %	63 %	63 %
Weighted average grant-date fair value per share	$ 0.32	$ 0.29	$ 0.26

The following table represents the Company’s stock option activity for the year ended December 31, 2020:

	Shares	Weighted Average Exercise Price
Outstanding at January 1, 2020	7,827,464	$ 1.42
Granted	700,000	0.54
Forfeited or expired	(543,296)	1.34
Outstanding at December 31, 2020	7,984,168	1.35
Exercisable at December 31, 2020	6,918,029	$ 1.45

No stock options were exercised during 2020, accordingly, no amounts are shown in the table above. 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. The aggregate intrinsic value of all outstanding stock options at December 31, 2020 was nearly zero with a remaining contractual life of 6.0 years. The aggregate intrinsic value of all vested stock options at December 31, 2020 was nearly zero with a remaining contractual life of 6.2 years.

For the years ended December 31, 2020, 2019 and 2018, the Company recognized $0.3 million, $0.3 million and $1.1 million, respectively, of compensation expense related to stock options. As of December 31, 2020, unrecognized compensation expense related to nonvested stock options outstanding was approximately $0.4 million to be recognized over a weighted-average period of 1.4 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 vest immediately, one year from the grant date, in equal annual installments over three years or based on performance criteria. 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,		
	2020	2019	2018
Weighted average grant date fair value	$ 0.36	$ 0.46	$ 0.49

The following is a rollforward of the activity in restricted stock for the year ended December 31, 2020:

	Shares	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2020	9,292,800	$ 0.56
Granted	7,894,009	0.36
Vested	(9,344,341)	0.48
Forfeited	(106,860)	0.41
Nonvested at December 31, 2020	7,735,608	$ 0.46

Included in the non-vested balance at December 31, 2020 are approximately 2.0 million performance-based restricted stock awards that will vest upon the achievement of certain milestones. For the years ended December 31, 2020, 2019 and 2018, the Company recognized $4.5 million, $4.3 million and $3.9 million, respectively, of compensation expense related to restricted stock. The total fair value, as calculated on the day of vesting, of restricted stock awards that vested during 2020, 2019 and 2018 was $3.3 million, $4.1 million, and $3.1 million, respectively. As of December 31, 2020, unrecognized compensation expense related to unvested restricted stock outstanding was approximately $2.1 million to be recognized over a weighted-average period of 2.0 years.

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 and with the consent of our Lenders if paid cash.

For the 2020 Plan Year, the Company's adjusted EBITDA performance was within the bonus payout threshold according to the plan document. As of December 31, 2020, $1.3 million was accrued on the Company's consolidated balance sheet related to this bonus payment, which is expected to be made in the form of common stock during the first quarter of 2021.

Employee Stock Purchase Plan

The Company has an Employee Stock Purchase Plan (the “Plan”) which provides eligible employees of the Company 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 14.0 million 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”). 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 each of 2020 and 2019, the Company received $0.6 million in proceeds related to shares issued under this plan. For the years ended December 31, 2020, 2019 and 2018, the Company recorded compensation expense of approximately $0.4 million, $0.5 million and $0.5 million, respectively, which is reflected in marketing, general and administrative expenses. Additionally, the Company has issued approximately 10.5 million shares through December 31, 2020 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,	
	2020	2019
Risk-free interest rate	0.9 %	2.4 %
Expected term (months)	6	6
Volatility	123 %	128 %
Weighted average grant-date fair value per share	$ 0.18	$ 0.20

16. 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,	
	2020	2019
Accumulated minimum pension liability adjustment	$ (2,483)	$ (4,525)
Accumulated net foreign currency translation adjustment	(461)	1,076
Total accumulated other comprehensive loss	$ (2,944)	$ (3,449)

For each of the periods ended December 31, 2020 and 2019, the minimum pension liability adjustment in the table above includes a settlement loss of $2.1 million and $0.5 million, respectively. See further discussion in Note 12: Pensions and Other Employee Benefits.

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

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, 2020, 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, 2020 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, 2020.

(b) Changes in internal control over financial reporting

As of December 31, 2020, our management, with the participation of our Principal Executive Officer and Principal Financial Officer, evaluated our internal control over financial reporting. Although our employees have followed remote work arrangements caused by COVID-19, these circumstances have not adversely affected the Company's ability to maintain operations, including adequate financial reporting systems, internal control over financial reporting and disclosure controls and procedures. Additionally, in April 2020, we implemented a new billing system which resulted in our subscribers migrating to the new system. As a result of this migration, we planned and implemented changes to our internal control over financial reporting, none of which adversely affected the Company's 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 year ended December 31, 2020 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, 2020.

The Company’s internal control over financial reporting as of December 31, 2020 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report, which appears herein.

Item 9B. Other Information

Not applicable.

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 2021 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 "2020 Pay Ratio" which will be included in our definitive Proxy Statement for our 2021 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 2021 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 2021 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 2021 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, 2020 and 2019
Consolidated statements of operations for the years ended December 31, 2020, 2019 and 2018
Consolidated statements of comprehensive income (loss) for the years ended December 31, 2020, 2019 and 2018
Consolidated statements of stockholders’ equity for the years ended December 31, 2020, 2019 and 2018
Consolidated statements of cash flows for the years ended December 31, 2020, 2019 and 2018
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

Date: March 4, 2021

David B. Kagan
Chief Executive Officer

POWER OF ATTORNEY

KNOW BY ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David B. Kagan 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 March 4, 2021.

Signature	Title
/s/ David B. Kagan David B. Kagan	Chief Executive Officer (Principal Executive Officer)
/s/ Rebecca S. Clary Rebecca S. Clary	Chief Financial Officer (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*	Corrected Second Amended and Restated Certificate of Incorporation of Globalstar, Inc. (Exhibit 3.1 to Form 8-K filed June 19, 2019)
3.2*	Fourth Amended and Restated Bylaws of Globalstar, Inc. (Exhibit 3.1 to Form 8-K filed on April 15, 2019)
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)
4.3	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934
10.1*	Amended and Restated Loan Agreement between Globalstar, Inc., and Thermo Funding Company LLC dated as of July 31, 2013 (Exhibit 10.4 to Form 8-K filed August 22, 2013)
10.2*	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)
10.3*	Voting Agreement dated as of April 24, 2018 (Exhibit 10.1 to Form 8-K filed on April 25, 2018)
10.4*	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)
10.5*	Settlement Agreement dated December 14, 2018 (Exhibit 10.1 to form 8-K filed December 17, 2018)
10.6*	Lease Agreement by and between Globalstar, Inc. and Thermo Covington, LLC dated February 1, 2019 (Exhibit 10.1 to Form 10-Q filed May 2, 2019)
10.7*	Form of Indemnification Agreement between Globalstar, Inc. and its Directors dated February 26, 2019 (Exhibit 10.50 to Form 10-K filed February 28, 2019)
10.8*	Subordinated Loan Agreement Dated as of July 2, 2019 by and among Globalstar, Inc. and Other Lenders (Exhibit 10.1 to Form 10-Q filed August 9, 2019)
10.9*	Fourth Global Amendment and Restatement Agreement dated as of November 26, 2019 between Globalstar, Inc., Thermo Funding Company LLC, BNP Paribas and the other lenders thereto Amendment and Restatement Agreement dated as of November 26, 2019 between Globalstar, Inc., Thermo Funding Company LLC, BNP Paribas and the other lenders thereto (Exhibit 10.37 to Form 10-K filed February 28, 2020)
10.10*	Fourth Amended and Restated Facility Agreement dated as of November 26, 2019 between Globalstar, Inc., BNP Paribas and the other lenders party thereto (Exhibit 10.38 to Form 10-K filed February 28, 2020)
10.11*	Second Lien Facility Agreement dated as of November 26, 2019 between Globalstar, Inc., Global Loan Agency Services Limited, GLAS Trust Corporation Limited and other lenders thereto (Exhibit 10.39 to Form 10-K filed February 28, 2020)
10.12*	Form of Common Stock Purchase Warrant dated November 27, 2019 between Globalstar, Inc. and other lenders thereto (Exhibit 10.40 to Form 10-K filed February 28, 2020)
10.13*	Registration Rights Agreement dated November 26, 2019 between Globalstar, Inc. and other lenders thereto (Exhibit 10.41 to Form 10-K filed February 28, 2020)
10.14*	Intercreditor Agreement dated November 26, 2019 between BNP Paribas, Global Loan Agency Services Limited, The Senior Lenders, The Second Lien Lenders, Globalstar, Inc., BNP Paribas, GLAS Trust Corporation Limited and other lenders thereto (Exhibit 10.42 to Form 10-K filed February 28, 2020)
10.15*	Third Amended and Restated Globalstar, Inc. 2006 Equity Incentive Plan (Appendix A to Definitive Proxy Statement filed April 16, 2019)
10.16*	Amended and Restated Employee Stock Purchase Plan (Appendix B to Definitive Proxy Statement filed April 16, 2019)
10.17*	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)

10.18*	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)
10.19*	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)
10.20*	Form of Stock Option Award Agreement for use with executive officers (Exhibit 10.45 to Form 10-K filed March 31, 2011)
10.21*†	2018 Key Employee Bonus Plan (Exhibit 10.54 to Form 10-K filed February 23, 2018)
10.22*†	2019 Key Employee Bonus Plan (Exhibit 10.52 to Form 10-K Filed February 28, 2020)
10.23*††	2020 Key Employee Bonus Plan (Exhibit 10.1 to Form 10-Q filed November 5, 2020)
10.24††	2021 Key Employee Bonus Plan
10.25*	Letter Agreement with David Kagan dated November 27, 2017 (Exhibit 10.55 to Form 10-K filed February 23, 2018)
10.26*	Letter Agreement with David Kagan dated September 4, 2018 (Exhibit 10.59 to Form 10-K filed February 28, 2019)
16.1*	Letter from Letter from Crowe LLP addressed to the Securities and Exchange Commission (Exhibit 16.1 to Form 8-K Filed March 5, 2020) LLP addressed to the Securities and Exchange Commission (Exhibit 16.1 to Form 8-K Filed March 5, 2020)
21.1	Subsidiaries of Globalstar, Inc.
23.1	Consent of Ernst & Young LLP
23.2	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.
32.1	Section 906 Certification of Principal Executive Officer of Globalstar, Inc.
32.2	Section 906 Certification of Principal Financial Officer of Globalstar, Inc.
101.INS	XBRL Instance Document
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.
††	† Portions of the exhibit have been omitted pursuant to Item 601(b)(10) of Regulation S-K.

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of December 31, 2020, Globalstar, Inc. (the "Company") had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our certificate of incorporation and our bylaws, each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.3 is a part. We encourage you to read our certificate of incorporation, our bylaws and the applicable provisions of the Delaware General Corporation Law, Title 8 of the Delaware Code, for additional information.

Common Stock

General. We are authorized to issue 1.9 billion shares of common stock, par value $0.0001 per share. All outstanding shares of common stock are, and all shares of common stock to be issued upon exercise of any warrants offered hereby will be, fully-paid and nonassessable.

Dividends. Subject to preferences that may be granted to holders of any preferred stock and restrictions under our credit facilities, the holders of our common stock will be entitled to dividends as may be declared from time to time by the board of directors from funds available therefor.

Voting Rights. Each share of common stock entitles its holder to one vote on all matters to be voted on by the stockholders. Our certificate of incorporation does not provide for cumulative voting in the election of directors. Generally, all matters to be voted on by the stockholders must be approved by a majority or, in the case of the election of directors, by a plurality, of the votes present in person or by proxy and entitled to vote. While Thermo Capital Partners, L.L.C. and any of its affiliates (collectively, "Thermo"), beneficially own 45% or more of the shares of our common stock, two directors will be elected by a vote of the holders of shares of common stock not affiliated with Thermo ("Minority Directors"). Additionally, even if Thermo owns 70% or more of the voting power of our stock, Thermo may not vote more than 69.9% of the voting power of the shares eligible to vote in the election of any directors.

Preemptive Rights. Holders of common stock do not have preemptive rights with respect to the issuance and sale by the company of additional shares of common stock or other equity securities of the company.

Liquidation Rights. Upon dissolution, liquidation or winding-up, the holders of shares of common stock will be entitled to receive our assets available for distribution proportionate to their pro rata ownership of the outstanding shares of common stock.

Preferred Stock

Our board of directors has the authority, without further action of our stockholders, to issue up to 100 million shares of preferred stock, par value $0.0001 per share, in one or more series, to determine the number of shares constituting and the designation of each series and to fix the powers, preferences, rights and qualifications, limitations or restrictions thereof, which may include dividend rights, conversion rights, voting rights, terms of redemption, and liquidation preferences.

There are no restrictions on the repurchase or redemption of preferred stock by the Company in the event of any arrearage in the payment of dividends or sinking fund installments.

The issuance of preferred stock could adversely affect the holders of common stock. The potential issuance of preferred stock may discourage bids for shares of our common stock at a premium over the market price of our common stock, may adversely affect the market price of shares of our common stock and may discourage, delay or prevent a change of control.

No shares of our preferred stock are outstanding. We have no current plans to issue any shares of preferred stock.

Anti-takeover Effects of Certain Provisions of Our Amended and Restated Certificate of Incorporation and Bylaws and of Delaware General Corporation Law

The provisions of the Delaware General Corporation Law and our amended and restated certificate of incorporation and bylaws summarized below may have the effect of discouraging, delaying or preventing a hostile takeover, including one that might result in a premium being paid over the market price of our common stock, and discouraging, delaying or preventing changes in the control or management of the Company.

Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws provide that:

- if Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, no action can be taken by stockholders except at an annual or special meeting of the stockholders called in accordance with our bylaws, and stockholders may not act by written consent;
- while Thermo owns a majority of our outstanding capital stock entitled to vote in the election of directors, action can be taken by written consent signed by the number of stockholders necessary to authorize or take such action at a meeting;
- if Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, the approval of holders of 66 2/3% of the shares then entitled to vote in the election of directors will be required to adopt, amend or repeal our bylaws;
- while Thermo owns a majority of our outstanding capital stock entitled to vote in the election of directors, the approval of the majority of the holders of the shares then entitled to vote in the election of directors will be required to adopt, amend or repeal our bylaws;
- our board of directors is expressly authorized to make, alter or repeal our bylaws;
- stockholders may not call special meetings of the stockholders or fill vacancies on the board of directors;
- our board of directors are divided into three classes of service with staggered three-year terms, meaning that only one class of directors will be elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective terms;
- our board of directors is authorized to issue preferred stock without stockholder approval;
- if Thermo does not own a majority of our outstanding capital stock entitled to vote in the election of directors, directors may only be removed for cause by the holders of 66 2/3% of the shares then entitled to vote in the election of directors;
- while Thermo owns a majority of our outstanding capital stock entitled to vote in the election of directors, directors may be removed with or without cause; *provided that*, Thermo may not vote on, or consent to, or have any voting power in respect to, the removal without cause of the Minority Directors; and

- we will indemnify directors and certain officers against losses they may incur in connection with investigations and legal proceedings resulting from their service to us, which may include services in connection with takeover defense measures.

The anti-takeover and other provisions of our certificate of incorporation and by-laws could discourage potential acquisition proposals and could delay or prevent a change in control. These provisions are intended to enhance the likelihood of continuity and stability in the composition of the board of directors and in the policies formulated by the board of directors and to discourage certain types of transactions that may involve an actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts. Such provisions also may have the effect of preventing changes in our management.

Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law regulating corporate takeovers, which prohibits a Delaware corporation from engaging in any business combination with an “interested stockholder” for three years after the person becomes an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Except as otherwise specified in Section 203, an “interested stockholder” is defined to include (a) any person that is the owner of 15% or more of the outstanding voting securities of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within three years immediately prior to the date of determination and (b) the affiliates and associates of any such person. Thermo is not an “interested stockholder” because it acquired more than 15% of our outstanding stock prior to the completion of our initial public offering.

For purposes of Section 203, the term “business combinations” includes mergers, consolidations, asset sales or other transactions that result in a financial benefit to the interested stockholder and transactions that would increase the interested stockholder’s proportionate share ownership of our company.

Under some circumstances, Section 203 makes it more difficult for an interested stockholder to effect various business combinations with us. Although our stockholders have the right to exclude us from the restrictions imposed by Section 203, they have not done so. Section 203 may encourage companies interested in acquiring us to negotiate in advance with the board of directors, because the requirement

stated above regarding stockholder approval would be avoided if a majority of the directors approves, prior to the time the party became an interested stockholder, either the business combination or the transaction which results in the stockholder becoming an interested stockholder.

Forum Selection Provision

Our Bylaws provide that, unless the Company consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company; (ii) any action asserting a claim for or based on a breach of a fiduciary duty owed by any current or former director or officer or other employee of the Company to the Company or to the Company's shareowners, including a claim alleging the aiding and abetting of such a breach of fiduciary duty; (iii) any action asserting a claim against the Company or any current or former director or officer or other employee of the Company arising pursuant to any provision of the General Corporation Law of the State of Delaware or the Company's Certificate of Incorporation or Bylaws (as either may be amended from time to time); (iv) any action asserting a claim related to or involving the Company that is governed by the internal affairs doctrine; or (v) any action asserting an "internal corporate claim" as that term is defined in Section 115 of the General Corporation Law of the State of Delaware shall be a state court located within the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal court for the District of Delaware).

Section 27(a) of the Securities Exchange Act of 1934 (the "Exchange Act") confers exclusive jurisdiction over all suits and actions to enforce a liability or duty created under the Exchange Act or the rules and regulations thereunder. Accordingly, the provisions above do not apply to any such suits or actions. In addition, a recent decision of the Delaware Court of Chancery has held that exclusive forum provisions of the kind included in the Company's Bylaws do not apply to claims arising under the Securities Act of 1933. Unless action by the Delaware legislature or the Delaware courts provides otherwise, the provisions above will also not apply to such claims.

This forum selection provision may limit the ability of holders of our shares to bring a claim arising in other instances in a judicial forum that such shareholders find favorable for disputes with us or our directors or officers, which may discourage such lawsuits against the Company and/or our directors and officers. Alternatively, if a court outside of the State of Delaware were to find this forum selection provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or claims described above, we may incur additional costs associated with resolving such matters in other jurisdictions, which could harm our business, prospects, financial condition and results of operations.

Strategic Review Committee

As part of the settlement of the previously disclosed shareholder action against us, captioned *Mudrick Capital Management, LP, et al. v. Monroe, et al.,* C.A. No. 2018-0699-TMR, our certificate of incorporation and bylaws were amended to require us to form a Strategic Review Committee that is required to remain in existence for as long as Thermo beneficially owns 45% or more of our outstanding common stock. To the extent permitted by applicable law, the Strategic Review Committee has exclusive responsibility for the oversight, review and approval of, among other things and subject to certain exceptions, any acquisition by Thermo of additional newly-issued securities of the Company and any transaction between the Company and Thermo 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.

Limitation of Liability of Directors

Our certificate of incorporation provides that no director shall be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability as follows:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; and
- for any transaction from which the director derived an improper personal benefit.

Listing

Our common stock is listed on the NYSE American under the trading symbol "GSAT."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Investor Services LLC.

Exhibit 10.24

Certain portions of this document have been omitted pursuant to Item 601(b)(10) of Regulation S-K and, where applicable, have been marked with "[*]" to indicate where omissions have been made. The marked information has been omitted because it is (i) not material and (ii) would likely cause competitive harm to the registrant if publicly disclosed.

GLOBALSTAR, INC.

ANNUAL KEY EMPLOYEE BONUS PLAN
(PLAN YEAR COINCIDING WITH 2021 FISCAL YEAR)

Section 1. Purposes of the Plan

The purposes of this Key Employee Bonus Plan ("**Plan**") of Globalstar, Inc. ("Company") are:

- to reward designated key employees' successful efforts to exceed the Company's financial performance goals for the designated Plan Year,
- to align these employees' financial interests with those of the Company's stockholders, and
- to provide these employees with a competitive, success-based bonus package.

Section 2. Bonus Pool; Amounts Payable

(a) The pool available for bonus distribution shall be determined based on the Company's Adjusted EBITDA performance during the authorized calendar year ("**Plan Year**"). The aggregate amount to be distributed under the Plan with respect to the 2021 Plan Year shall be $[*] if the Company's Adjusted EBITDA for the Plan Year is $[*] (the "**Base EBITDA**"). The Base EBITDA may be adjusted from time to time to align with the Company's operating budget.

For each 1% of Adjusted EBITDA over the Base EBITDA, the bonus pool will be increased by 1% of the percentage increase in Base EBITDA. For each 1% of Adjusted EBITDA below Base EBITDA, the bonus pool will be decreased by 2-1/2% of the percentage decrease in Base EBITDA until Adjusted EBITDA declines to less than 75% of Base EBITDA or the prior Plan Year's Adjusted EBITDA, whichever is higher, after which no bonus will be payable. See **Exhibit I** for examples of potential bonus pool amounts.

For Plan purposes, Adjusted EBITDA means EBITDA adjusted on a basis consistent with Adjusted EBITDA previously reported by the Company, with further adjustments, if necessary, for extraordinary net costs or benefits, spectrum lease proceeds and other similar items impacting Adjusted EBITDA during the Plan Year as determined at the sole discretion of the Compensation Committee of the Board of Directors ("**Committee**").

(b) The portion of the pool payable to each participant shall be as recommended by the Chief Executive Officer **("CEO")** and approved by the Committee acting in the Committee's sole discretion.

Section 3. Participants; Eligibility; Payment

(a) The Committee (the Chairman of the Board of Directors being Chairman of the Committee) and the CEO shall designate the participants in the Plan as soon as is feasible after the beginning of each Plan Year and will report the roster of participants to the Board. The Plan and participation of initially-designated key employees, shall be effective retroactive to January 1 of the Plan Year. The CEO, after reporting to and receiving approval of the Committee, may also revise the roster of and designate additional, participants from time to time with participation to be effective from date determined by the CEO.

(b) In order to be eligible to receive this bonus, a participant must be employed by the Company or any of its subsidiaries from the beginning of the Plan Year (subject to express partial year designation under Section 3(a)) and until the first business day that is three (3) business days after the Company files its annual report on Form 10-K for the Plan Year (such day the "**Payment Date**"). Failure of a participant to remain employed through the Payment Date for any reason whatsoever will terminate all entitlements under the Plan; provided, however, that the Committee may, but shall not be required to approve, on a case-by-case basis, payments under the Plan of prorated bonus for employees who, during the Plan Year, are hired as, or who replace, designated participants. The Committee may also, but shall not be required to, make case-by-case exceptions to termination of Plan participation resulting from termination of service, either during the Plan Year or before the Payment Date, because of death, disability, or voluntary retirement of a participant.

(c) The Company shall make payments on the Payment Date. All payments will be, made in cash or in common stock of the Company as determined by the Committee. If payments are made in stock, the shares shall be distributed accordance with the stock distribution provisions of Company's Amended and Restated 2006 Equity Incentive Plan and shall be fully vested, registered and marketable at the time distributed.

Section 4. Committee

(a) This Plan shall be administered by the Committee, which shall have full authority and discretion to interpret the Plan, to establish, amend and rescind rules relating to the Plan that are not inconsistent with this document, and to make all other determinations that may be necessary or advisable for the Plan's administration.

(b) Any interpretation of the Plan by the Committee and any decision by it relating to the Plan shall be final and binding on all persons.

Section 5. Liability for Repayment

In the event that, within two years after the Payment Date, discovered fraud or misrepresentation (as determined by the Committee) should result in a need for the Company to restate its annual financial statements for the Plan Year in a manner that reduces the Adjusted EBITDA figure that was used to determine the amount available for distribution under the Plan, then participants who have received distributions under the Plan in excess of the amounts that they would have been entitled to receive shall be liable to repay such excess to the Company, without interest, on demand.

Section 6. Plan Not Exclusive

This Plan shall not be construed as limiting the ability or discretion of the Committee to award additional compensation, including without limitation other bonuses, separate and apart from this Plan, to individual participants based upon subjective or other criteria.

EXHIBIT I: TABLE OF POTENTIAL BONUS POOL AMOUNTS

(in thousands)

[*]

Exhibit 21.1

Subsidiaries of Globalstar, Inc.

As of December 31, 2020, the subsidiaries of Globalstar, Inc., their jurisdiction of organization and the percent of their voting securities owned by their immediate parent entity were as follows:

Subsidiary	**Organized Under Laws of**	**% of Voting Securities Owned by Immediate Parent**
GSSI, LLC	Delaware	100%
ATSS Canada, Inc.	Delaware	100%
Globalstar Brazil Holdings, L.P.	Delaware	100%
Globalstar do Brasil Holdings Ltda.	Brazil	100%
Globalstar do Brasil Ltda.	Brazil	100%
Globalstar Japan K.K.	Japan	100%
Globalstar Satellite Services Pte., Ltd	Singapore	100%
Globalstar Communications Mongolia LLC	Mongolia	100%
Globalstar Satellite Services Pty., Ltd	South Africa	70%
Globalstar C, LLC	Delaware	100%
Globalstar Leasing LLC	Delaware	100%
Globalstar Licensee LLC	Delaware	100%
Globalstar Security Services, LLC	Delaware	100%
Globalstar USA, LLC	Delaware	100%
GUSA Licensee LLC	Delaware	100%
Globalstar Canada Satellite Co.	Canada	100%
Globalstar de Venezuela, C.A.	Venezuela	100%
Globalstar Colombia, Ltda.	Colombia	100%
Globalstar Caribbean Ltd.	Cayman Islands	100%
Globalstar Republica Dominicana, S.A.	Dominican Republic	100%
GCL Licensee LLC	Delaware	100%
Globalstar Americas Acquisitions, Ltd.	British Virgin Islands	100%
Globalstar Americas Holding Ltd.	British Virgin Islands	100%
Globalstar Gateway Company S.A.	Nicaragua	100%
Globalstar Americas Telecommunications Ltd.	British Virgin Islands	100%
Globalstar Honduras S.A.	Honduras	100%
Globalstar Nicaragua S.A.	Nicaragua	100%
Globalstar de El Salvador, SA de CV	El Salvador	100%
Globalstar Panama, Corp.	Panama	100%
Globalstar Guatemala S.A.	Guatemala	100%
Globalstar Belize Ltd.	Belize	100%
Astral Technologies Investment Ltd.	British Virgin Islands	100%
Astral Technologies Nicaragua S.A.	Nicaragua	100%
SPOT LLC	Colorado	100%
Globalstar Media, LLC	Louisiana	100%
Globalstar Broadband Services, Inc.	Delaware	100%

Subsidiary	Organized Under Laws of	% of Voting Securities Owned by Immediate Parent
The World’s End (Pty) Ltd.	Botswana	100%
Globaltouch West Africa Limited	Nigeria	30%
Globalstar International, LLC	Delaware	100%
Globalstar Telecomunicaciones Perú S.A.C.	Peru	100%
Globalstar Netherlands B.V.	Netherlands	100%
Mobile Satellite Services B.V.	Netherlands	100%
Globalstar Europe, S.A.S.	France	100%
Globalstar Gabon S.A.	Gabon	100%
Globalstar Europe Satellite Services, Ltd.	Ireland	100%
Globalstar Holding US, LLC	Delaware	100%
Globalstar Slovakia, S.R.O.	Slovakia	100%
Globalstar Argentina S.R.L.	Argentina	100%
GSAT Bucharest S.R.L.	Romania	100%
Globalstar Albania sh.p.k.	Albania	100%
Globalstar Communications Spain, S.L.	Spain	100%
Globalstar London Limited	United Kingdom	100%
Globalstar Cote D'Ivoire	Cote D'Ivoire	100%
Leosat Portugal, Unipessoal, LDA	Portugal	100%
Globalstar Moçamibque LDA	Mozambique	75%
Globalstar Montenegro	Montenegro	100%
Leosat Kenya Limited	Kenya	100%
Mobile Satellite Services Rwanda Ltd	Rwanda	100%
Globalstar Satellite Namibia (PTY) LTD	Namibia	70%
Globalstar Seoul Co., Ltd	South Korea	100%
Globalstar Asia Pacific	South Korea	100%
Globalstar GE, SL	Equatorial Guinea	100%
Mobile Satellite Services Mexico S. de R.L. de C.V.	Mexico	100%
Global Star Majan LLC	Oman	100%
Globalstar Japan, Inc.	Japan	51%
Mobile Satellite Services Australia Pty. Ltd.	Australia	100%

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-3 No. 333-235726) of Globalstar, Inc. (Globalstar) of our reports dated March 4, 2021, with respect to the consolidated financial statements of Globalstar, and the effectiveness of internal control over financial reporting of Globalstar, included in this Annual Report (Form 10-K) of Globalstar for the year ended December 31, 2020.

/s/ Ernst & Young LLP

New Orleans, Louisiana
March 4, 2021

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in these Registration Statements on Form S-8 (Nos. 333-235505, 333-232178, 333-196327, 333-188538, 333-180178, 333-176281, 333-173218, 333-165444, 333-161510, 333-156884, 333-150871, 333-149747, 333-145283, and 333-138590) of Globalstar, Inc. of our report dated February 28, 2020 relating to the 2019 and 2018 consolidated financial statements appearing in this Annual Report on Form 10-K.

/s/ Crowe LLP

Oak Brook, Illinois
March 4, 2021

Exhibit 31.1

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: March 4, 2021

By: /s/ David B. Kagan

David B. Kagan
Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

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: March 4, 2021

By: /s/ Rebecca S. Clary

Rebecca S. Clary
Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

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, 2020 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.

March 4, 2021

By: /s/ David B. Kagan

David B. Kagan

Chief Executive Officer (Principal Executive Officer)

Exhibit 32.2

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, 2020 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.

March 4, 2021	By:	/s/ Rebecca S. Clary
		Rebecca S. Clary
		Chief Financial Officer (Principal Financial Officer)