

KVH INDUSTRIES INC \DE\
Form 10-Q
May 04, 2018
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended: March 31, 2018

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 0-28082

KVH Industries, Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware 05-0420589
(State or Other Jurisdiction of (I.R.S. Employer
Incorporation or Organization) Identification Number)
50 Enterprise Center, Middletown, RI 02842
(Address of Principal Executive Offices) (Zip Code)
(401) 847-3327
(Registrant's Telephone Number, Including Area
Code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or 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 (Do not check if a smaller reporting company) 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Date	Class	Outstanding shares
May 2, 2018	Common Stock, par value \$0.01 per share	17,506,737

KVH INDUSTRIES, INC. AND SUBSIDIARIES
Form 10-Q
INDEX

	Page No.
<u>PART I. FINANCIAL INFORMATION</u>	
<u>ITEM 1. FINANCIAL STATEMENTS</u>	
Consolidated Balance Sheets as of March 31, 2018 (unaudited) and December 31, 2017	<u>3</u>
Consolidated Statements of Operations for the three months ended March 31, 2018 and 2017 (unaudited)	<u>4</u>
Consolidated Statements of Comprehensive Loss for the three months ended March 31, 2018 and 2017 (unaudited)	<u>5</u>
Consolidated Statements of Cash Flows for the three months ended March 31, 2018 and 2017 (unaudited)	<u>6</u>
<u>Notes to Consolidated Financial Statements (unaudited)</u>	<u>7</u>
<u>ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	<u>32</u>
<u>ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	<u>42</u>
<u>ITEM 4. CONTROLS AND PROCEDURES</u>	<u>43</u>
<u>PART II. OTHER INFORMATION</u>	
<u>ITEM 1. LEGAL PROCEEDINGS</u>	<u>44</u>
<u>ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS</u>	<u>45</u>
<u>ITEM 6. EXHIBITS</u>	<u>46</u>
<u>SIGNATURE</u>	<u>47</u>
<u>EXHIBIT INDEX</u>	<u>48</u>

PART I. FINANCIAL INFORMATION

ITEM 1. Financial Statements

KVH INDUSTRIES, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share amounts)

	March 31, 2018	December 31, 2017
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 37,768	\$ 34,596
Marketable securities	3,332	8,319
Accounts receivable, net of allowance for doubtful accounts of \$2,709 and \$2,852 as of March 31, 2018 and December 31, 2017, respectively	28,550	28,316
Inventories	23,327	22,732
Prepaid expenses and other current assets	4,419	3,816
Current contract assets	3,305	—
Total current assets	100,701	97,779
Property and equipment, less accumulated depreciation of \$52,767 and \$51,099 as of March 31, 2018 and December 31, 2017, respectively	48,145	43,521
Intangible assets, less accumulated amortization of \$21,770 and \$20,656 as of March 31, 2018 and December 31, 2017, respectively	14,587	15,120
Goodwill	34,996	33,872
Other non-current assets	6,437	5,927
Non-current contract assets	6,272	—
Non-current deferred income tax asset	214	20
Total assets	\$ 211,352	\$ 196,239
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 17,144	\$ 15,736
Accrued compensation and employee-related expenses	4,531	5,358
Accrued other	9,583	9,210
Accrued product warranty costs	2,027	2,074
Deferred revenue	—	6,919
Current portion of long-term debt	2,484	2,482
Contract liabilities	11,973	—
Liability for uncertain tax positions	1,631	1,570
Total current liabilities	49,373	43,349
Other long-term liabilities	2,414	19
Long-term contract liabilities	8,301	—
Long-term debt, excluding current portion	41,701	44,572
Non-current deferred income tax liability	2,729	2,634
Total liabilities	\$ 104,518	\$ 90,574
Commitments and contingencies (Notes 2, 10, 12, and 19)		
Stockholders' equity:		
Preferred stock, \$0.01 par value. Authorized 1,000,000 shares; none issued	—	—
Common stock, \$0.01 par value. Authorized 30,000,000 shares; 18,804,066 and 18,787,816 shares issued at March 31, 2018 and December 31, 2017, respectively; and 17,521,644 and 17,128,825 shares outstanding at March 31, 2018 and December 31, 2017, respectively	188	188

Edgar Filing: KVH INDUSTRIES INC \DE\ - Form 10-Q

Additional paid-in capital	136,718	134,361
Accumulated deficit	(11,058)	(4,417)
Accumulated other comprehensive loss	(8,850)	(11,317)
	116,998	118,815
Less: treasury stock at cost, common stock, 1,282,422 and 1,658,991 shares as of March 31, 2018 and December 31, 2017, respectively	(10,164)	(13,150)
Total stockholders' equity	106,834	105,665
Total liabilities and stockholders' equity	\$ 211,352	\$ 196,239

See accompanying Notes to Unaudited Consolidated Financial Statements.

3

KVH INDUSTRIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except earnings per share amounts, unaudited)

	Three Months Ended March 31,	
	2018	2017
Sales:		
Product	\$13,992	\$14,863
Service	26,109	25,348
Net sales	40,101	40,211
Costs and expenses:		
Costs of product sales	8,923	10,539
Costs of service sales	13,816	13,268
Research and development	3,934	3,947
Sales, marketing and support	8,941	8,740
General and administrative	7,667	8,187
Total costs and expenses	43,281	44,681
Loss from operations	(3,180)	(4,470)
Interest income	148	166
Interest expense	409	353
Other expense, net	(274)	(68)
Loss before income tax expense	(3,715)	(4,725)
Income tax expense	178	160
Net loss	\$(3,893)	\$(4,885)
Net loss per common share		
Basic and diluted	\$(0.23)	\$(0.30)
Weighted average number of common shares outstanding:		
Basic and diluted	16,742	16,261

See accompanying Notes to Unaudited Consolidated Financial Statements.

KVH INDUSTRIES, INC. AND SUBSIDIARIES
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
 (in thousands, unaudited)

	Three Months Ended March 31,	
	2018	2017
Net loss	\$(3,893)	\$(4,885)
Other comprehensive income, net of tax:		
Unrealized gain on available-for-sale securities	1	—
Foreign currency translation adjustment	2,444	601
Unrealized gain on derivative instruments, net	22	27
Other comprehensive income, net of tax ⁽¹⁾	2,467	628
Total comprehensive loss	\$(1,426)	\$(4,257)

(1) Tax impact was nominal for all periods.

See accompanying Notes to Unaudited Consolidated Financial Statements.

5

KVH INDUSTRIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands, unaudited)

	Three Months Ended March 31,	
	2018	2017
Cash flows from operating activities:		
Net loss	\$(3,893)	\$(4,885)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Provision for doubtful accounts	28	74
Depreciation and amortization	3,050	2,761
Deferred income taxes	9	—
Loss on sale of fixed assets	—	3
Compensation expense related to stock-based awards and employee stock purchase plan	853	960
Unrealized currency translation loss	40	12
Changes in operating assets and liabilities:		
Accounts receivable	(91)	4,160
Inventories	(558)	(1,009)
Prepaid expenses, other current assets, and current contract assets	(651)	(203)
Other non-current assets and non-current contract assets	(836)	(269)
Accounts payable	1,067	1,724
Deferred revenue, contract liabilities, and long-term contract liabilities	1,094	454
Accrued compensation, product warranty, and other	(1,303)	849
Other long-term liabilities	(6)	(286)
Net cash (used in) provided by operating activities	\$(1,197)	\$4,345
Cash flows from investing activities:		
Capital expenditures	(3,189)	(2,047)
Cash paid for acquisition of intangible asset	—	(50)
Purchases of marketable securities	(1,026)	(1,385)
Maturities and sales of marketable securities	6,013	10,354
Net cash provided by investing activities	\$1,798	\$6,872
Cash flows from financing activities:		
Repayments of long-term debt	(44)	(1,518)
Repayments of term note borrowings	(2,825)	(7,625)
Payment of employee restricted stock withholdings	—	(392)
Proceeds from stock options exercised and employee stock purchase plan	—	1,060
Sale of treasury stock	4,500	—
Payment of capital lease	(107)	—
Net cash provided by (used in) financing activities	\$1,524	\$(8,475)
Effect of exchange rate changes on cash and cash equivalents	1,047	221
Net increase in cash and cash equivalents	3,172	2,963
Cash and cash equivalents at beginning of period	34,596	26,422
Cash and cash equivalents at end of period	\$37,768	\$29,385
Supplemental disclosure of non-cash investing activities:		
Changes in accrued other and accounts payable related to property and equipment additions	\$537	\$169
Deferred purchase price consideration related to asset acquisition included in accrued expenses	\$—	\$50

See accompanying Notes to Unaudited Consolidated Financial Statements.

KVH INDUSTRIES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Unaudited, all amounts in thousands except per share amounts)

(1) Description of Business

KVH Industries, Inc. (together with its subsidiaries, the Company or KVH) is a leading manufacturer of solutions that provide global high-speed Internet, television, and voice services via satellite to mobile users at sea and on land. KVH is also a leading provider of commercially licensed entertainment, including news, sports, music, and movies, to commercial and leisure customers in the maritime, hotel, and retail markets. In addition, the Company develops and distributes training films and eLearning computer-based training courses to commercial maritime customers. KVH is also a premier manufacturer of high-performance navigational sensors and integrated inertial systems for defense and commercial applications. KVH's reporting segments are as follows:

- the mobile connectivity segment and
- the inertial navigation segment

KVH's mobile connectivity products enable customers to receive voice services, Internet services, and live digital television via satellite services in marine vessels, recreational vehicles, buses and automobiles. KVH's CommBox offers a range of tools designed to increase communication efficiency, reduce costs, and manage network operations. KVH sells and leases its mobile connectivity products through an extensive international network of dealers and distributors. KVH also sells and leases products directly to end users. In October 2017, KVH introduced a new 60-cm diameter TracPhone V7-HTS Ku-band antenna which is designed to deliver faster data speeds globally to the maritime market. KVH is able to offer download/upload speeds as fast as 10 Mbps/3 Mbps by combining KVH's proprietary antenna system design and industry-leading mini-VSAT Broadband network, along with partnering with Intelsat Epic satellite services for high throughput satellite (HTS) capabilities and additional capacity from SKY Perfect JSAT satellites. With the HTS network, the Company added an additional 25 million square miles to our global maritime Ku-band high-speed connectivity footprint.

KVH's mobile connectivity service sales primarily represent sales earned from satellite voice and Internet airtime services. KVH provides, for monthly fixed and usage fees, satellite connectivity services, including broadband Internet, data and VoIP services, to its TracPhone V-series customers. In the second quarter of 2017, the Company launched a new mini-VSAT Broadband service offering, AgilePlans, which is a monthly subscription model providing global connectivity to commercial maritime customers, including hardware, installation, broadband Internet, Voice over Internet Protocol (VoIP), entertainment and training content and global support for a monthly fee with no minimum commitment. KVH offers AgilePlans customers a variety of airtime data plans with varying data speeds and fixed data usage levels with overage charges per megabyte, which is similar to the plans that the Company offers to its other customers. The Company recognizes the monthly subscription fee as service revenue over the service delivery period. The Company retains ownership of the hardware that it provides to AgilePlans customers, who must return the hardware to KVH if they decide to terminate the service. Because KVH does not sell the hardware under AgilePlans, the Company does not recognize any product revenue when the hardware is deployed to an AgilePlans customer. KVH records the cost of the hardware used by AgilePlans customers as revenue-generating assets and depreciates the cost over an estimated useful life of five years. Since the Company is retaining ownership of the hardware, it does not accrue any warranty costs for AgilePlans hardware; however, any maintenance costs on the hardware are expensed in the period these costs are incurred. Mobile connectivity service sales also include the distribution of commercially licensed entertainment, including news, sports, music, and movies to commercial and leisure customers in the maritime, hotel, and retail markets through KVH Media Group, and the distribution of training films and eLearning computer-based training courses to commercial customers in the maritime market through Super Dragon Limited and Videotel Marine Asia Limited (together referred to as Videotel). KVH also earns monthly usage fees from third-party

satellite connectivity services, including voice, data and Internet services, provided to its Inmarsat and Iridium customers who choose to activate their subscriptions with KVH. Mobile connectivity service sales also include engineering services provided under development contracts, sales from product repairs, and extended warranty sales.

7

KVH's inertial navigation products offer precision fiber optic gyro (FOG)-based systems that enable platform and optical stabilization, navigation, pointing and guidance. KVH's inertial navigation products also include tactical navigation systems that provide uninterrupted access to navigation and pointing information in a variety of military vehicles, including tactical trucks and light armored vehicles. KVH's inertial navigation products are sold directly to U.S. and foreign governments and government contractors, as well as through an international network of authorized independent sales representatives. In addition, KVH's inertial navigation technology is used in numerous commercial products, such as navigation and positioning systems for various applications including precision mapping, dynamic surveying, autonomous vehicles, train location control and track geometry measurement systems, industrial robotics and optical stabilization.

KVH's inertial navigation service sales include product repairs, engineering services provided under development contracts and extended warranty sales.

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements of KVH Industries, Inc. and its wholly owned subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States of America. The Company has evaluated all subsequent events through the date of this filing. All significant intercompany accounts and transactions have been eliminated in consolidation.

The consolidated financial statements have not been audited by the Company's independent registered public accounting firm and include all adjustments (consisting of only normal recurring adjustments) which are, in the opinion of management, necessary for a fair presentation of the financial condition, results of operations, and cash flows for the periods presented. These consolidated financial statements do not include all disclosures associated with annual financial statements and accordingly should be read in conjunction with the Company's consolidated financial statements and related notes included in the Company's annual report on Form 10-K for the year ended December 31, 2017 filed on March 2, 2018 with the Securities and Exchange Commission. The results for the three months ended March 31, 2018 are not necessarily indicative of operating results for the remainder of the year.

Significant Estimates and Assumptions and Other Significant Non-Recurring Transactions

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of sales and expenses during the reporting periods. As described in the Company's annual report on Form 10-K, the most significant estimates and assumptions by management affect the Company's revenue recognition, valuation of accounts receivable, valuation of inventory, valuations and deferred purchase price consideration related to asset acquisition, expected future cash flows including growth rates, discount rates, terminal values and other assumptions and estimates used to evaluate the recoverability of long-lived assets and goodwill, estimated fair values of long-lived assets, including goodwill, amortization methods and periods, certain accrued expenses and other related charges, stock-based compensation, contingent liabilities, key valuation assumptions for its share-based awards, estimated fulfillment costs for warranty obligations, tax reserves and recoverability of the Company's net deferred tax assets and related valuation allowance. The Company has reviewed these estimates and determined that these remain the most significant estimates for the three months ended March 31, 2018.

Although the Company regularly assesses these estimates, actual results could differ materially from these estimates. Changes in estimates are recorded in the period in which they become known. The Company bases its estimates on

historical experience and various other assumptions that it believes to be reasonable under the circumstances.

The only material change to the significant accounting policies disclosed in the Company's annual report on Form 10-K for the year ended December 31, 2017 was the Company's adoption of Accounting Standards Codification (ASC) 606, Revenue from Contracts with Customers effective January 1, 2018. Please see footnote 16 for further discussion.

On February 27, 2018, the Company entered into a stock purchase agreement with SKY Perfect JSAT Corporation, or SJC, pursuant to which the Company agreed to sell 377 shares of treasury stock to SJC for a purchase price of \$11.95 per share, or an aggregate of \$4,500, in a private placement. The transaction closed on February 28, 2018.

During the first quarter of 2018, the Company entered into a five-year capital lease for three satellite hubs for the HTS network. Please see footnote 19 for further discussion.

(3) Accounting Standards Issued and Not Yet Adopted

ASC Update No. 2016-02

In February 2016, the FASB issued ASC Update No. 2016-02, Leases (Topic 842). It is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Earlier application is permitted. Update No. 2016-02 creates new accounting and reporting guidelines for leasing arrangements. The new guidance requires organizations that lease assets to recognize assets and liabilities on the balance sheet related to the rights and obligations created by those leases, regardless of whether they are classified as finance or operating leases. Consistent with current guidance, the recognition, measurement, and presentation of expenses and cash flows arising from a lease primarily will depend on its classification as a finance or operating lease. The guidance also requires new disclosures to help financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The new standard is to be applied using a modified retrospective approach. The Company is currently evaluating the impact of the new pronouncement on its financial statements. Based on its preliminary assessment, upon adoption the Company expects to recognize significant right-to-use assets and corresponding lease liabilities on its balance sheet related to leased facilities and equipment.

ASC Update No. 2016-13

In June 2016, the FASB issued ASC Update No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The update is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted for fiscal years beginning after December 15, 2018. The purpose of Update No. 2016-13 is to replace the current incurred loss impairment methodology for financial assets measured at amortized cost with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information, including forecasted information, to develop credit loss estimates. The adoption of Update No. 2016-13 is not expected to have a material impact on the Company's financial position or results of operations.

ASC Update No. 2017-12

In August 2017, the FASB issued ASC Update No. 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. The update is effective for annual periods beginning after December 15, 2018. Early adoption is permitted. The purpose of Update No. 2017-12 is to improve the presentation and disclosure requirements for, and simplify the application and increase transparency of hedge accounting. The adoption of Update No. 2017-12 is not expected to have a material impact on the Company's financial position or results of operations.

There are no other recent accounting pronouncements issued by the FASB that are expected to have a material impact on the Company's financial statements.

(4) Marketable Securities

Marketable securities as of March 31, 2018 and December 31, 2017 consisted of the following:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
March 31, 2018				
Money market mutual funds	\$ 3,332	\$	—\$	—\$3,332
Total marketable securities designated as available-for-sale	\$ 3,332	\$	—\$	—\$3,332
December 31, 2017	Amortized	Gross	Gross	Fair

Edgar Filing: KVH INDUSTRIES INC \DE\ - Form 10-Q

	Cost	Unrealized Gains	Unrealized Losses	Value
Money market mutual funds	\$ 7,318	\$ —	\$ —	\$7,318
Certificates of deposit	1,002	—	(1)	1,001
Total marketable securities designated as available-for-sale	\$ 8,320	\$ —	\$ (1)	\$8,319

9

The amortized costs and fair value of marketable securities as of March 31, 2018 and December 31, 2017 are shown below by effective maturity. Effective maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

	Amortized Cost	Fair Value
March 31, 2018		
Due in less than one year	\$ —	\$—
December 31, 2017		
Due in less than one year	\$ 1,002	\$1,001

Interest income from marketable securities was \$12 and \$31 during the three months ended March 31, 2018 and 2017, respectively.

(5) Stockholder's Equity

(a) Stock Equity and Incentive Plan

The Company recognizes stock-based compensation in accordance with the provisions of ASC Topic 718, Compensation--Stock Compensation. Stock-based compensation expense, excluding compensation charges related to our employee stock purchase plan, or the ESPP, was \$843 and \$943 for the three months ended March 31, 2018 and 2017, respectively. As of March 31, 2018, there was \$1,586 of total unrecognized compensation expense related to stock options, which is expected to be recognized over a weighted-average period of 2.83 years. As of March 31, 2018, there was \$3,379 of total unrecognized compensation expense related to restricted stock awards, which is expected to be recognized over a weighted-average period of 2.30 years.

Stock Options

During the three months ended March 31, 2018, no stock options were exercised for common stock and, as a result, no shares of common stock were delivered to the Company as payment for the exercise price or related minimum tax withholding obligations. During the three months ended March 31, 2018, no stock options were granted and 11 stock options expired, were canceled or were forfeited. The Company estimates the fair value of each option grant on the date of grant using the Black-Scholes option-pricing model. The weighted average assumptions utilized to determine the fair value of options granted during the three months ended March 31, 2017 were as follows:

	Three Months Ended March 31, 2017
Risk-free interest rate	1.96 %
Expected volatility	35.53 %
Expected life (in years)	4.22
Dividend yield	0 %

As of March 31, 2018, there were 1,057 options outstanding with a weighted average exercise price of \$10.04 per share and 338 options exercisable with a weighted average exercise price of \$12.35 per share.

Restricted Stock

During the three months ended March 31, 2018, 20 shares of restricted stock were granted with a weighted average grant date fair value of \$10.00 per share and no shares of restricted stock were forfeited. Additionally, during the three months ended March 31, 2018, 188 shares of restricted stock vested, none of which were surrendered to the Company as payment by employees in lieu of cash to satisfy minimum tax withholding obligations in connection with the vesting of restricted stock. As of March 31, 2018, there were 432 shares of restricted stock outstanding that were subject to service-based vesting conditions.

As of March 31, 2018, the Company had no unvested outstanding options and no shares of restricted stock that were subject to performance-based or market-based vesting conditions.

(b) Employee Stock Purchase Plan

The Company's Amended and Restated 1996 Employee Stock Purchase Plan (ESPP) affords eligible employees the right to purchase common stock, via payroll deductions, through various offering periods at a purchase price equal to 85% of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. During the three months ended March 31, 2018 and 2017, no shares were issued under the ESPP plan. The Company recorded compensation charges of \$10 and \$17 for the three months ended March 31, 2018 and 2017, respectively, related to the ESPP.

(c) Stock-Based Compensation Expense

The following table presents stock-based compensation expense, including under the ESPP, in the Company's consolidated statements of operations for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31, 2018 2017	
Cost of product sales	\$71	\$82
Cost of service sales	—	—
Research and development	170	189
Sales, marketing and support	181	268
General and administrative	431	421
	\$853	\$960

(d) Accumulated Other Comprehensive Loss

Comprehensive income (loss) includes net earnings (loss), unrealized gains and losses from foreign currency translation, unrealized gains and losses from available for sale marketable securities and changes in fair value related to interest rate swap derivative instruments, net of tax attributes. The components of the Company's comprehensive income (loss) and the effect on earnings for the periods presented are detailed in the accompanying consolidated statements of comprehensive income (loss).

	Foreign Currency Translation	Unrealized (Loss) Gain on Available for Sale Marketable Securities	Interest Rate Swaps	Total Accumulated Other Comprehensive Loss
Balance, December 31, 2017	(11,247)	(1)	(69)	(11,317)
Other comprehensive income before reclassifications	2,444	1	7	2,452
Amounts reclassified from AOCI to Other income, net	—	—	15	15
Net other comprehensive income, March 31, 2018	2,444	1	22	2,467
Balance, March 31, 2018	(8,803)	—	(47)	(8,850)

	Foreign Currency Translation	Unrealized Gain (Loss) on Available for Sale Marketable Securities	Interest Rate Swaps	Total Accumulated Other Comprehensive Loss
Balance, December 31, 2016	\$(16,651)	\$ —	—\$(158)	\$ (16,809)
Other comprehensive income before reclassifications	601	—	5	606
Amounts reclassified from AOCI to Other income, net	—	—	22	22
Net other comprehensive income, March 31, 2017	601	—	27	628
Balance, March 31, 2017	(16,050)	—	(131)	(16,181)

For additional information, see Note 4, "Marketable Securities," and Note 17, "Derivative Instruments and Hedging Activities."

(6) Net Loss per Common Share

Basic net loss per share is calculated based on the weighted average number of common shares outstanding during the period. Diluted net loss per share incorporates the dilutive effect of common stock equivalent options, warrants and other convertible securities, if any, as determined with the treasury stock accounting method. For the three months ended March 31, 2018 and 2017, since there was a net loss, the Company excluded 251 and 203, respectively, in outstanding stock options and non-vested restricted shares from its diluted loss per share calculation, as inclusion of these securities would have reduced the net loss per share.

A reconciliation of the basic and diluted weighted average common shares outstanding is as follows:

	Three Months Ended March 31,	
	2018	2017
Weighted average common shares outstanding—basic	16,742	16,261
Dilutive common shares issuable in connection with stock plans	—	—
Weighted average common shares outstanding—diluted	16,742	16,261

(7) Inventories

Inventories are stated at the lower of cost and net realizable value using the first-in first-out costing method. Inventories as of March 31, 2018 and December 31, 2017 include the costs of material, labor, and factory overhead. Components of inventories consist of the following:

	March 31, December 31,	
	2018	2017
Raw materials	\$ 13,835	\$ 13,347
Work in process	2,926	2,137
Finished goods	6,566	7,248
	\$ 23,327	\$ 22,732

(8) Property and Equipment

Property and equipment, net, as of March 31, 2018 and December 31, 2017 consist of the following:

	March 31, 2018	December 31, 2017
Land	\$3,828	\$ 3,828
Building and improvements	24,042	24,038
Leasehold improvements	475	429
Machinery and equipment	24,465	24,764
Revenue-generating assets	34,880	28,453
Office and computer equipment	13,171	13,057
Motor vehicles	51	51
	100,912	94,620
Less accumulated depreciation	(52,767)	(51,099)
	\$48,145	\$43,521

Depreciation expense was \$1,953 and \$1,693 for the three months ended March 31, 2018 and 2017, respectively.

Certain revenue-generating hardware assets are utilized by the Company in the delivery of the Company's airtime services, media, and other content. These revenue-generating assets were previously included in machinery and equipment, which are now presented separately.

13

(9) Product Warranty

The Company's products carry standard limited warranties that range from one to two years and vary by product. The warranty period begins on the date of retail purchase or lease by the original purchaser. The Company accrues estimated product warranty costs at the time of sale and any additional amounts are recorded when such costs are probable and can be reasonably estimated. Factors that affect the Company's warranty liability include the number of units sold or leased, historical and anticipated rates of warranty repairs and the cost per repair. Warranty and related costs are reflected within sales, marketing and support in the accompanying consolidated statements of operations. As of March 31, 2018 and December 31, 2017, the Company had accrued product warranty costs of \$2,027 and \$2,074, respectively.

The following table summarizes product warranty activity during 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
Beginning balance	\$2,074	\$2,280
Charges to expense	741	237
Costs incurred	(788)	(122)
Ending balance	\$2,027	\$2,395

(10) Debt

Long-term debt consisted of the following:

	March 31, December 31,	
	2018	2017
Term note	\$ 41,450	\$ 44,275
Mortgage loan	2,735	2,779
Total	44,185	47,054
Less amounts classified as current	2,484	2,482
Long-term debt, excluding current portion	\$ 41,701	\$ 44,572

Term Note and Line of Credit

On July 1, 2014, the Company entered into (i) a five-year senior credit facility agreement (the Credit Agreement) with Bank of America, N.A., as Administrative Agent, and the lenders named from time to time as parties thereto (the Lenders), for an aggregate amount of up to \$80,000, including a revolving credit facility (the Revolver) of up to \$15,000 and a term loan (Term Loan) of \$65,000 to be used for general corporate purposes, including both (A) the refinancing of the Company's \$30,000 then-outstanding indebtedness under its previous credit facility and (B) permitted acquisitions, (ii) revolving credit notes (together, the Revolving Credit Note) to evidence the Revolver, (iii) term notes (together, the Term Note, and together with the Revolving Credit Note, the Notes) to evidence the Term Loan, (iv) a Security Agreement (the Security Agreement) required by the Lenders with respect to the grant by the Company of a security interest in substantially all of the assets of the Company in order to secure the obligations of the Company under the Credit Agreement and the Notes, and (v) Pledge Agreements (the Pledge Agreements) required by the Lenders with respect to the grant by the Company of a security interest in 65% of the capital stock of each of KVH Industries A/S and KVH Industries U.K. Limited held by the Company in order to secure the obligations of the Company under the Credit Agreement and the Notes.

The Credit Agreement was most recently amended in March 2017 to modify the Maximum Consolidated Leverage Ratio, the Applicable Rate, the Consolidated Fixed Charge Coverage Ratio and the amortization schedule of the Term Loan, as well as to make certain other changes. The amendment was accounted for as a debt modification as it did not

result in a significant modification to the Credit Agreement.

In connection with the March 2017 amendment, the Company made an additional principal repayment of \$6,000 on the Term Note and amended the repayment terms. Under the amended terms, the Company must make principal repayments of \$575 every three months starting on April 1, 2017 until the Term Note maturity on July 1, 2019. On the maturity date, the entire remaining principal balance of the loan, including any future loans under the Revolver, is due and payable, together with all accrued and unpaid interest, penalties, and any other amounts due and payable under the Credit Agreement. The Credit Agreement contains provisions requiring the mandatory prepayment of amounts outstanding under the Term Loan and the Revolver under specified circumstances, including (i) 100% of the net cash proceeds from certain dispositions to the extent not reinvested in the Company's business within a stated period, (ii) 50% of the net cash proceeds from stated equity issuances and (iii) 100% of the net cash proceeds from certain receipts of more than \$250 outside the ordinary course of business. The prepayments are first applied to the Term Loan, in inverse order of maturity, and then to the Revolver. In the discretion of the Administrative Agent, certain mandatory prepayments made on the Revolver can permanently reduce the amount of credit available under the Revolver.

As required by the Credit Agreement, the Company used 50% of the net cash proceeds of its \$4,500 private placement of treasury stock to SKY Perfect JSAT Corporation on February 28, 2018 to prepay \$2,250 of indebtedness under the Term Loan.

Loans under the Credit Agreement bear interest at varying rates determined in accordance with the Credit Agreement. Each LIBOR Rate Loan, as defined in the Credit Agreement, bears interest on the outstanding principal amount thereof for each interest period from the applicable borrowing date at a rate per annum equal to the LIBOR Daily Floating Rate or LIBOR Monthly Floating Rate, each as defined in the Credit Agreement, as applicable, plus the Applicable Rate, as defined in the Credit Agreement, and each Base Rate Loan, as defined in the Credit Agreement, bears interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate, as defined in the Credit Agreement, plus the Applicable Rate. The Applicable Rate ranges from 1.75% to 2.25%, depending on the Company's Consolidated Leverage Ratio, as defined in the Credit Agreement. The highest Applicable Rate applies when the Consolidated Leverage Ratio exceeds 1.50:1.00. Upon certain defaults, including failure to make payments when due, interest becomes payable at a higher default rate.

Borrowings under the Revolver are subject to the satisfaction of numerous conditions precedent at the time of each borrowing, including the continued accuracy of the Company's representations and warranties and the absence of any default under the Credit Agreement. As of March 31, 2018, there were no borrowings outstanding under the Revolver and the full balance of \$15,000 was available for borrowing.

The Credit Agreement contains two financial covenants, a Maximum Consolidated Leverage Ratio and a Minimum Consolidated Fixed Charge Coverage Ratio, each as defined in the Credit Agreement. The Maximum Consolidated Leverage Ratio may not be greater than 1.50:1.00. The Minimum Consolidated Fixed Charge Coverage Ratio may not be less than 1.25:1.00. In the March 2017 amendment, the definition of the Consolidated Fixed Charge Coverage Ratio was amended to include only maintenance capital expenditures, as defined. The Company was in compliance with these financial ratio debt covenants as of March 31, 2018.

The Credit Agreement imposes certain other affirmative and negative covenants, including without limitation covenants with respect to the payment of taxes and other obligations, compliance with laws, entry into material contracts, creation of liens, incurrence of indebtedness, investments, dispositions, fundamental changes, restricted payments, changes in the nature of the Company's business, transactions with affiliates, corporate and accounting changes, and sale and leaseback arrangements.

The Company's obligation to repay loans under the Credit Agreement could be accelerated upon a default or event of default under the terms of the Credit Agreement, including certain failures to pay principal or interest when due,

certain breaches of representations and warranties, the failure to comply with the Company's affirmative and negative covenants under the Credit Agreement, a change of control of the Company, certain defaults in payment relating to other indebtedness, the acceleration of payment of certain other indebtedness, certain events relating to the liquidation, dissolution, bankruptcy, insolvency or receivership of the Company, the entry of certain judgments against the Company, certain events relating to the impairment of collateral or the Lenders' security interest therein, and any other material adverse change with respect to the Company.

Mortgage Loan

The Company has a mortgage loan (as amended, the Mortgage Loan) in the amount of \$4,000 related to its headquarters facility in Middletown, Rhode Island. The loan term is ten years, with a principal amortization of 20 years. The interest rate is based on the BBA LIBOR Rate plus 2.00 percentage points. The Mortgage Loan is secured by the underlying property and improvements. The monthly mortgage payment is approximately \$15 plus interest and increases in increments of approximately \$1 each year throughout the life of the mortgage. Due to the difference in the term of the loan and amortization of the principal, a balloon payment of \$2,551 is due on April 1, 2019. The loan contains one financial covenant, a Fixed Charge Coverage Ratio, which applies in the event that the Company's consolidated cash, cash equivalents and marketable securities balance falls below \$25,000 at any time. As the Company's consolidated cash, cash equivalents, and marketable securities balance was above the minimum threshold throughout the three months ended March 31, 2018, the Fixed Charge Coverage Ratio did not apply.

Under the mortgage loan, the Company may prepay its outstanding loan balance subject to certain early termination charges. If the Company were to default on the Mortgage Loan, the underlying property and improvements would be used as collateral. As discussed in Note 17 to the consolidated financial statements, the Company entered into two interest rate swap agreements that are intended to hedge its mortgage interest obligations over the term of the Mortgage Loan by fixing the interest rates specified in the Mortgage Loan to 5.91% for half of the principal amount outstanding as of April 1, 2010 and 6.07% for the remaining half.

(11) Segment Reporting

The financial results of each segment are based on revenues from external customers, cost of revenue and operating expenses that are directly attributable to the segment and an allocation of costs from shared functions. These shared functions include, but are not limited to, facilities, human resources, information technology, and engineering. Allocations are made based on management's judgment of the most relevant factors, such as head count, number of customer sites, or other operational data that contribute to the shared costs. Certain corporate-level costs have not been allocated as they are not attributable to either segment. These costs primarily consist of broad corporate functions, including executive, legal, finance, and costs associated with corporate actions. Segment-level asset information has not been provided as such information is not reviewed by the chief operating decision-maker for purposes of assessing segment performance and allocating resources. There are no inter-segment sales or transactions.

The Company's performance is impacted by the levels of activity in the marine and land mobile markets and defense sectors, among others. Performance in any particular period could be impacted by the timing of sales to certain large customers.

The mobile connectivity segment primarily manufactures and distributes a comprehensive family of mobile satellite antenna products and services that provide access to television, the Internet and voice services while on the move. Product sales within the mobile connectivity segment accounted for 20% and 25% of the Company's consolidated net sales for the three months ended March 31, 2018 and 2017, respectively. Sales of mini-VSAT Broadband airtime service accounted for approximately 41% and 40% of the Company's consolidated net sales for the three months ended March 31, 2018 and 2017, respectively. Sales of content and training services within the mobile connectivity segment accounted for approximately 19% of the Company's consolidated net sales for each of the three months ended March 31, 2018 and 2017.

The inertial navigation segment manufactures and distributes a portfolio of digital compass and fiber optic gyro (FOG)-based systems that address the rigorous requirements of military and commercial customers and provide reliable, easy-to-use and continuously available navigation and pointing data. The principal product categories in this segment include the FOG-based inertial measurement units (IMUs) for precision guidance, FOGs for tactical

navigation as well as pointing and stabilization systems, and digital compasses that provide accurate heading information for demanding applications, security, automation and access control equipment and systems. Sales of FOG-based guidance and navigation systems within the inertial navigation segment accounted for 13% and 11% of the Company's consolidated net sales for the three months ended March 31, 2018 and 2017, respectively.

No other single product class accounts for 10% or more of the Company's consolidated net sales.

The Company operates in a number of major geographic areas across the globe. The Company generates international net sales, based upon customer location, primarily from customers located in Canada, Europe, Africa, Asia/Pacific, the Middle East, and India. International revenues represented 58% and 59% of the Company's consolidated net sales for the three months ended March 31, 2018 and 2017, respectively. No individual foreign country represented 10% or more of the Company's consolidated net sales for the three months ended March 31, 2018 or 2017.

As of March 31, 2018 and December 31, 2017, the long-lived tangible assets related to the Company's international subsidiaries were less than 10% of the Company's long-lived tangible assets and were deemed not material.

Net sales and operating earnings (loss) for the Company's reporting segments and the Company's loss before income tax expense for the three months ended March 31, 2018 and 2017 were as follows:

	Three Months Ended March 31, 2018 2017	
Net sales:		
Mobile connectivity	\$32,749	\$34,287
Inertial navigation	7,352	5,924
Consolidated net sales	\$40,101	\$40,211
Operating earnings (loss):		
Mobile connectivity	\$1,072	\$622
Inertial navigation	334	(44)
Subtotal	1,406	578
Unallocated, net	(4,586)	(5,048)
Loss from operations	(3,180)	(4,470)
Net interest and other expense	(535)	(255)
Loss before income tax expense	\$(3,715)	\$(4,725)

Depreciation expense and amortization expense for the Company's reporting segments for the three months ended March 31, 2018 and 2017 were as follows:

	Three Months Ended March 31, 2018 2017	
Depreciation expense:		
Mobile connectivity	1,470	1,478
Inertial navigation	218	195
Unallocated	265	20
Total consolidated depreciation expense	1,953	1,693
Amortization expense:		
Mobile connectivity	1,097	1,068
Inertial navigation	—	—
Unallocated	—	—
Total consolidated amortization expense	1,097	1,068

(12) Legal Matters

From time to time, the Company is involved in litigation incidental to the conduct of its business. In the ordinary course of business, the Company is a party to inquiries, legal proceedings and claims including, from time to time, disagreements with vendors and customers. The Company is not a party to any lawsuit or proceeding that, in management's opinion, is likely to materially harm the Company's business, results of operations, financial condition, or cash flows.

(13) Share Buyback Program

On November 26, 2008, the Company's Board of Directors authorized a program to repurchase up to 1,000 shares of the Company's common stock. As of March 31, 2018, 341 shares of the Company's common stock remain available for repurchase under the authorized program. The repurchase program is funded using the Company's existing cash, cash equivalents, marketable securities and future cash flows. Under the repurchase program, the Company, at management's discretion, may repurchase shares on the open market from time to time, in privately negotiated transactions or block transactions, or through an accelerated repurchase agreement. The timing of such repurchases depends on availability of shares, price, market conditions, alternative uses of capital, and applicable regulatory requirements. The program may be modified, suspended or terminated at any time without prior notice. The repurchase program has no expiration date. There were no other repurchase programs outstanding during the three months ended March 31, 2018 and no repurchase programs expired during the period.

During the three months ended March 31, 2018 and 2017, the Company did not repurchase any shares of its common stock.

(14) Fair Value Measurements

ASC Topic 820, Fair Value Measurements and Disclosures (ASC 820), provides a framework for measuring fair value and requires expanded disclosures regarding fair value measurements. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. ASC 820 describes three levels of inputs that may be used to measure fair value:

- Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities. The Company's Level 1 assets are investments in money market mutual funds and certificates of deposit.
- Level 2: Quoted prices for similar assets or liabilities in active markets; or observable prices that are based on observable market data, based on directly or indirectly market-corroborated inputs. The Company's Level 2 liabilities are interest rate swaps.
- Level 3: Unobservable inputs that are supported by little or no market activity, and are developed based on the best information available given the circumstances. The Company has no Level 3 assets.

Assets and liabilities measured at fair value are based on the valuation techniques identified in the table below. The valuation techniques are:

- (a) Market approach—prices and other relevant information generated by market transactions involving identical or comparable assets.

The valuations of the interest rate swaps intended to mitigate the Company's interest rate risk are determined with the assistance of a third-party financial institution using widely accepted valuation techniques, including

- (b) discounted cash flow analysis on the expected cash flows of each instrument. This analysis utilizes observable market-based inputs, including interest rate curves and interest rate volatility, and reflects the contractual terms of these instruments, including the period to maturity.

The following tables present financial assets and liabilities at March 31, 2018 and December 31, 2017 for which the Company measures fair value on a recurring basis, by level, within the fair value hierarchy:

March 31, 2018	Total	Level 1	Level 2	Level 3	Valuation Technique
Assets					
Money market mutual funds	\$3,332	\$3,332	\$ —	—	—(a)
Liabilities					
Interest rate swaps	47	—	47	—	(b)
December 31, 2017	Total	Level 1	Level 2	Level 3	Valuation Technique
Assets					
Money market mutual funds	\$7,318	\$7,318	\$ —	—	—(a)
Certificates of deposit	1,001	1,001	—	—	(a)
Liabilities					
Interest rate swaps	69	—	69	—	(b)

Certain financial instruments are carried at cost on the consolidated balance sheets, which approximates fair value due to their short-term, highly liquid nature. These instruments include cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses. The carrying amount of the Company's debt approximates fair value based on currently available quoted rates of similarly structured debt.

Assets Measured and Recorded at Fair Value on a Nonrecurring Basis

The Company's non-financial assets, such as goodwill, intangible assets, and other long-lived assets resulting from business combinations, are measured at fair value using income approach valuation methodologies at the date of acquisition and subsequently re-measured if an impairment exists. There were no impairments of the Company's non-financial assets noted as of March 31, 2018. The Company does not have any liabilities that are recorded at fair value on a non-recurring basis.

(15) Goodwill and Intangible Assets

Goodwill

The following table sets forth the changes in the carrying amount of goodwill for the three months ended March 31, 2018:

	Amounts
Balance at December 31, 2017	\$ 33,872
Foreign currency translation adjustment	1,124
Balance at March 31, 2018	\$ 34,996

In January 2017, the Company early adopted ASC Update No. 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test of Goodwill Impairment. ASC 350 requires the completion of a goodwill impairment test at least annually based on either an optional qualitative assessment or the first step of comparing the carrying value of a reporting unit to its estimated fair value as of the test date. Any impairment charges would be based on the first step. The Company now performs its annual goodwill impairment test as of October 1st. During the three months ended December 31, 2017, the Company changed its annual impairment assessment date from August 31st to October 1st to better align the timing of the test date with its annual budgeting cycle. In connection with the change in the date of its

annual goodwill impairment test, the Company performed a goodwill impairment test as of both August 31, 2017 and October 1, 2017, and concluded that the fair values of its reporting units exceeded their respective carrying values. The Company notes that, as of August 31, 2017, the fair value of all of the Company's reporting units exceeded their carrying values by more than 10%. For the October 1, 2017 test, the Company performed a qualitative assessment over goodwill impairment concluding it was more-likely-than-not that its reporting units fair value exceeded their carrying value. Accordingly, it was not necessary for the Company to perform the full Step 1 quantitative analysis. To date, the Company has not had accumulated goodwill impairment losses. A negative trend of operating results or material changes to forecasted operating results could result in the requirement for additional interim goodwill impairment tests and the potential of a future goodwill impairment charge, which could be material.

Intangible Assets

The changes in the carrying amount of intangible assets during the three months ended March 31, 2018 are as follows:

	Amounts
Balance at December 31, 2017	\$ 15,120
Amortization expense	(1,097)
Foreign currency translation adjustment	564
Balance at March 31, 2018	\$ 14,587

Intangible assets arose from an acquisition made prior to 2013, the acquisition of KVH Media Group (acquired as Headland Media Limited) in May 2013 and the acquisition of Videotel in July 2014. Intangibles arising from the acquisition made prior to 2013 are being amortized on a straight-line basis over an estimated useful life of 7 years. Intangibles arising from the acquisition of KVH Media Group are being amortized on a straight-line basis over the estimated useful life of: (i) 10 years for acquired subscriber relationships, (ii) 15 years for distribution rights, (iii) 3 years for internally developed software and (iv) 2 years for proprietary content. Intangibles arising from the acquisition of Videotel are being amortized on a straight-line basis over the estimated useful life of: (i) 8 years for acquired subscriber relationships, (ii) 5 years for favorable leases, (iii) 4 years for internally developed software and (iv) 5 years for proprietary content. The intangibles arising from the KVH Media Group and Videotel acquisitions were recorded in pounds sterling and fluctuations in exchange rates could cause these amounts to increase or decrease from time to time.

In January 2017, the Company completed the acquisition of certain subscriber relationships from a third party. This acquisition did not meet the definition of a business under ASC 2017-01, Business Combinations (Topic 805)-Clarifying the Definition of a Business, which the Company adopted on October 1, 2016. The Company ascribed \$100 of the initial purchase price to the acquired subscriber relationships definite-lived intangible assets with an initial estimated useful life of 10 years. Under the asset purchase agreement, the purchase price includes a component of contingent consideration under which the Company is required to pay a percentage of recurring revenues received from the acquired subscriber relationships through 2026 up to a maximum annual payment of \$114. As of March 31, 2018, the carrying value of the intangible assets acquired in the asset acquisition was \$133. As the acquisition did not represent a business combination, the contingent consideration arrangement is recognized only when the contingency is resolved and the consideration is paid or becomes payable. The amounts payable under the contingent consideration arrangement, if any, will be included in the measurement of the cost of the acquired subscriber relationships. During the three months ended March 31, 2018, no additional consideration was earned under the contingent consideration arrangement.

Acquired intangible assets are subject to amortization. The following table summarizes acquired intangible assets at March 31, 2018 and December 31, 2017, respectively:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
March 31, 2018			
Subscriber relationships	\$ 18,269	\$ 8,865	\$ 9,404
Distribution rights	4,496	1,523	2,973
Internally developed software	2,328	2,281	47
Proprietary content	8,308	6,306	2,002
Intellectual property	2,284	2,284	—
Favorable lease	655	494	161
	\$ 36,340	\$ 21,753	\$ 14,587
December 31, 2017			
Subscriber relationships	\$ 17,912	\$ 8,347	\$ 9,565
Distribution rights	4,385	1,450	2,935
Internally developed software	2,324	2,206	118
Proprietary content	8,223	5,908	2,315
Intellectual property	2,284	2,284	—
Favorable lease	648	461	187
	\$ 35,776	\$ 20,656	\$ 15,120

Amortization expense related to intangible assets for the three months ended March 31, 2018 and 2017 was as follows:

Expense Category	Three Months Ended March 31,	
	2018	2017
Cost of service sales	\$399	\$355
General and administrative expense	698	713
Total amortization expense	\$1,097	\$1,068

As of March 31, 2018, the total weighted average remaining useful lives of the definite-lived intangible assets was 4.0 years and the weighted average remaining useful lives by the definite-lived intangible asset category are as follows:

Intangible Asset	Weighted Average Remaining Useful Life in Years
Subscriber relationships	4.6
Distribution rights	10.1
Internally developed software	0.3
Proprietary content	1.3
Favorable lease	1.3

Estimated future amortization expense remaining at March 31, 2018 for intangible assets acquired was as follows:

Remainder of 2018	\$3,133
2019	3,242
2020	2,380
2021	2,380
2022	1,561
Thereafter	1,891
Total future amortization expense	\$14,587

For intangible assets, the Company assesses the carrying value of these assets whenever events or circumstances indicate that the carrying value may not be recoverable. Recoverability of assets to be held and used is measured by comparing the carrying amount of an asset, or asset group, to the future undiscounted cash flows expected to be generated by the asset, or asset group. There were no events or changes in circumstances during the first quarter of 2018 which indicated that an assessment of the impairment of goodwill and intangible assets was required.

(16) Revenue from Contracts with Customers (ASC 606)

The Company adopted ASC 606 on January 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. The reported results for the three months ended March 31, 2018 reflect the application of ASC 606 guidance while the reported results for the three months ended March 31, 2017 were prepared under the guidance of ASC 605, Revenue Recognition (ASC 605), which is also referred to herein as "legacy GAAP" or the "previous guidance". The adoption of ASC 606 represents a change in accounting principle that is expected to more closely align revenue recognition with the delivery of the Company's products and services and is expected to provide financial statement readers with enhanced disclosures. In accordance with ASC 606, revenue is recognized when a customer obtains control of promised products and services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these products and services. To achieve this core principle, the Company applies the following five steps:

1) Identify the contract with a customer

A contract with a customer exists when (i) the Company enters into an enforceable contract with a customer that defines each party's rights regarding the products and services to be transferred and identifies the payment terms related to these products and services, (ii) the contract has commercial substance and, (iii) the Company determines that collection of substantially all consideration for products and services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. The Company applies judgment in determining the customer's ability and intention to pay, which is based on a variety of factors, including the customer's historical payment pattern or, in the case of a new customer, published credit and financial information pertaining to the customer.

2) Identify the performance obligations in the contract

Performance obligations promised in a contract are identified based on the products and services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the product and service either on its own or together with other resources that are readily available from third parties or from the Company, and are distinct in the context of the contract, whereby the transfer of the product and service is separately identifiable from other promises in the contract. To the extent a contract includes multiple promised products and services, the Company must apply judgment to determine whether promised products and services are capable of being distinct and distinct in the context of the contract. If these criteria are not met the promised products and

services are accounted for as a combined performance obligation.

3) Determine the transaction price

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring products and services to the customer. To the extent the transaction price includes variable consideration, the Company estimates the amount of variable consideration that should be included in the transaction price utilizing either the expected value method or the most likely amount method depending on the nature of the variable consideration. Variable consideration is included in the transaction price if, in the Company's judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. None of the Company's contracts as of March 31, 2018 contained a significant financing component. Determining the transaction price requires significant judgment, which is discussed by revenue category in further detail below.

4) Allocate the transaction price to performance obligations in the contract

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. However, if a series of distinct products or services that are substantially the same qualifies as a single performance obligation in a contract with variable consideration, the Company must determine if the variable consideration is attributable to the entire contract or to a specific part of the contract. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis unless the transaction price is variable and meets the criteria to be allocated entirely to a performance obligation or to a distinct product or service that forms part of a single performance obligation. The Company determines standalone selling price based on the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions, the Company estimates the standalone selling price taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations.

5) Recognize revenue when or as the Company satisfies a performance obligation

The Company satisfies performance obligations either over time or at a point in time as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised product or service to a customer.

Disaggregation of Revenue

The following table summarizes net sales from contracts with customers for the three months ended March 31, 2018:

Mobile connectivity product, transferred at point in time	\$6,670
Mobile connectivity product, transferred over time	1,250
Mobile connectivity service	24,829
Inertial navigation product	6,072
Inertial navigation service	1,280
Total net sales	\$40,101

For mobile connectivity product sales, the delivery of the Company's performance obligations, and associated revenue, are generally transferred to the customer at a point in time, with the exception of certain mini-VSAT contracts which are transferred to customers over time. For mobile connectivity service sales, the delivery of the Company's performance obligations and associated revenue are transferred to the customer over time. For inertial navigation product sales, the delivery of the Company's performance obligations, and associated revenue, are generally transferred to the customer at a point in time. For inertial navigation service sales, the Company's performance obligations, and associated revenue, are generally transferred to customers over time.

Product sales

Revenue from product sales is recognized when control of the goods is transferred to the customer, which generally occurs at the Company's plant or warehouse upon delivery to the carrier for shipment. Revenue related to shipping and handling is recognized when the products are shipped and the associated costs are accrued for based on the Company's election to account for shipping and handling activities as a fulfillment of the promise to transfer the products and not as a combined promise. For certain inertial navigation product sales, customer acceptance or inspection may be required before control of the goods is transferred to the customer. For those sales, revenue is recognized after notification of customer acceptance and the goods have been delivered to the carrier for shipment. In certain circumstances customers may request a bill-and-hold arrangement. Under these bill-and-hold arrangements, revenue is recognized when the Company has fulfilled all of its performance obligations, the Company has received notification of customer acceptance of the goods, the units are segregated for the specific customer only, and the goods are ready for physical transfer to the customer in accordance with their defined contract delivery schedule.

The Company's standard payment terms are generally Net 30. Under certain limited conditions, the Company, at its sole discretion, provides for the return of goods. No product is accepted for return and no credit is allowed on any returned product unless the Company has granted and confirmed prior written permission by means of appropriate authorization. The Company establishes reserves for potential sales returns, credits, and allowances, and evaluates, on a monthly basis, the adequacy of those reserves based upon historical experience and expectations for the future.

Contracts with multiple performance obligations

The Company sells products and services through arrangements that in certain instances bundle VSAT equipment, satellite connectivity and other services. For these arrangements, the Company has determined that the performance obligations are not distinct in the context of the contracts with certain customers, including sales-type leases on the VSAT equipment. The Company will recognize product revenue under these arrangements over the estimated satellite connectivity customer life, which is estimated to be five years based on historical evidence. For sales-type leases, interest is charged at market rates and is recognized in other income throughout the lease term, which is typically three to five years.

Satellite connectivity and media content service sales

Directly sold and re-sold satellite connectivity service for voice, data and Internet is recognized monthly based upon minutes or megabytes of traffic processed or contracted fixed fee schedules. Typically, subscribers enter into a one-year minimum service agreement. The Company has evaluated whether it obtains control of the services that are being transferred to the customer in assessing gross revenue reporting as principal verse net revenue reporting as agent for its satellite connectivity service sales and its payments to the applicable service providers. Based on the Company's assessment of the indicators, the Company has determined that gross revenue reporting as a principal is appropriate. The applicable indicators of gross revenue reporting included, but were not limited to, the following:

The Company is the primary obligor in its arrangements with its subscribers. The Company manages all interactions with the subscribers, while satellite connectivity service providers do not interact with the subscribers. In addition, the Company assumes the entire performance risk under its arrangements with the subscribers and in the event of a performance issue, the Company may incur reductions in fees without regard for any recourse that the Company may have with the applicable satellite connective service providers.

The Company has latitude in establishing pricing, as the pricing under its arrangements with the subscribers is negotiated through a contracting process, and has discretion on establishing pricing. The Company then separately negotiates the fees with the applicable satellite service providers.

¶The Company has complete discretion in determining which satellite service providers it will contract with.

As a result, the Company has determined that it earns revenue (as a principal) from the delivery of satellite connectivity services to its subscribers and records all satellite connectivity service sales to subscribers as gross sales. All associated regulatory service fees and costs are recorded net in the consolidated financial statements.

The Company sells prepaid airtime services in the form of prepaid cards. A liability is established upon purchase equal to the cash paid for the prepaid card. The Company recognizes revenue from the prepaid services upon the use of the prepaid card by the customer. The Company does not offer refunds for unused prepaid services. Prepaid airtime services have not been a significant portion of the Company's total sales.

Media content sales include the Company's distribution of commercially licensed news, sports, movies and music content for commercial and leisure customers in the maritime, hotel, and retail markets as well as training videos to the merchant marine market that are typically based on a contracted fixed fee schedule. The Company typically recognizes revenue from media content sales ratably over the period of the service contract.

The accounting estimates related to the recognition of satellite connectivity and media content service sales require the Company to make assumptions about future billing adjustments for disputes with subscribers as well as unauthorized usage. The Company recognizes the monthly subscription fee as service revenue over the service delivery period. Under AgilePlans, the Company retains ownership of the hardware that it provides to these customers, who must return the hardware to KVH if they decide to terminate the service. Because KVH does not sell the hardware under AgilePlans, the Company does not recognize any product revenue when the hardware is deployed to an AgilePlans customer.

Inertial navigation service sales

The Company engages in contracts for development, production, and services activities related to standard product modification or enhancement. The Company considers the nature of these contracts and the types of products and services provided when determining the proper accounting for a particular contract. Customer and government-agency contracted engineering service and sales under development contracts are recognized primarily during the periods in which the Company performs the service or development efforts in accordance with the agreement. Services performed under these types of contracts include engineering studies, surveys, building construction, prototype development, and program management. Performance is determined principally by comparing the accumulated labor hours incurred to date with management's estimate of the total labor hours to complete the contracted work. Incurred labor hours represent work performed, which corresponds with and best depicts the transfer of control to the customer. This continuous transfer of control to the customer is supported by clauses in the contract that allow the customer to unilaterally terminate the contract for convenience, pay the Company for costs incurred plus a reasonable profit and take control of any work in process. The Company establishes billing terms at the time project deliverables and milestones are agreed. Unbilled revenue recognized in excess of the amounts invoiced to clients are classified within the accompanying consolidated balance sheets as "accounts receivable" as the Company's right to consideration is unconditional.

Product service sales

Product service sales other than under development contracts are recognized when completed services are delivered to the customer. The Company also sells extended warranty contracts on mobile connectivity and inertial navigation products. Sales under these contracts are recognized ratably over the contract term. Product service sales including extended warranties are not a significant portion of the Company's total sales.

Financial Statement Impact of Adopting ASC 606

The Company adopted ASC 606 using the modified retrospective method. The cumulative effect of applying the new guidance to all contracts with customers that were not completed as of January 1, 2018 was recorded as an adjustment to accumulated deficit as of the adoption date. As a result of applying the modified retrospective method to adopt the new revenue guidance, the following adjustments were made to accounts on the consolidated balance sheet as of January 1, 2018:

	As Reported December 31, 2017	Adjustments mini-VSAT Product	Adjusted January 1, 2018
Cash, cash equivalent and marketable securities	\$ 42,915	\$ —	\$42,915
Accounts receivable, net	28,316	—	28,316
Inventories	22,732	—	22,732
Contract assets	—	3,205	3,205
Prepaid expenses and other current assets	3,816	—	3,816
Long-lived assets	92,513	—	92,513
Other non-current assets	5,927	—	5,927
Contract assets, long-term	—	5,963	5,963
Non-current deferred income tax asset	20	202	222
Total assets	\$ 196,239	\$ 9,370	\$205,609
Accounts payable, accrued expenses, and other current liabilities	\$ 36,430	—	\$36,430
Deferred revenue, current	6,919	(6,919)	—
Contract liabilities	—	11,039	11,039
Long-term contract liabilities	—	7,998	7,998
Other long-term liabilities	2,653	—	2,653
Long-term debt, excluding current portion	44,572	—	44,572
Total liabilities	\$ 90,574	\$ 12,118	\$102,692
Accumulated deficit	(4,417)	(2,748)	(7,165)
Common stock, additional paid-in capital, and accumulated other comprehensive loss	110,082	—	110,082
Total stockholders' equity	\$ 105,665	\$ (2,748)	\$102,917
Total liabilities and stockholders' equity	\$ 196,239	\$ 9,370	\$205,609
mini-VSAT Broadband			

Under the previous guidance, promised products and services under certain contracts were determined to be separate units of accounting. Under ASC 606, the products and services for these contracts are not considered separate performance obligations because they are not distinct in the context of the contract. As a result, under ASC 606 this revenue will be recognized over the estimated customer's life rather than at a point in time under the previous guidance. In conjunction with the January 1, 2018 adoption of ASC 606, the Company increased its accumulated deficit by \$2,748, reflecting the deferral of \$12,118 in revenue and \$9,370 of cost of revenues, for contracts that were not complete as of the date of adoption.

Cost to Obtain a Customer Contract

Prior to the adoption of ASC 606, the Company expensed commissions paid to internal sales representatives and external sales representatives for obtaining mini-VSAT product contracts in the period the commissions were earned. Under ASC 606, for certain contracts in which the products and services are not considered separate performance obligation, the Company currently capitalizes these incremental costs of obtaining customer contracts and amortizes

them over the estimated customer life of 5 years. The net impact of these changes to the treatment of commissions resulted in a \$191 adjustment to accumulated deficit as of January 1, 2018.

Income Taxes

The adoption of ASC 606 primarily resulted in a deferral of revenue as of December 31, 2017, which in turn generated additional deferred tax assets that ultimately increased the Company's net deferred tax asset position by \$203 as of January 1, 2018 related to sales made by certain international jurisdictions. As the Company fully reserves its net deferred tax assets generated in the U.S., this impact was offset by a corresponding increase to the valuation allowance.

Impact of New Revenue Guidance on Financial Statement Line Items

The following tables compare the reported consolidated balance sheet, statement of operations and cash flows, as of and for the three months ended March 31, 2018, to the pro forma amounts that would have been reported if the previous guidance had been in effect:

Balance Sheet	As of March 31, 2018	
	As reported	Pro forma as if the previous accounting guidance had been in effect
Cash, cash equivalent and marketable securities	\$41,100	\$41,100
Accounts receivable, net	28,550	28,550
Inventories	23,327	23,327
Contract assets	3,305	—
Prepaid expenses and other current assets	4,419	4,419
Long-lived assets	97,728	97,728
Other non-current assets	6,437	6,437
Contract assets, long-term	6,272	—
Non-current deferred income tax asset	214	21
Total assets	\$211,352	\$201,582
Accounts payable, accrued expenses, and other current liabilities	\$37,400	\$37,400
Deferred revenue, current	—	7,748
Contract liabilities	11,973	—
Long-term contract liabilities	8,301	—
Other long-term liabilities	5,143	5,143
Long-term debt, excluding current portion	41,701	41,701
Total liabilities	\$104,518	\$91,992
Accumulated deficit	(11,058)	(8,302)
Common stock, additional paid-in capital, and accumulated other comprehensive loss	117,892	117,892
Total stockholders' equity	\$106,834	\$109,590
Total liabilities and stockholders' equity	\$211,352	\$201,582

Total reported assets and reported liabilities were \$9,770 and \$12,526, respectively, greater than the pro forma balance sheet, which assumes that the previous guidance remained in effect as of March 31, 2018. This difference was largely due to the deferral of revenue and associated contract costs in connection with the treatment of certain mini-VSAT customer contracts in which the products and services were not distinct in the context of the contract.

Consolidated Statement of Operations	Three Months Ended March 31, 2018	
	As reported	Pro forma as if the previous accounting guidance had been in effect
Sales:		
Product	\$ 13,992	\$ 14,400
Service	26,109	26,109
Net Sales	40,101	40,509
Costs and expenses:		
Costs of product sales	8,923	9,332
Costs of service sales	13,816	13,816
Research and development	3,934	3,934
Sales, marketing and support	8,941	8,940
General and administrative	7,667	7,667
Total operating expenses	43,281	43,689
Loss from operations	(3,180)	(3,180)
Other expense, net	(535)	(535)
Loss before income tax expense	(3,715)	(3,715)
Income tax expense	178	169
Net loss	\$(3,893)	\$(3,884)
Net loss per common share:		
Basic and diluted	\$(0.23)	\$(0.23)

The following paragraphs summarize the significant changes to the Company's consolidated statement of operations for the three months ended March 31, 2018 resulting from the adoption of ASC 606 on January 1, 2018 compared to the results the Company would have reported under the prior guidance:

ASC 606 deferred the recognition of revenue and fulfillment costs related to mini-VSAT contracts in which the performance obligations for products and services are not distinct in the context of the contract. The deferred revenue and associated fulfillment costs will be recognized over the estimated customer life of 5 years. Under the previous guidance, these promised products and services were determined to be separate units of accounting, as a result of which the product revenue was recognized at the time of sale. As a result of the adoption of ASC 606, revenues and related cost of revenues that were approximately \$408 and \$409 lower, respectively, for the three months ended March 31, 2018 than they would have been under legacy GAAP.

ASC 606 resulted in the amortization of capitalized commission costs that were recorded as part of the cumulative effect adjustment upon adoption. Amortization of these capitalized costs to selling and marketing expenses, net of commission costs that were capitalized in the quarter, resulted in no meaningful impact on selling and marketing expenses in the quarter.

The net impact of accounting for revenue under the new guidance increased net loss by \$9, with no change in basic or diluted loss per share.

Statement of Cash Flows	Three Months Ended March 31, 2018		Pro forma as if the previous accounting guidance had been in effect
	As reported		
Net loss	\$	(3,893)	\$ (3,884)
Non cash adjustments to reconcile net loss to net cash used in operating activities			
Changes in operating assets and liabilities:			
Accounts receivable and inventories	(649)	(649)
Prepaid expenses, other assets, and contract assets	(1,487)	(1,079)
Deferred revenue, contract liabilities, and long-term contract liabilities	1,094		686
Accounts payable, accrued compensation, warranty, other, and other long-term liabilities	(242)	(242)
Net cash used in operating activities	\$	(1,197)	\$ (1,197)

The adoption of ASC 606 had no impact on the Company's cash flows from operations. The aforementioned impacts resulted in offsetting shifts in cash flows throughout net loss and various changes in working capital balances.

	Contract Assets		Contract Liabilities	
	Current	Non-Current	Current	Non-Current
Balance at January 1, 2018	\$3,205	\$ 5,963	\$11,039	\$ 7,998
Balance at March 31, 2018	\$3,305	\$ 6,272	\$11,973	\$ 8,301

Revenue recognized during the three months ended March 31, 2018 from amounts included in deferred revenue at the beginning of the period was approximately \$1,215.

Business and Credit Concentrations

Concentrations of risk with respect to trade accounts receivable are generally limited due to the large number of customers and their dispersion across several geographic areas. Although the Company does not foresee that credit risk associated with these receivables will deviate from historical experience, repayment is dependent upon the financial stability of those individual customers. The Company establishes allowances for potential bad debts and evaluates, on a monthly basis, the adequacy of those reserves based upon historical experience and its expectations for future collectability concerns. The Company performs ongoing credit evaluations of the financial condition of its

customers and generally does not require collateral.

No single customer accounted for 10% or more of consolidated net sales for the first quarter of 2018 or 2017 or accounts receivable at March 31, 2018 or December 31, 2017.

Certain components from third parties used in the Company's products are procured from single sources of supply. The failure of a supplier, including a subcontractor, to deliver on schedule could delay or interrupt the Company's delivery of products and thereby materially adversely affect the Company's revenues and operating results.

(17) Derivative Instruments and Hedging Activities

Effective April 1, 2010, in order to reduce the volatility of cash outflows that arise from changes in interest rates, the Company entered into two interest rate swap agreements. These interest rate swap agreements are intended to hedge the Company's mortgage loan related to its headquarters facility in Middletown, Rhode Island by fixing the interest rates specified in the mortgage loan to 5.9% for half of the principal amount outstanding and 6.1% for the remaining half of the principal amount outstanding as of April 1, 2010 until the mortgage loan expires on April 16, 2019. The Company does not use derivatives for speculative purposes. For a derivative that is designated as a cash flow hedge, changes in the fair value of the derivative are recognized in accumulated other comprehensive income ("AOCI") to the extent the derivative is effective at offsetting the changes in the cash flows being hedged until the hedged item affects earnings. As the Company makes the required principal and interest payments under the mortgage loan and the related interest rate swaps are settled, the Company reclassifies the amounts recorded in AOCI related to the changes in the fair value of the settled interest rate swaps to earnings. To the extent there is any hedge ineffectiveness, changes in fair value relating to the ineffective portion are immediately recognized in earnings in other income (expense) in the consolidated statements of income. The interest rate swap is recorded within accrued other liabilities on the balance sheet. The critical terms of the interest rate swaps were designed to mirror the terms of the Company's mortgage loans. The Company designated these derivatives as cash flow hedges of the variability of the LIBOR-based interest payments on principal over a nine-year period, which ends on April 1, 2019. As of March 31, 2018, the Company determined that the existence of hedge ineffectiveness, if any, was immaterial and all changes in the fair value of the interest rate caps were recorded in the consolidated statements of comprehensive (loss) income as a component of AOCI.

As of March 31, 2018, the Company had the following outstanding interest rate derivatives that were designated as cash flow hedges of interest rate risk:

Interest Rate Derivatives	Notional (in thousands)	Asset (Liability)	Effective Date	Maturity Date	Index	Strike Rate
Interest rate swap	\$ 1,368	(22)	April 1, 2010	April 1, 2019	1-month LIBOR	5.91 %
Interest rate swap	\$ 1,368	(25)	April 1, 2010	April 1, 2019	1-month LIBOR	6.07 %

As of December 31, 2017, the Company had the following outstanding interest rate derivatives that were designated as cash flow hedges of interest rate risk:

Interest Rate Derivatives	Notional (in thousands)	Asset (Liability)	Effective Date	Maturity Date	Index	Strike Rate
Interest rate swap	\$ 1,389	(33)	April 1, 2010	April 1, 2019	1-month LIBOR	5.91 %
Interest rate swap	\$ 1,389	(36)	April 1, 2010	April 1, 2019	1-month LIBOR	6.07 %

(18) Income Taxes

The Company's effective tax rate for the three months ended March 31, 2018 was (4.8)% compared with (3.4)% for the corresponding period in the prior year. The effective income tax rate is based on estimated income for the year, the estimated composition of the income in different jurisdictions and discrete adjustments, if any, in the applicable quarterly periods, including retroactive changes in tax legislation, settlements of tax audits or assessments, and the resolution or identification of tax position uncertainties.

For the three months ended March 31, 2018 and 2017, the effective tax rate was lower than the statutory tax rate primarily due to the Company maintaining a valuation allowance reserve on its US deferred tax assets and to the composition of income from foreign jurisdictions taxed at lower rates.

The 2017 Tax Cuts and Jobs Act (the "Tax Act"), which was signed into law on December 22, 2017, has resulted in significant changes to the U.S. corporate income tax system. These changes include a federal statutory rate reduction

from 35% to 21%, the elimination or reduction of certain domestic deductions and credits and limitations on the deductibility of interest expense and executive compensation. The 2017 Tax Act also transitions international taxation from a worldwide system to a modified territorial system and includes base erosion prevention measures on non-U.S. earnings, which has the effect of subjecting certain earnings of our foreign subsidiaries to U.S. taxation as global intangible low-taxed income (GILTI).

30

The Securities and Exchange Commission released Staff Accounting Bulletin (SAB) No. 118 to provide guidance to companies on how to implement the accounting and disclosure changes as a result of the Tax Act. The SEC staff guidance has recognized that, due to the complexity and timing of the release of the Tax Act, the accounting for this change in the law may be incomplete upon issuance of a company's financial statements for the reporting period in which the Tax Act was enacted. SAB No. 118 states that if a company can determine a reasonable estimate for the effects of the Tax Act then this estimate can be included in the financial statements. The Company made a preliminary estimate of the Transition Toll Tax and the remeasurement of our deferred tax assets and liabilities as of December 31, 2017. The preliminary estimate is subject to change as we finalize our analysis and as interpretations of the provisions of the 2017 Tax Act continue to develop. The final determination of the Transition Toll Tax and the remeasurement of our deferred tax assets and liabilities will be completed as additional information becomes available, but no later than one year from the enactment of the 2017 Tax Act. U.S. Treasury regulations, administrative interpretations or court decisions interpreting the 2017 Tax Act may require further adjustments and changes in our estimates, which could have a material adverse effect on our business, results of operations, financial position and cash flows. The Company has not recorded any changes to this estimate for the three months ended March 31, 2018. The Company can make an accounting policy election to either recognize deferred taxes for temporary differences expected to reverse as GILTI in future years or provide for the tax expense related to GILTI resulting from those items in the year the tax is incurred. As of the date of this report, the Company is still evaluating the guidance and has not made a policy election related to the treatment of the GILTI tax.

As of March 31, 2018 and December 31, 2017, the Company had reserves for uncertain tax positions of \$1,631 and \$1,570, respectively. The Company incurred \$23 in interest and penalties for the three months ended March 31, 2018, which were recorded as a component of income tax expense. There were no material changes during the three months ended March 31, 2018 to the Company's reserve for uncertain tax positions. The Company estimates that it is reasonably possible that the balance of unrecognized tax benefits as of March 31, 2018 may decrease \$235 in the next twelve months as a result of a lapse of statutes of limitations and settlements with taxing authorities.

The Company's tax jurisdictions include the United States, the United Kingdom, Denmark, Cyprus, Norway, Brazil, Singapore, Belgium, the Netherlands, Hong Kong, India and Japan. In general, the statute of limitations with respect to the Company's United States federal income taxes has expired for years prior to 2014, and the relevant state and foreign statutes vary. However, preceding years remain open to examination by United States federal and state and foreign taxing authorities to the extent of future utilization of net operating losses and research and development tax credits generated in each preceding year.

(19) Capital Lease

During the first quarter of 2018, the Company entered into a five-year capital lease for three satellite hubs for its HTS network. As of March 31, 2018, the gross costs and accumulated depreciation associated with this lease are included in revenue generating assets and amounted to \$3,068 and \$78, respectively. Property and equipment under capital leases are stated at the present value of minimum lease payments.

The property and equipment held under this capital lease are amortized on a straight line basis over the seven-year estimated useful life of the asset, since the lease meets the bargain purchase option criteria. Amortization of assets held under capital leases is included within depreciation expense. Depreciation expense for these capital assets was \$78 for the three months ended March 31, 2018.

The future minimum capital lease payments under this capital lease as of March 31, 2018 are:

Remainder of 2018	\$468
2019	624
2020	624
2021	624
2022	624
2023	45
Total minimum lease payments	\$3,009
Less amount representing interest (1.53%)	\$(47)
Present value of net minimum capital lease payments	\$2,962
Less current installments of obligation under accrued other	\$562
Obligations under other long-term liabilities, excluding current installments	\$2,400

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Introduction

The statements included in this quarterly report on Form 10-Q, other than statements of historical fact, are forward-looking statements. Examples of forward-looking statements include statements regarding our future financial results, operating results, business strategies, projected costs, products and services, competitive positions and plans, customer preferences, consumer trends, anticipated product development, and objectives of management for future operations. In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative terms or other comparable terminology. Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in the section entitled "Risk Factors" in Item 1A of Part I of our annual report on Form 10-K for the year ended December 31, 2017. These and many other factors could affect our future financial and operating results, and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by us or on our behalf. For example, our expectations regarding certain items as a percentage of sales assume that we will achieve our anticipated sales goals. The following discussion and analysis should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this report.

Overview

We design, develop, manufacture and market mobile connectivity products and services for the marine and land mobile markets, and navigation, guidance and stabilization products for both the defense and commercial markets. We operate in two operating segments based on product lines: mobile connectivity and inertial navigation.

32

Mobile Connectivity Segment

Our mobile connectivity segment offers satellite communications products and services. Our mobile connectivity products enable customers to receive voice and Internet services and live digital television via satellite services in marine vessels, recreational vehicles, buses and automobiles. Our CommBox offers a range of tools designed to increase communication efficiency, reduce costs, and manage network operations. We sell and lease our mobile connectivity products through an extensive international network of dealers and distributors. We also sell and lease products directly to end users.

Our mobile connectivity service sales include sales of satellite voice and Internet airtime services, engineering services provided under development contracts, sales from product repairs, and extended warranty sales. Our mobile connectivity service sales also include our distribution of entertainment, including news, sports, music, and movies, to commercial and leisure customers in the maritime, hotel, and retail markets through KVH Media Group, as well as the distribution of training films and eLearning computer-based training courses to commercial customers in the maritime market through our Videotel business. We typically recognize revenue from media content sales ratably over the period of the service contract. We provide, for monthly fixed and usage fees, satellite connectivity services for broadband Internet, data and Voice over Internet Protocol (VoIP) service to our TracPhone V-series customers. We also earn monthly usage fees for third-party satellite connectivity for voice, data and Internet services to our Inmarsat and Iridium customers who choose to activate their subscriptions with us. Our service sales have grown as a percentage of total revenue from 63% of our net sales for the first three months of 2017 to 65% in the first three months of 2018. The majority of KVH Media Group's and Videotel's services are invoiced in pounds sterling, which increases our exposure to fluctuations in exchange rates.

Our marine leisure business within the mobile connectivity segment is highly seasonal, and seasonality can also impact our commercial marine business. Historically, we have generated the majority of our marine leisure product revenues during the first and second quarters of each year, and these revenues typically decline in the third and fourth quarters of each year, compared to the first two quarters. Temporary suspensions of our airtime services typically increase in the third and fourth quarters of each year as boats are placed out of service during the winter months.

Inertial Navigation Segment

Our inertial navigation segment offers precision fiber optic gyro (FOG)-based systems that enable platform and optical stabilization, navigation, pointing, and guidance. Our inertial navigation products also include tactical navigation systems that provide uninterrupted access to navigation and pointing information in a variety of military vehicles, including tactical trucks and light armored vehicles. Our inertial navigation products are sold directly to U.S. and foreign governments and government contractors, as well as through an international network of authorized independent sales representatives. In addition, our inertial navigation products are used in numerous commercial products, such as navigation and positioning systems for various applications including precision mapping, dynamic surveying, autonomous vehicles, train location control and track geometry measurement systems, industrial robotics and optical stabilization.

We generate sales primarily from the sale of our mobile connectivity systems and services and our inertial navigation products and services. The following table provides, for the periods indicated, our sales by segment:

	Three Months Ended March 31, 2018		2017
Mobile connectivity	\$32,749	\$34,287	
Inertial navigation	7,352	5,924	

Net sales \$40,101 \$40,211

Product sales within the mobile connectivity segment accounted for 20% and 25% of our consolidated net sales for the three months ended March 31, 2018 and 2017, respectively. Sales of mini-VSAT Broadband airtime services accounted for approximately 41% and 40% of our consolidated net sales for the three months ended March 31, 2018 and 2017, respectively. Sales of content and training services within the mobile connectivity segment accounted for 19% of our consolidated net sales for both the three months ended March 31, 2018 and 2017.

Within our inertial navigation segment, net sales of FOG-based guidance and navigation systems accounted for 13% and 11% of our consolidated net sales for the three months ended March 31, 2018 and 2017, respectively.

No other single product class accounted for 10% or more of our consolidated net sales for the three months ended March 31, 2018 or 2017. No individual customer accounted for 10% or more of our consolidated net sales for the three months ended March 31, 2018 or 2017.

We operate in a number of major geographic areas across the globe. We generate our international net sales, based upon customer location, primarily from customers located in Canada, Europe, Africa, Asia/Pacific, the Middle East, and India. Our international net sales totaled 58% and 59% of our consolidated net sales for the three months ended March 31, 2018 and 2017, respectively. No individual foreign country represented 10% or more of our consolidated net sales for the three months ended March 31, 2018 or 2017. See Note 11 to our consolidated financial statements for more information on our segments.

In addition to our internally funded research and development efforts, we also conduct research and development activities that are funded by our customers. These activities relate primarily to engineering studies, surveys, prototype development, program management, and standard product customization. In accordance with accounting principles generally accepted in the United States of America, we account for customer-funded research as service revenue, and we account for the associated research and development costs as costs of service and product sales. As a result, customer-funded research and development are not included in the research and development expense that we present in our statement of operations. The following table presents our total annual research and development effort, representing the sum of research costs of service and product sales and the operating expense of research and development as described in our statement of operations. Our management believes this information is useful because it provides a better understanding of our total expenditures on research and development activities.

	Three Months Ended March 31, 2018 2017 (in thousands)	
Research and development expense presented on the statement of operations	\$3,934	\$3,947
Costs of customer-funded research and development included in costs of service sales	675	509
Total consolidated statements of operations expenditures on research and development activities	\$4,609	\$4,456

Critical Accounting Policies and Significant Estimates

The discussion and analysis of our financial condition and results of operations are based upon 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 judgments that affect the reported amounts of assets and liabilities, sales and expenses, and related disclosure at the date of our financial statements. Our significant accounting policies are summarized in Note 1 to the consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2017.

As described in our annual report on Form 10-K for the year ended December 31, 2017, our most critical accounting policies and estimates upon which our consolidated financial statements were prepared were those relating to revenue recognition, valuation of accounts receivable, valuation of inventory, valuations and purchase price allocations related to business combinations, expected future cash flows including growth rates, discount rates, terminal values and other assumptions and estimates used to evaluate the recoverability of long-lived assets and goodwill, estimated fair values of long-lived assets, including goodwill, amortization methods and periods, certain accrued expenses and other related charges, stock-based compensation, contingent liabilities, key valuation assumptions for its share-based awards, estimated fulfillment costs for warranty obligations, tax reserves and recoverability of our net deferred tax assets and related valuation allowance. We have reviewed our policies and estimates and determined that these remain our most critical accounting policies and estimates for the three months ended March 31, 2018. We have updated our revenue

recognition policies in conjunction with our adoption of ASC 606 as of January 1, 2018, as further described in Note 16 to the accompanying financial statements.

Readers should refer to our annual report on Form 10-K for the year ended December 31, 2017 under “Management’s Discussion and Analysis of Financial Condition and Results of Operation—Critical Accounting Policies and Significant Estimates” for descriptions of these policies and estimates, as well as the notes to the consolidated financial statements included elsewhere within this report.

Results of Operations

The following table provides, for the periods indicated, certain financial data expressed as a percentage of net sales:

	Three Months Ended March 31, 2018		2017	
Sales:				
Product	34.9	%	37.0	%
Service	65.1		63.0	
Net sales	100.0		100.0	
Cost and expenses:				
Costs of product sales	22.3		26.2	
Costs of service sales	34.5		33.0	
Research and development	9.8		9.8	
Sales, marketing and support	22.3		21.7	
General and administrative	19.1		20.4	
Total costs and expenses	108.0		111.1	
Loss from operations	(8.0)	(11.1)
Interest income	0.4		0.4	
Interest expense	1.0		0.9	
Other expense, net	(0.7)	(0.2)
Loss before income tax	(9.3)	(11.8)
Income tax	0.4		0.4	
Net loss	(9.7)%	(12.2)%

Three Months Ended March 31, 2018 and 2017

Net Sales

As discussed further under the heading "Segment Discussion" below, product sales decreased \$0.9 million, or 6%, to \$14.0 million for the three months ended March 31, 2018 from \$14.9 million for the three months ended March 31, 2017, primarily due to a decrease in mobile connectivity product sales of \$1.9 million, which was partially offset by an increase in inertial navigation product sales of \$1.1 million. Service sales for the three months ended March 31, 2018 increased \$0.8 million, or 3%, to \$26.1 million from \$25.3 million for three months ended March 31, 2017 due to an increase in inertial navigation service sales of \$0.4 million and an increase in mobile connectivity service sales of \$0.4 million.

Costs of Sales

Costs of sales consists of costs of product sales and costs of service sales. Costs of sales decreased \$1.1 million, or 5%, in the three months ended March 31, 2018 to \$22.7 million from \$23.8 million in the three months ended March 31, 2017. The decrease in costs of sales was driven by a decrease of \$1.6 million, or 15%, in costs of product sales, partially offset by a \$0.5 million, or 4%, increase in costs of service sales. As a percentage of net sales, costs of sales was 57% for the three months ended March 31, 2018 and 59% for the three months ended March 31, 2017.

Our costs of product sales consist primarily of materials, manufacturing overhead, and direct labor used to produce our products. For the three months ended March 31, 2018, costs of product sales decreased \$1.6 million, or 15%, to \$8.9 million from \$10.5 million in the three months ended March 31, 2017. As a percentage of product sales, costs of product sales were 64% and 71% for the three months ended March 31, 2018 and 2017, respectively. The decrease was principally driven by a change in product mix, primarily due to higher FOG product sales which generally have higher margins than mobile connectivity products. Mobile connectivity costs of product sales decreased by \$2.1 million, or 29%, due to a decrease in our mobile connectivity product sales. Mobile connectivity costs of product sales

as a percentage of mobile connectivity product sales were 66% and 74% for the three months ended March 31, 2018 and 2017, respectively. The decrease was principally driven by product mix. Inertial navigation costs of product sales increased by \$0.4 million, or 12%, primarily due to an increase in FOG costs of product sales. Inertial navigation costs of product sales as a percentage of inertial navigation product sales was 61% and 65% for the three months ended March 31, 2018 and 2017, respectively. The decrease was primarily driven by a change in product mix of single and multiple axis FOGs.

35

Our costs of service sales consist primarily of satellite service capacity, depreciation, service network overhead expense associated with our mini-VSAT Broadband network infrastructure, direct network service labor, Inmarsat service costs, product installation costs, engineering and related direct costs associated with customer-funded research and development, media materials and distribution costs, and service repair materials. For the three months ended March 31, 2018, costs of service sales increased by \$0.5 million, or 4%, to \$13.8 million from \$13.3 million for the three months ended March 31, 2017. As a percentage of service sales, costs of service sales were 53% and 52% for the three months ended March 31, 2018 and 2017, respectively. Mobile connectivity costs of service sales increased by \$0.3 million, or 2%, primarily due to a \$0.7 million increase in mini-VSAT airtime costs of service sales including increased depreciation expense related to our purchase of three new HTS satellite hubs, which was partially offset by a \$0.3 million decrease in costs of services sales for other airtime services and repairs and a \$0.1 million decrease in content and learning costs of service sales. Mobile connectivity costs of service sales as a percentage of mobile connectivity service sales was 53% and 52% for the three months ended March 31, 2018 and 2017, respectively. Inertial navigation costs of service sales increased by \$0.2 million, or 40%, primarily due to an increase in contract engineering services revenues. Inertial navigation costs of service sales as a percentage of inertial navigation service sales was 58% and 56% for the three months ended March 31, 2018 and 2017, respectively.

We expect that our costs of sales will generally increase in correlation with our expected growth in our mobile connectivity and inertial navigation net sales. We expect that the mobile connectivity costs of service sales as percentage of mobile connectivity sales will increase as we integrate our HTS airtime network.

Operating Expenses

Research and development expense consists of direct labor, materials, external consultants, and related overhead costs that support our internally funded product development and product sustaining engineering activities. Research and development expense were \$3.9 million for both the three months ended March 31, 2018 and 2017. Expensed materials increased by \$0.2 million, which was offset by a \$0.2 million decrease in unfunded engineering costs. As a percentage of net sales, research and development expense for the three months ended March 31, 2018 and 2017 was 10%.

We expect that research and development expense will grow year-over-year as we continue to invest in developing new technologies and applications for our products.

Sales, marketing, and support expense consists primarily of salaries and related expenses for sales and marketing personnel, commissions for both in-house and third-party representatives, costs related to the co-development of certain content, other sales and marketing support costs such as advertising, literature and promotional materials, product service personnel and support costs, warranty-related costs and bad debt expense. Sales, marketing and support expense also includes the operating expenses of our sales office subsidiaries in Denmark, Singapore, Brazil, and Japan. Sales, marketing and support expense for the three months ended March 31, 2018 increased by \$0.2 million, or 2%, to \$8.9 million from \$8.7 million for the three months ended March 31, 2017. The increase primarily resulted from a \$0.4 million increase in warranty expense and expensed materials, partially offset by a \$0.1 million decrease in bad debt expense and a \$0.1 million decrease in consulting fees. As a percentage of net sales, sales, marketing and support expense for the three months ended March 31, 2018 and 2017 was 22%.

We expect that our sales, marketing, and support expense will increase year-over-year primarily driven by increased personnel, marketing and technology investments to support product sales and launches.

General and administrative expense consists of costs attributable to management, finance and accounting, information technology, human resources, certain outside professional services, and other administrative costs. General and

administrative expense for the three months ended March 31, 2018 decreased by \$0.5 million, or 6%, to \$7.7 million from \$8.2 million for the three months ended March 31, 2017. The decrease in general and administrative expense primarily resulted from a \$0.3 million decrease in legal and professional fees and a \$0.3 million decrease in salaries and associated compensation. These decreases were partially offset by a \$0.1 million increase in computer expenses. As a percentage of net sales, general and administrative expense for the three months ended March 31, 2018 was 19% as compared to 20% for the three months ended March 31, 2017.

We expect general and administrative expenses to increase year-over-year in 2018, primarily driven by increased personnel costs.

Interest and Other (Expense) Income, Net

Interest income represents interest earned on our cash and cash equivalents, as well as from investments. Interest income decreased slightly to \$0.1 million for the three months ended March 31, 2018 from \$0.2 million for the three months ended March 31, 2017. Interest expense was \$0.4 million for the three months ended March 31, 2018 and 2017. Other expense, net increased by \$0.2 million primarily due to foreign exchange transaction losses during the three months ended March 31, 2018 resulting from the fluctuation of the pounds sterling.

Income Tax Expense

Income tax expense for the three months ended March 31, 2018 was \$0.2 million due to taxes related to income earned in foreign jurisdictions and no associated income tax benefit related to the losses incurred in the U.S. and Brazil due to a full valuation allowance on our related deferred tax assets. Income tax expense for the three months ended March 31, 2017 was \$0.2 million due to taxes related to income earned in foreign jurisdictions and no associated income tax benefit related to the loss incurred in the U.S. due to a full valuation allowance on our U.S. deferred tax assets.

Segment Discussion - Three Months Ended March 31, 2018 and 2017

Our net sales by segment for the three months ended March 31, 2018 and 2017 were as follows:

	For the three months ended March 31,		Change	
	2018	2017	\$	%
	(dollars in thousands)			
Mobile connectivity sales				
Product	\$7,920	\$9,854	\$(1,934)	(20)%
Service	24,829	24,433	396	2 %
Net sales	\$32,749	\$34,287	\$(1,538)	(4)%
Inertial navigation sales				
Product	\$6,072	\$5,009	\$1,063	21 %
Service	1,280	915	365	40 %
Net sales	\$7,352	\$5,924	\$1,428	24 %

Operating earnings (loss) by segment for the three months ended March 31, 2018 and 2017 were as follows:

	For the three months ended March 31,		Change	
	2018	2017	\$	%
	(dollars in thousands)			
Mobile connectivity	\$1,072	\$622	\$450	72 %
Inertial navigation	334	(44)	378	859 %
	\$1,406	\$578	\$828	143 %
Unallocated	(4,586)	(5,048)	462	9 %
Loss from operations	\$(3,180)	\$(4,470)	\$1,290	29 %

Mobile Connectivity Segment

Net sales in the mobile connectivity segment decreased by \$1.5 million, or 4%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. Mobile connectivity product sales decreased by \$1.9 million, or 20%, to \$7.9 million for the three months ended March 31, 2018 from \$9.8 million for the three months ended March 31, 2017. The decrease was primarily due to a \$1.6 million, or 18%, decrease in marine mobile connectivity product sales due to the impact of the AgilePlans subscription service, the adoption of ASC 606 and a \$0.3 million, or 35%, decrease in sales of our land mobile connectivity products. The net impact of adopting ASC 606 was a decrease in marine connectivity product sales of \$0.4 million.

Mobile connectivity service sales increased by \$0.4 million, or 2%, to \$24.8 million for the three months ended March 31, 2018 from \$24.4 million for the three months ended March 31, 2017. The increase was primarily due to a \$0.6 million increase in our mini-VSAT service sales compared to the three months ended March 31, 2017 primarily due to a 6% increase in subscribers, partially as a result of the introduction of AgilePlans. Partially offsetting this increase was a \$0.1 million decrease in content and training service sales and \$0.1 million decrease in other mobile connectivity repair services.

We expect that our mini-VSAT service sales will continue to grow year-over-year, primarily through the continued expansion of our mini-VSAT Broadband customer base, and due to the availability of our AgilePlans subscription service model. We expect that mini-VSAT product sales may decline if customers select the new subscription service model.

Operating earnings for the mobile connectivity segment increased by \$0.5 million, or 72%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. This increase was primarily the result of an increase in service sales which have a higher margin than mobile connectivity product sales, a \$0.3 million decrease in professional fees, and a \$0.1 million decrease in bad debt expense, which were partially offset by a \$0.4 million increase in warranty expense and expensed materials.

We expect our overall mobile connectivity operating earnings to show modest growth in 2018 through market expansion and as existing customers expand their mini-VSAT Broadband usage and as customers take advantage of the AgilePlans subscription service option.

Inertial Navigation Segment

Net sales in the inertial navigation segment increased by \$1.4 million, or 24%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. Inertial navigation product sales increased \$1.1 million, or 21%, to \$6.1 million for the three months ended March 31, 2018 from \$5.0 million for the three months ended March 31, 2017, primarily due to increased sales of our FOG products. TACNAV sales remained flat quarter over quarter.

Inertial navigation service sales increased \$0.4 million, or 40%, to \$1.3 million for the three months ended March 31, 2018 from \$0.9 million for the three months ended March 31, 2017. The increase resulted from a \$0.2 million increase in contracted engineering services for an engineering and services development contract from a major U.S. defense contractor, which began in the first quarter and is expected to continue through the second quarter of 2018, as well as a \$0.2 million increase in inertial navigation repair revenue.

We expect to see growth in our FOG product sales in 2018 due to a higher backlog entering the year. We also expect to see growth in contracted engineering services year-over-year. However, it is challenging to predict whether sales of our TACNAV products will increase in 2018 as we cannot predict when specific orders, which could be individually

significant, may be received, if at all.

Our operating earnings (loss) for the inertial navigation segment increased \$0.4 million, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. This increase is primarily due to an increase in product sales and service sales of \$1.4 million, which was partially offset by a \$0.3 million increase in salaries and associated benefits and commissions.

We expect our overall inertial navigation operating earnings to increase modestly in 2018 due to the higher backlog of FOG products entering the year and due to the higher expected increase in contracted engineering service sales.

Unallocated

Certain corporate-level costs have not been allocated because they are not attributable to either segment. These costs primarily consist of broad corporate functions, including executive, legal, finance, information technology, and costs associated with corporate actions.

Unallocated operating loss decreased by \$0.5 million, or 9%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. The decrease in the operating loss was primarily the result of a \$0.3 million decrease in salaries and associated compensation and a \$0.2 million decrease in professional fees.

Backlog

Backlog is not a meaningful indicator for predicting revenue in future periods. Commercial resellers for our mobile connectivity products and FOG products do not carry extensive inventories and rely on us to ship products quickly. Generally due to the rapid delivery of our commercial products, our backlog for those products is not significant.

Our backlog for all products and services was \$15.6 million and \$16.3 million as of March 31, 2018 and December 31, 2017, respectively. As of March 31, 2018, \$13.3 million of our backlog was scheduled for fulfillment in 2018, \$0.7 million was scheduled for fulfillment in 2019, and \$1.6 million was scheduled for fulfillment in 2020 through 2028.

Backlog consists of orders evidenced by written agreements and specified delivery dates for customers who are acceptable credit risks. We do not include satellite connectivity service sales in our backlog even though many of our satellite connectivity customers have signed annual or multi-year service contracts providing for a fixed monthly fee. Military orders included in backlog are generally subject to cancellation for the convenience of the customer. When orders are canceled, we generally recover actual costs incurred through the date of cancellation and the costs resulting from termination. As of March 31, 2018, our backlog included \$8.5 million in orders that are subject to cancellation for convenience by the customer. Individual orders for guidance and stabilization products are often large and may require procurement of specialized long-lead components and allocation of manufacturing resources. The complexity of planning and executing larger orders generally requires customers to order well in advance of the required delivery date, resulting in backlog.

Liquidity and Capital Resources

Our primary liquidity needs are to fund general business requirements, including working capital requirements, capital expenditures, interest payments, and debt repayments. In recent years, we have funded our operations primarily from cash flows from operations, bank financing, and the proceeds received from exercises of stock options.

As of March 31, 2018, we had \$41.1 million in cash, cash equivalents, and marketable securities, of which \$19.9 million in cash and cash equivalents was held in local currencies by our foreign subsidiaries. Our foreign subsidiaries held no marketable securities as of March 31, 2018. As of March 31, 2018, we had \$51.3 million in working capital.

Net cash used in operations was \$1.2 million for the three months ended March 31, 2018 compared to net cash provided by operations of \$4.3 million for the three months ended March 31, 2017. The \$5.5 million increase in cash used is primarily due to a \$4.3 million decrease in cash inflows relating to accounts receivable, a \$2.8 million increase in cash outflows relating to accounts payable and accrued expenses and a \$0.6 million increase in cash outflows related to other non-current assets. Partially offsetting these changes were a \$1.0 million decrease in net loss and a \$0.6 million increase in cash inflows related to deferred revenue.

Net cash provided by investing activities was \$1.8 million for the three months ended March 31, 2018 compared to net cash provided by investing activities of \$6.9 million for the three months ended March 31, 2017. The \$5.1 million decrease was principally the result of a \$4.0 million decrease in net investments in available-for-sale marketable securities, and a \$1.1 million increase in capital expenditures.

Net cash provided by financing activities was \$1.5 million for the three months ended March 31, 2018 compared to net cash used in financing activities of \$8.5 million for the three months ended March 31, 2017. The \$10.0 million increase in net cash provided by financing activities is primarily attributable to a \$6.3 million decrease in repayment of long-term debt and term note borrowings and a \$4.5 million increase in sale of treasury stock. These amounts were partially offset by a \$0.7 million decrease in proceeds from the exercise of stock options net of payments for employee restricted stock withholdings.

Borrowing Arrangements

Principal Credit Facility

As of March 31, 2018, there was \$41.5 million in aggregate principal amount outstanding under our principal credit facility. On July 1, 2014, we entered into a five-year senior credit agreement with Bank of America, N.A., as administrative agent, and the lenders named from time to time as parties thereto, for an aggregate amount of up to \$80.0 million, including a revolving credit facility of up to \$15.0 million and a term loan of \$65.0 million to be used for general corporate purposes, including both the refinancing of the \$30.0 million of indebtedness then outstanding under our former credit facility and permitted acquisitions. The credit agreement was most recently amended in March 2017 to modify the Maximum Consolidated Leverage Ratio, the Applicable Rate, the Consolidated Fixed Charge Coverage Ratio (each as defined in the credit agreement) and the amortization schedule of the term loan, as well as to make certain other changes.

In connection with the March 2017 amendment, we made an additional principal repayment of \$6.0 million on the term loan and amended the repayment terms. Under the amended terms, we must make principal repayments of \$575,000 every three months starting on April 1, 2017 until the loan matures on July 1, 2019. On the maturity date, the entire remaining principal balance of the loan, including any future loans under the revolver, is due and payable, together with all accrued and unpaid interest, penalties, and any other amounts due and payable under the credit agreement. The credit agreement contains provisions requiring the mandatory prepayment of amounts outstanding under the term loan and the revolver under specified circumstances, including (i) 100% of the net cash proceeds from certain dispositions to the extent not reinvested in our business within a stated period, (ii) 50% of the net cash proceeds from stated equity issuances and (iii) 100% of the net cash proceeds from certain receipts of more than \$250,000 outside the ordinary course of business. The prepayments are first applied to the term loan, in inverse order of maturity, and then to the revolver. In the discretion of the administrative agent, certain mandatory prepayments made on the revolver can permanently reduce the amount of credit available under the revolver.

As required by the credit agreement, we used 50% of the net cash proceeds of our \$4.5 million private placement of treasury stock to SKY Perfect JSAT Corporation on February 28, 2018 to prepay \$2.25 million of indebtedness under the term loan.

Loans under the credit agreement bear interest at varying rates determined in accordance with the credit agreement. Each LIBOR Rate Loan, as defined in the credit agreement, bears interest on the outstanding principal amount thereof for each interest period from the applicable borrowing date at a rate per annum equal to the LIBOR Daily Floating Rate or LIBOR Monthly Floating Rate, each as defined in the credit agreement, as applicable, plus the Applicable Rate, as defined in the credit agreement, and each Base Rate Loan, as defined in the credit agreement, bears interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate, as defined in the credit agreement, plus the Applicable Rate. The Applicable Rate ranges from 1.75% to 2.25%, depending on our Consolidated Leverage Ratio, as defined in the credit agreement. The highest Applicable Rate applies when the Consolidated Leverage Ratio exceeds 1.50:1.00. Upon certain defaults, including failure to make payments when due, interest becomes payable at a higher default rate.

Borrowings under the revolver are subject to the satisfaction of numerous conditions precedent at the time of each borrowing, including the continued accuracy of our representations and warranties and the absence of any default under the credit agreement. As of March 31, 2018, there were no borrowings outstanding under the revolver.

The credit agreement contains two financial covenants, a Maximum Consolidated Leverage Ratio and a Minimum Consolidated Fixed Charge Coverage Ratio, each as defined in the credit agreement. The Maximum Consolidated Leverage Ratio may not be greater than 1.50:1.00. The Minimum Consolidated Fixed Charge Coverage Ratio may not be less than 1.25:1.00. In the March 2017 amendment, the definition of the Consolidated Fixed Charge Coverage Ratio was amended to include only maintenance capital expenditures, as defined. We were in compliance with these financial ratio debt covenants as of March 31, 2018 and expect to be in compliance with the financial covenants for

the foreseeable future.

The credit agreement imposes certain other affirmative and negative covenants, including without limitation covenants with respect to the payment of taxes and other obligations, compliance with laws, entry into material contracts, creation of liens, incurrence of indebtedness, investments, dispositions, fundamental changes, restricted payments, changes in the nature of our business, transactions with affiliates, corporate and accounting changes, and sale and leaseback arrangements.

Our obligation to repay loans under the credit agreement could be accelerated upon a default or event of default under the terms of the credit agreement, including certain failures to pay principal or interest when due, certain breaches of representations and warranties, the failure to comply with our affirmative and negative covenants under the credit agreement, a change of control, certain defaults in payment relating to other indebtedness, the acceleration of payment of certain other indebtedness, certain events relating to our liquidation, dissolution, bankruptcy, insolvency or receivership, the entry of certain judgments against us, certain events relating to the impairment of collateral or the lenders' security interest therein, and any other material adverse change with respect to us.

Mortgage Loan

We have a \$4.0 million mortgage loan related to our headquarters facility in Middletown, Rhode Island. The loan term is ten years, with a principal amortization of 20 years. The interest rate is based on the BBA LIBOR Rate (as defined in the loan agreement) plus 2.00 percentage points. The mortgage loan is secured by the underlying property and improvements. The monthly mortgage payment is approximately \$15,000, plus interest, and increases in increments of approximately \$1,000 each year over the life of the mortgage. Due to the difference in the term of the loan and amortization of the principal, a balloon payment of \$2.6 million is due in April 2019. The loan contains one financial covenant, a Fixed Charge Coverage Ratio, which applies in the event that our consolidated cash, cash equivalents, and marketable securities balance falls below \$25.0 million at any time. As our consolidated cash, cash equivalents, and marketable securities balance was above the minimum threshold throughout 2017, the Fixed Charge Coverage Ratio did not apply.

Under the mortgage loan, we may prepay our outstanding loan balance subject to an early termination charge. If we were to default on the mortgage loan, the underlying property and improvements would be used as collateral. In 2010, we entered into two interest rate swap agreements that are intended to hedge our mortgage interest obligations over the term of the mortgage loan by fixing the interest rates specified in the mortgage loan to 5.91% for half of the principal amount outstanding as of April 1, 2010 and 6.07% for the remaining half.

Other Matters

We intend to continue to invest in the mini-VSAT Broadband network on a global basis. As part of the future potential capacity expansion, we would plan to seek to acquire additional satellite capacity from satellite operators, expend funds to seek regulatory approvals and permits, develop product enhancements in anticipation of the expansion, and hire additional personnel. From time to time we have entered into multi-year agreements to lease satellite capacity, and we have also purchased numerous satellite hubs to support the added capacity. These transactions can involve millions of dollars, and from time to time we have entered into secured lending arrangements to finance them. During the first quarter of 2018, we entered into a five-year capital lease for three satellite hubs for the HTS network. The total cost of the five-year capital lease will be \$3.1 million.

On November 26, 2008, our Board of Directors authorized a program to repurchase up to one million shares of our common stock. The share repurchase program is funded using our existing cash, cash equivalents, marketable securities and future cash flows. As of March 31, 2018, 341,000 shares of our common stock remain available for repurchase under the program. We did not purchase any shares of our common stock in the three months ended March 31, 2018.

As of March 31, 2018, we held \$41.1 million in cash, cash equivalents and marketable securities. We believe that our cash, cash equivalents and marketable securities, together with our other working capital and cash flows from operations, will be adequate to meet planned operating and capital requirements through at least the next twelve months. However, as the need or opportunity arises, we may seek to raise additional capital through public or private sales of securities or through additional debt financing. There are no assurances that we will be able to obtain any

additional funding or that such funding will be available on terms acceptable to us.

41

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risk exposures are interest rate risk and foreign currency exchange rate risk.

We are exposed to changes in interest rates because we finance certain operations through fixed and variable rate debt instruments.

We had \$41.5 million in borrowings outstanding at March 31, 2018, at an interest rate equal to the LIBOR Daily Floating Rate plus 1.75% under our variable-rate credit facility. For more information regarding our credit facility, see Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations - Borrowing Arrangements. A hypothetical 10% increase or decrease in interest rates would have a \$0.2 million impact on our annual interest expense based on the \$41.5 million outstanding at March 31, 2018 with an interest rate of 3.63%.

As discussed in Note 17 to the consolidated financial statements, effective April 1, 2010, in order to reduce the volatility of cash outflows that arise from changes in interest rates, we entered into two interest rate swap agreements. These interest rate swap agreements are intended to hedge our mortgage loan related to our headquarters facility in Middletown, Rhode Island by fixing the interest rates specified in the mortgage loan to 5.9% for half of the principal amount outstanding and 6.1% for the remaining half of the principal amount outstanding as of April 1, 2010 until the mortgage loan expires on April 16, 2019.

We are exposed to currency exchange rate fluctuations related to our subsidiary operations in the United Kingdom, Denmark, Norway, Brazil, Singapore, Hong Kong, Cyprus, Japan, Belgium, and the Netherlands. Certain transactions in these locations are made in the local currency, yet are reported in the U.S. dollar. For foreign currency exposures existing at March 31, 2018, a 10% unfavorable movement in the foreign exchange rates for our subsidiary locations would not expose us to material losses in earnings or cash flows.

From time to time, we have purchased foreign currency forward contracts. These forward contracts are intended to offset the impact of exchange rate fluctuations on cash flows of our foreign subsidiaries. Foreign exchange contracts are accounted for as cash flow hedges and are recorded on the balance sheet at fair value until executed. Changes in the fair value are recognized in earnings. We did not enter into any such contracts or have any such contracts outstanding during the three months ended March 31, 2018.

The primary objective of our investment activities is to preserve principal and maintain liquidity, while at the same time maximizing income. We have not entered into any instruments for trading purposes. Some of the securities that we invest in may have market risk. To minimize this risk, we maintain our portfolio of cash equivalents and short-term investments in a variety of securities that from time to time can include United States treasuries, certificates of deposit, investment grade asset-backed corporate securities, money market mutual funds, municipal bonds, and government agency and non-government debt securities. As of March 31, 2018, all of our marketable securities consisted of money market mutual funds. Accordingly, long-term interest rate risk is not considered material for our investment activities. We did not invest in any financial instruments denominated in foreign currencies as of March 31, 2018.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, our management has evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2018, the end of the period covered by this interim report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2018.

Changes in Internal Control over Financial Reporting

Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, our management has evaluated changes in our internal control over financial reporting that occurred during the first quarter of 2018. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer did not identify any change in our internal control over financial reporting during the first quarter of 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Important Considerations

The effectiveness of our disclosure controls and procedures and our internal control over financial reporting is subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the soundness of our systems, the possibility of human error, and the risk of fraud. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and the risk that the degree of compliance with policies or procedures may deteriorate over time. Because of these limitations, there can be no assurance that any system of disclosure controls and procedures or internal control over financial reporting will be successful in preventing all errors or fraud or in making all material information known in a timely manner to the appropriate levels of management.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we are involved in litigation incidental to the conduct of our business. In the ordinary course of business, we are a party to inquiries, legal proceedings and claims including, from time to time, disagreements with vendors and customers. We are not a party to any lawsuit or proceeding that, in our opinion, is likely to materially harm our business, results of operations, financial condition, or cash flows.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

On November 26, 2008, our Board of Directors authorized a program to repurchase up to one million shares of our common stock. As of March 31, 2018, 341,000 shares of common stock remain available for repurchase under the program. The repurchase program is funded using our existing cash, cash equivalents, marketable securities, and future cash flows. Under the repurchase program, at management's discretion, we may repurchase shares on the open market from time to time, in privately negotiated transactions or block transactions, or through an accelerated repurchase agreement. The timing of such repurchases depends on availability of shares, price, market conditions, alternative uses of capital, and applicable regulatory requirements. The program may be modified, suspended or terminated at any time without prior notice. The repurchase program has no expiration date. There were no other repurchase programs outstanding during the three months ended March 31, 2018, and no repurchase programs expired during the period.

We did not repurchase any shares of our common stock in open market transactions during the three months ended March 31, 2018.

During the three months ended March 31, 2018, no shares were surrendered to us in satisfaction of tax withholding obligations arising from the vesting of restricted stock awards. During the three months ended March 31, 2017, 43,217 vested restricted shares were surrendered to us in satisfaction of tax withholding obligations at an average price of \$9.08 per share.

ITEM 6. EXHIBITS

Exhibits:

Exhibit No.	Description	Filed with this Form 10-Q	Incorporated by Reference Form Filing Date	Exhibit No.
<u>3.1</u>	Amended and Restated Certificate of Incorporation, as amended		10-Q August 6, 2010	3.1
<u>3.2</u>	Amended and Restated Bylaws		10-Q November 1, 2017	3.2
<u>4.1</u>	Specimen certificate for the common stock		10-K March 2, 2018	4.1
<u>31.1</u>	Rule 13a-14(a)/15d-14(a) certification of principal executive officer	X		
<u>31.2</u>	Rule 13a-14(a)/15d-14(a) certification of principal financial officer	X		
<u>32.1</u>	Section 1350 certification of principal executive officer and principal financial officer	X		

The following financial information from KVH Industries, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets (unaudited), (ii) the Consolidated Statements of Operations (unaudited), (iii) the Consolidated Statements of Comprehensive Loss (unaudited), (iv) the Consolidated Statements of Cash Flows (unaudited), and (v) the Notes to Consolidated Financial Statements (unaudited).

SIGNATURE

Pursuant to the requirements 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.

Date: May 4, 2018

KVH Industries, Inc.

By: /s/ DONALD W. REILLY
Donald W. Reilly
(Duly Authorized Officer and Chief Financial
Officer)

Exhibit Index

Exhibit No.	Description	Filed with this Form 10-Q	Incorporated by Reference Form Filing Date	Exhibit No.
3.1	Amended and Restated Certificate of Incorporation, as amended		10-Q August 6, 2010	3.1
3.2	Amended and Restated Bylaws		10-Q November 1, 2017	3.2
4.1	Specimen certificate for the common stock		10-K March 2, 2018	4.1
31.1	Rule 13a-14(a)/15d-14(a) certification of principal executive officer	X		
31.2	Rule 13a-14(a)/15d-14(a) certification of principal financial officer	X		
32.1	Section 1350 certification of principal executive officer and principal financial officer	X		
101	The following financial information from KVH Industries, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets (unaudited), (ii) the Consolidated Statements of Operations (unaudited), (iii) the Consolidated Statements of Comprehensive Loss (unaudited), (iv) the Consolidated Statements of Cash Flows (unaudited), and (v) the Notes to Consolidated Financial Statements (unaudited).	X		