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: June 30, 2023

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 Incorporation or Organization)	*(I.R.S. Employer 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)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Trading Symbol(s)**	**Name of Each Exchange on which Registered**
Common Stock, par value $0.01 per share	KVHI	The Nasdaq Stock Market LLC (Nasdaq Global Select Market)

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

Indicate by check mark whether the registrant 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
August 1, 2023	Common Stock, par value $0.01 per share	19,535,522

KVH INDUSTRIES, INC. AND SUBSIDIARIES

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PART I. FINANCIAL INFORMATION

ITEM 1. Financial Statements

KVH INDUSTRIES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	June 30, 2023	December 31, 2022
ASSETS	**(unaudited)**	
Current assets:		
Cash and cash equivalents	$ 14,008	$ 21,056
Marketable securities	56,966	55,680
Accounts receivable, net of allowance for credit losses of $1,187 and $1,268 as of June 30, 2023 and December 31, 2022, respectively	26,975	27,427
Inventories	24,179	22,730
Prepaid expenses and other current assets	2,382	3,067
Current contract assets	1,162	1,243
Total current assets	125,672	131,203
Property and equipment, net	50,790	53,118
Intangible assets, net	283	404
Goodwill	5,351	5,308
Right of use assets	1,582	2,168
Other non-current assets	4,588	5,037
Non-current contract assets	2,757	3,033
Deferred income tax asset	258	259
Total assets	**$ 191,281**	**$ 200,530**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 12,194	$ 20,449
Accrued compensation and employee-related expenses	4,251	7,621
Accrued other	3,605	4,234
Accrued product warranty costs	688	1,287
Contract liabilities	3,310	3,108
Current operating lease liability	1,207	1,532
Liability for uncertain tax positions	674	637
Total current liabilities	25,929	38,868
Long-term operating lease liability	371	636
Long-term contract liabilities	4,220	4,315
Deferred income tax liability	57	55
Total liabilities	**$ 30,577**	**$ 43,874**
Commitments and contingencies (Notes 2, 10, and 15)		
Stockholders' equity:		
Preferred stock, $0.01 par value. Authorized 1,000,000 shares; none issued	—	—
Common stock, $0.01 par value. Authorized 30,000,000 shares; 20,969,436 and 20,631,152 shares issued at June 30, 2023 and December 31, 2022, respectively; and 19,513,327 and 19,198,458 shares outstanding at June 30, 2023 and December 31, 2022, respectively	210	206
Additional paid-in capital	163,690	160,475
Retained earnings	12,849	11,936
Accumulated other comprehensive loss	(3,955)	(4,110)
	172,794	168,507
Less: treasury stock at cost, common stock, 1,456,109 and 1,432,694 shares as of June 30, 2023 and December 31, 2022, respectively.	(12,090)	(11,851)
Total stockholders' equity	**160,704**	**156,656**
Total liabilities and stockholders' equity	**$ 191,281**	**$ 200,530**

See accompanying Notes to Unaudited Consolidated Financial Statements.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Sales:				
Product	$ 5,425	$ 6,620	$ 10,374	$ 13,183
Service	28,746	27,933	57,486	54,521
Net sales	34,171	34,553	67,860	67,704
Costs and expenses:				
Costs of product sales	6,633	5,198	11,867	10,616
Costs of service sales	15,534	15,200	31,610	30,126
Research and development	2,416	2,624	4,981	5,635
Sales, marketing and support	5,142	5,676	10,854	12,645
General and administrative	4,122	6,898	8,772	13,973
Total costs and expenses	33,847	35,596	68,084	72,995
Income (loss) from operations	324	(1,043)	(224)	(5,291)
Interest income	885	201	1,663	409
Interest expense	—	1	—	2
Other (expense) income, net	(238)	889	(462)	992
Income (loss) from continuing operations before income tax expense	971	46	977	(3,892)
Income tax expense from continuing operations	46	235	64	564
Net income (loss) from continuing operations	$ 925	$ (189)	$ 913	$ (4,456)
Net loss from discontinued operations, net of tax	—	(1,255)	—	(1,680)
Net income (loss)	**$ 925**	**$ (1,444)**	**$ 913**	**$ (6,136)**
Net income (loss) from continuing operations per common share				
Basic	**$ 0.05**	**$ (0.01)**	**$ 0.05**	**$ (0.24)**
Diluted	**$ 0.05**	**$ (0.01)**	**$ 0.05**	**$ (0.24)**
Net loss from discontinued operations per common share				
Basic	**$ 0.00**	**$ (0.07)**	**$ 0.00**	**$ (0.09)**
Diluted	**$ 0.00**	**$ (0.07)**	**$ 0.00**	**$ (0.09)**
Net income (loss) per common share				
Basic	**$ 0.05**	**$ (0.08)**	**$ 0.05**	**$ (0.33)**
Diluted	**$ 0.05**	**$ (0.08)**	**$ 0.05**	**$ (0.33)**
Weighted average number of common shares outstanding:				
Basic	**19,153**	**18,564**	**19,018**	**18,507**
Diluted	**19,275**	**18,564**	**19,161**	**18,507**

See accompanying Notes to Unaudited Consolidated Financial Statements.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
Net income (loss)	$ 925	$ (1,444)	$ 913	$ (6,136)
Other comprehensive income (loss), net of tax:				
Unrealized (loss) gain on available-for-sale securities	(1)	—	12	—
Foreign currency translation adjustment	75	(419)	143	(612)
Other comprehensive income (loss), net of tax(1)	74	(419)	155	(612)
Total comprehensive income (loss)	$ 999	$ (1,863)	$ 1,068	$ (6,748)

(1) Tax impact was nominal for all periods.

See accompanying Notes to Unaudited Consolidated Financial Statements.

KVH INDUSTRIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, unaudited)

	Common Stock		Additional Paid-in Capital	Retained earnings	Accumulated Other Comprehensive Loss	Treasury Stock		Total Stockholders' Equity
	Shares	Amount				Shares	Amount	
Balance at March 31, 2023	**20,826**	**$ 208**	**$ 161,779**	**$ 11,924**	**$ (4,029)**	**(1,456)**	**$ (12,090)**	**$ 157,792**
Net income	—	—	—	925	—	—	—	925
Other comprehensive income	—	—	—	—	74	—	—	74
Stock-based compensation	—	—	578	—	—	—	—	578
Exercise of stock options and issuance of restricted stock awards, net of forfeitures	143	2	1,333	—	—	—	—	1,335
Balance at June 30, 2023	**20,969**	**$ 210**	**$ 163,690**	**$ 12,849**	**$ (3,955)**	**(1,456)**	**$ (12,090)**	**$ 160,704**

	Common Stock		Additional Paid-in Capital	Retained earnings	Accumulated Other Comprehensive Loss	Treasury Stock		Total Stockholders' Equity
	Shares	Amount				Shares	Amount	
Balance at December 31, 2022	**20,631**	**$ 206**	**$ 160,475**	**$ 11,936**	**$ (4,110)**	**(1,433)**	**$ (11,851)**	**$ 156,656**
Net income	—	—	—	913	—	—	—	913
Other comprehensive income	—	—	—	—	155	—	—	155
Stock-based compensation	—	—	874	—	—	—	—	874
Acquisition of treasury stock	—	—	—	—	—	(23)	(239)	(239)
Exercise of stock options and issuance of restricted stock awards, net of forfeitures	338	4	2,341	—	—	—	—	2,345
Balance at June 30, 2023	**20,969**	**$ 210**	**$ 163,690**	**$ 12,849**	**$ (3,955)**	**(1,456)**	**$ (12,090)**	**$ 160,704**

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Stock		Total Stockholders' Equity
	Shares	Amount				Shares	Amount	
Balance at March 31, 2022	**20,328**	**$ 203**	**$ 157,142**	**$ (16,857)**	**$ (3,602)**	**(1,433)**	**$ (11,851)**	**$ 125,035**
Net loss	—	—	—	(1,444)	—	—	—	(1,444)
Other comprehensive loss	—	—	—	—	(419)	—	—	(419)
Stock-based compensation	—	—	705	—	—	—	—	705
Exercise of stock options and issuance of restricted stock awards, net of forfeitures	175	2	149	—	—	—	—	151
Balance at June 30, 2022	**20,503**	**$ 205**	**$ 157,996**	**$ (18,301)**	**$ (4,021)**	**(1,433)**	**$ (11,851)**	**$ 124,028**

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Stock		Total Stockholders' Equity
	Shares	Amount				Shares	Amount	
Balance at December 31, 2021	**20,343**	**$ 203**	**$ 156,199**	**$ (12,165)**	**$ (3,409)**	**(1,433)**	**$ (11,851)**	**$ 128,977**
Net loss	—	—	—	(6,136)	—	—	—	(6,136)
Other comprehensive loss	—	—	—	—	(612)	—	—	(612)
Stock-based compensation	—	—	1,586	—	—	—	—	1,586
Issuance of common stock under employee stock purchase plan	22	—	193	—	—	—	—	193
Exercise of stock options and issuance of restricted stock awards, net of forfeitures	138	2	149	—	—	—	—	151
Taxes accrued for net share settlement of options	—	—	(131)	—	—	—	—	(131)
Balance at June 30, 2022	**20,503**	**$ 205**	**$ 157,996**	**$ (18,301)**	**$ (4,021)**	**(1,433)**	**$ (11,851)**	**$ 124,028**

See accompanying Notes to Unaudited Consolidated Financial Statements.

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

	Six Months Ended June 30,	
	2023	**2022**
Cash flows from operating activities:		
Net income (loss)	$ 913	$ (6,136)
Adjustments to reconcile net loss to net cash used in operating activities:		
Provision for doubtful accounts	(1)	367
Depreciation and amortization	6,920	7,158
Deferred income taxes	3	(15)
Loss on disposals of fixed assets	323	216
Compensation expense related to stock-based awards and employee stock purchase plan	874	1,586
Unrealized currency translation loss (gain)	19	(361)
Gain on sale of KVH Media Group Entertainment Limited	—	(631)
Changes in operating assets and liabilities:		
Accounts receivable	481	(640)
Inventories	(1,447)	(6,371)
Prepaid expenses, other current assets, and current contract assets	793	(372)
Other non-current assets and non-current contract assets	721	1,252
Accounts payable	(8,260)	(56)
Contract liabilities and long-term contract liabilities	72	114
Accrued compensation, product warranty and other	(4,598)	655
Net cash used in operating activities	**$ (3,187)**	**$ (3,234)**
Cash flows from investing activities:		
Capital expenditures	(4,744)	(8,012)
Cash paid for acquisition of intangible asset	(23)	(28)
Proceeds from the sale of KVH Media Group Entertainment Limited, net of cash sold	—	2,378
Purchases of marketable securities	(16,697)	(10)
Maturities and sales of marketable securities	15,422	8,000
Net cash (used in) provided by investing activities	**$ (6,042)**	**$ 2,328**
Cash flows from financing activities:		
Proceeds from stock options exercised and employee stock purchase plan	2,367	333
Purchase of treasury stock	(239)	—
Payment of finance lease	(22)	(132)
Net cash provided by financing activities	**$ 2,106**	**$ 201**
Effect of exchange rate changes on cash and cash equivalents	75	(276)
Net decrease in cash and cash equivalents	**(7,048)**	**(981)**
Cash and cash equivalents at beginning of period	**21,056**	**11,376**
Cash and cash equivalents at end of period	**$ 14,008**	**$ 10,395**
Supplemental disclosure of non-cash investing and financing activities:		
Changes in accrued other and accounts payable related to property and equipment additions	$ 47	$ 188
Taxes accrued for net share settlement of options	$ —	$ 131

See accompanying Notes to Unaudited Consolidated Financial Statements.

(1) Description of Business

KVH Industries, Inc. (together with its subsidiaries, the Company or KVH) designs, develops, manufactures and markets mobile connectivity products and services for the marine and land markets.

KVH's satellite-only and hybrid products enable marine customers to receive data, Voice over Internet Protocol (VoIP), and value-added services via satellite, cellular, and shore-based Wi-Fi networks onboard commercial, leisure, and military/government vessels. In addition, the Company's in-motion television terminals permit customers to receive live digital television via regional satellite services in marine vessels, recreational vehicles, buses and automobiles. KVH sells its products through an extensive international network of dealers and distributors. KVH also sells and leases products to service providers and end users.

KVH's service sales represent primarily revenue earned from satellite Internet airtime services. KVH provides, for monthly fixed and per-usage fees, satellite connectivity encompassing broadband Internet and VoIP services, to its TracNet H-series and TracPhone V-HTS series customers via KVH's global high-throughput satellite (HTS) network. Cellular airtime service increasingly supplements KVH's satellite-only airtime revenue following the July 2022 launch of the KVH ONE hybrid network and TracNet H-series terminals. This product and service combination integrates global satellite service with KVH-provided cellular service in more than 150 countries, along with shore-based Wi-Fi access. The May 2023 introduction of the KVH ONE OpenNet Program expanded access to KVH's global HTS network and airtime services to non-KVH terminals for the first time.

AgilePlans, KVH's connectivity as a service offering, is a monthly subscription model that provides global connectivity to commercial maritime customers. The subscription includes the choice of satellite-only and hybrid terminals, airtime data service, VoIP, daily news, subsidized shipping and installation, and global support for a monthly fee with no minimum contract commitment. KVH offers AgilePlans subscribers a variety of airtime data plans with varying data speeds and fixed data usage levels with per megabyte overage charges. These airtime plans are similar to those the Company offers to customers who elect to purchase or lease a TracNet H-series or TracPhone V-HTS series terminal.

The Company recognizes the monthly AgilePlans subscription fee as service revenue over the service delivery period. The Company retains ownership of the hardware 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 is expensed in the period these costs are incurred.

Service sales also include the distribution of commercially licensed entertainment, including news, sports, and movies to commercial customers in the maritime and hotel markets through the KVH Media Group, along with supplemental value-added services. In addition, KVH earns monthly usage fees from third-party satellite connectivity services, including VoIP, data and Internet services, provided to its Inmarsat and Iridium customers who choose to activate their subscriptions with KVH. Service sales also include sales from product repairs and extended warranty sales.

On August 9, 2022, the Company sold its inertial navigation business to EMCORE Corporation for net proceeds of $54,904, less specified deductions. On August 9, 2022, the Company also entered into a Transition Services Agreement with EMCORE, pursuant to which the Company agreed to provide certain transition services to support the continued operation of the inertial navigation business for six months following the sale with two extension options of three months each. The fee comprises both fixed monthly fees of approximately $100 as well as variable amounts for certain additional services with escalation increases on the fixed and variable rates for each extension option. The Company does not have any continuing involvement in these operations other than the transition services, which are being recorded as an offset to general and administrative expenses in continuing operations. For the three and six months ended June 30, 2023, the Company recognized an offset to general and administrative expenses associated with the Transition Services Agreement of $196 and $723, respectively. The Company determined that the sale met the requirements for reporting as discontinued operations in accordance with Accounting Standards Codification (ASC) 205-20. Please see Note 16 for the discontinued operations disclosures. As a result of the sale of its inertial navigation business, the Company operates as one reportable segment.

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated interim 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 2022 consolidated interim financial statements reflect the sale of the inertial navigation business as discontinued operations. See Notes 1 and 16 for further information on the sale of the inertial navigation business.

The consolidated interim 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 interim 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, 2022 filed on March 16, 2023 with the Securities and Exchange Commission. The results for the three and six months ended June 30, 2023 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 interim 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 interim 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 estimates and assumptions used by management affect the Company’s revenue recognition, valuation of accounts receivable, valuation of inventory, 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, forfeitures and 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, and the valuation of right-of-use assets and lease liabilities.

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.

Foreign Currency Translation

The financial statements of the Company’s foreign subsidiaries located in Denmark and Singapore are maintained using the United States dollar as the functional currency. Exchange rates in effect on the date of the transaction are used to record monetary assets and liabilities. Revenue and other expense elements are recorded at rates that approximate the rates in effect on the transaction dates. Foreign currency exchange gains and losses are recognized within “other (expense) income, net” in the accompanying consolidated statements of operations. The Company recorded a total of net foreign currency exchange (losses) gains, which are comprised of both realized and unrealized foreign currency exchange gains and losses, in its accompanying consolidated statements of operations of $(56) and $284 for the three months ended June 30, 2023 and 2022, respectively, and $(110) and $559 for the six months ended June 30, 2023 and 2022, respectively.

The financial statements of the Company’s foreign subsidiaries located in the United Kingdom, Brazil, Norway, Cyprus, India and Japan use the foreign subsidiaries’ respective local currencies as the functional currency. The Company translates the assets and liabilities of these foreign subsidiaries at the exchange rates in effect at the end of each reporting period. Net sales, costs and expenses are translated using average exchange rates in effect during the period. Gains and losses from foreign currency translation are credited or charged to accumulated other comprehensive loss included in stockholders' equity in the accompanying consolidated balance sheets.

Management Transition and Restructuring

On March 7, 2022, the Company announced that its President and Chief Executive Officer, Martin Kits van Heyningen, was retiring from his executive and Board roles after more than 40 years of service and assuming a consulting position with the Company. As of March 31, 2022, the Company accrued approximately $539 in consulting fees associated with a maximum of 50 hours of transition services through March 31, 2023, which was paid to Mr. Kits van Heyningen over the 12 months following his retirement. As of June 30, 2023 all payments related to the consulting fees had been completed. The associated expenses were included in general and administrative expenses in the accompanying consolidated statements of operations. There were also modifications to Mr. Kits van Heyningen's stock option and restricted stock awards.

In March 2022, the Company also restructured its operations to reduce costs and pursue a more focused strategy. The Company reduced its workforce by approximately 10% and began incurring reduced expenses from these actions beginning in the second quarter of 2022. For the three months ended June 30, 2022, the Company incurred $426 in severance payments and other employee benefit costs for employees who had a severance date of June 30, 2022 to December 31, 2022. For the six months ended June 30, 2022, the Company incurred $1,818 in severance and health insurance costs and $327 in legal and advisory fees. The combined expense of $2,145 was included in the financial statement line items of the accompanying consolidated statements of operations as follows: costs of product sales of $17, costs of service sales of $55, research and development of $392, sales, marketing and support of $894, and general and administrative expenses of $787. The Company also modified impacted employee's stock option and restricted stock awards.

During the third quarter of 2022, the Company restructured its foreign operations by closing its India and Cyprus offices and its Denmark warehouse to reduce costs. All costs associated with the severance payments, other employee benefits, and legal and advisory fees were incurred in 2022.

Dispositions

On April 29, 2022, KVH Media Group Limited, the Company's wholly owned subsidiary, sold its subsidiary KVH Media Group Entertainment Limited for net cash proceeds of $2,378. This transaction did not meet the criteria for reporting as discontinued operations under ASC 205-20. The Company recorded a gain on the sale of approximately $630, which is recorded in other income, net in the accompanying consolidated statements of operations.

Executive Employment Agreements

In May 2022, the Company entered into executive employment agreements with each of Brent C. Bruun, Roger A. Kuebel, Felise Feingold and Robert Balog in order to retain their services and provide them with certain benefits in the event that the Company terminates the executive's employment without cause (as defined in the agreement) or the executive terminates his or her employment for good reason (as defined in the agreement) (either such termination, a "Qualifying Termination"), including following a change of control. The terms of the agreements are substantially identical except as to title, salary, target bonus and reporting responsibilities. The agreements provided that, if the executive continued to serve as an employee through December 31, 2022 (the "Retention Date"), the Company would pay the executive a retention bonus equal to 75% of the executive's base salary on the agreement date, and the Company would accelerate the vesting of the executive's equity awards that would otherwise have vested in the twelve months after the Retention Date.

On October 11, 2022, the Company entered into an amendment to the employment agreement with Mr. Bruun that, among other things, increased his annual base salary to $448 per year, retroactive to July 1, 2022, increased his target annual incentive compensation for the second half of 2022 to 80% of his base salary (without changing his target annual incentive compensation for the first half of 2022), extended his Retention Date from December 31, 2022 to December 31, 2023, which effectively extended the period during which Mr. Bruun must remain employed by the Company in order to earn his retention bonus, and modified the amount of the retention bonus from 75% of his base salary in effect on May 2, 2022 to 75% of the highest base salary in effect for Mr. Bruun on or before the date he becomes entitled to receive the retention bonus or the "Partial Retention Bonus" (as defined in the employment agreement). If a Qualifying Termination occurs before December 31, 2023, Mr. Bruun will receive a pro rata portion of the retention bonus. If in connection with such a termination he becomes entitled to receive the change in control severance payments and benefits, he will also become entitled to receive the full retention bonus, and the Retention Date will be the later of the date of such change in control or such termination of employment. The amendment did not modify the terms of the employment agreement relating to acceleration of vesting of certain equity awards if Mr. Bruun remains employed by the Company through December 31, 2022.

In January 2023, the Company paid out all contracted benefits to Roger A. Kuebel, Felise Feingold and Robert Balog as the conditions of their agreements were satisfied on December 31, 2022. As of June 30, 2023, the Company has accrued approximately $236 for the retention bonus payable to Brent Bruun.

In addition to the amendment to Mr. Bruun's employment agreement, the Compensation Committee also granted Mr. Bruun a restricted stock award and a non-statutory stock option, which together had an aggregate grant date fair value of approximately $100. The restricted stock award and the non-statutory stock option have terms that are materially consistent with the previously disclosed terms of similar grants to the Company's executive officers.

(3) Recently Issued Accounting Standards

<u>Standards Implemented</u>

ASC Update No. 2016-13, ASC Update No. 2018-19, ASC Update No. 2019-04, ASC Update No. 2019-05, ASC Update No. 2019-10, ASC Update No. 2019-11, ASC Update No. 2020-02 and ASC Update No. 2022-02

In June 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Codification (ASC) Update No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. The purpose of Update No. 2016-13 is to replace the 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. Update No. 2016-13 did not have a material impact on the Company's financial position or results of operations.

In November 2018, the FASB issued ASC Update No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses*. This update introduced an expected credit loss methodology for the impairment of financial assets measured at amortized cost. The amendment also clarifies that receivables arising from operating leases are not within the scope of Subtopic 326-20. Instead, impairment of receivables arising from operating leases should be accounted for in accordance with Topic 842, Leases. Update No. 2018-19 did not have a material impact on the Company's financial position or results of operations.

In May 2019, the FASB issued ASC Update No. 2019-04, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments*. This update introduced clarifications of the Board's intent with respect to accrued interest, the transfer between classifications or categories for loans and debt securities, recoveries, reinsurance recoverables, projects of interest rate environments for variable-rate financial instruments, costs to sell when foreclosure is probable, consideration of expected prepayments when determining the effective interest rate, vintage disclosures, and extension and renewal options. Update No. 2019-04 did not have a material impact on the Company's financial position or results of operations.

In May 2019, the FASB issued ASC Update No. 2019-05, *Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief*. The amendments in the update ease the transition for entities adopting ASC Update 2016-13 and increase the comparability of financial statement information. With the exception of held-to-maturity debt securities, the amendments allow entities to irrevocably elect to apply the fair value option to financial instruments that were previously recorded at amortized cost basis within the scope of Subtopic 326-20, *Financial Instruments—Credit Losses—Measured at Amortized Cost*. Update No. 2019-05 did not have a material impact on the Company's financial position or results of operations.

In November 2019, the FASB issued ASC Update No. 2019-10, *Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates.* The amendments in this update change some effective dates for certain new accounting standards including those pertaining to Topic 326 discussed above, for certain types of entities. Update No. 2019-10 did not have a material impact on the Company's financial position or results of operations.

In November 2019, the FASB issued ASC Update No. 2019-11, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses (Topic 326).* The update is effective for entities that have adopted ASU 2016-13. The purpose of Update No. 2019-11 is to clarify the scope of the recovery guidance to purchased financial assets with credit deterioration. Update No. 2019-11 did not have a material impact on the Company's financial position or results of operations.

In February 2020, the FASB issued ASC Update No. 2020-02, *Financial Instruments – Credit Losses (Topic 326) and Leases (Topic 842).* The purpose of Update No. 2020-02 is to clarify the scope and interpretation of the standard. Update No. 2020-02 did not have a material impact on the Company's financial position or results of operations.

In March 2022, the FASB issued ASC update 2022-02, *Financial Instruments – Credit Losses (Topic 326) – Troubled Debt Restructurings and Vintage Disclosures*. The vintage disclosure portion of this guidance is applicable to the Company, which requires that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investment in leases within the scope of Subtopic 326-20. Gross write-off information must included the amortized cost basis of financing receivables by credit-quality indicator and class of financing receivable by year of origination. Update No. 2022-02 did not have a material impact on the Company's financial position or results of operations.

ASC Update No. 2017-04

In January 2017, the FASB issued ASC Update No. 2017-04, *Intangibles - Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment*. The purpose of Update No. 2017-04 is to eliminate Step 2 from the goodwill impairment test and instead an entity should perform its annual, or interim, goodwill impairment quantitative test by comparing the fair value of a reporting unit with its carrying amount. An entity will then recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, to the extent of the amount of goodwill allocated to that reporting unit. Update No. 2017-04 did not 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 the Company expects would have a material impact on the Company's financial statements.

(4) Marketable Securities

Marketable securities as of June 30, 2023 and December 31, 2022 consisted of the following:

June 30, 2023	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market mutual funds	$ 56,966	$ —	$ —	$ 56,966
United States treasuries	—	—	—	—
Total marketable securities designated as available-for-sale	$ 56,966	$ —	$ —	$ 56,966

December 31, 2022	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market mutual funds	$ 30,977	$ —	$ —	$ 30,977
United States treasuries	24,715	—	(12)	24,703
Total marketable securities designated as available-for-sale	$ 55,692	$ —	$ (12)	$ 55,680

Interest income from marketable securities was $687 and $9 during the three months ended June 30, 2023 and 2022, respectively, and $1,275 and $10 during the six months ended June 30, 2023 and 2022, 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*. On June 8, 2022, at the Company's 2022 Annual Meeting of Stockholders, the stockholders of the Company approved an amendment and restatement of the Company’s current equity compensation plan to increase the number of shares of common stock reserved for issuance under the plan by 1,280 shares, from 4,800 shares to 6,080 shares (excluding rollover shares). Stock-based compensation expense was $566 and $701, excluding $12 and $4 of compensation charges related to our Amended and Restated 1996 Employee Stock Purchase Plan, or the ESPP, for the three months ended June 30, 2023 and 2022, respectively, and $850 and $1,560, excluding $24 and $26 of compensation shares related to ESPP, for the six months ended June 30, 2023 and 2022, respectively. As of June 30, 2023, there was $2,513 of total unrecognized compensation expense related to stock options, which is expected to be recognized over a weighted-average period of 2.80 years. As of June 30, 2023, there was $2,690 of total unrecognized compensation expense related to restricted stock awards, which is expected to be recognized over a weighted-average period of 3.04 years.

Stock Options

During the three months ended June 30, 2023, the Company issued 147 shares of common stock upon the exercise of stock options and received $1,345 as payment for the exercise price. No shares were surrendered to the Company to satisfy minimum tax withholding obligations. Additionally, during the three months ended June 30, 2023, no stock options were granted and 261 stock options expired, were canceled or were forfeited.

During the six months ended June 30, 2023, the Company issued 260 shares of common stock upon the exercise of stock options and received $2,367 as payment for the exercise price. No shares were surrendered to the Company to satisfy minimum tax withholding obligations. Additionally, during the six months ended June 30, 2023, 317 stock options were granted and 431 stock options expired, were canceled or were forfeited. During the six months ended June 30, 2022, 398 stock options were granted. The Company has historically estimated 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 six months ended June 30, 2023 and 2022 are as follows:

	Six Months Ended June 30,	
	2023	2022
Risk-free interest rate	4.49 %	2.97 %
Expected volatility	43.93 %	43.16 %
Expected life (in years)	4.30	4.24
Dividend yield	0 %	0 %

As of June 30, 2023, there were 1,377 options outstanding with a weighted average exercise price of $9.55 per share and 565 options exercisable with a weighted average exercise price of $9.63 per share.

Restricted Stock

During the three months ended June 30, 2023, no shares of restricted stock were granted and 3 shares of restricted stock were forfeited. Additionally, during the three months ended June 30, 2023, 51 shares of restricted stock vested, of which no shares of common stock 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.

During the six months ended June 30, 2023, 151 shares of restricted stock were granted with a weighted average grant date fair value of $9.81 per share and 72 shares of restricted stock were forfeited. Additionally, during the six months ended June 30, 2023, 94 shares of restricted stock vested, of which no shares of common stock 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 June 30, 2023, the Company had no unvested outstanding options and no outstanding shares of restricted stock that were subject to performance-based or market-based vesting conditions.

Common Stock Repurchase

In the first quarter of 2023, the Company’s Board of Directors authorized the repurchase of a portion of executive common stock. The Company repurchased 23 shares of common stock held by executives at the Company to satisfy minimum tax withholding obligations in lieu of cash payment. No shares of common stock were repurchased during the twelve months ended December 31, 2022.

(b) Employee Stock Purchase Plan

The Company's 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 June 30, 2023 and 2022, no shares were issued under the ESPP plan. During the six months ended June 30, 2023 and 2022, 0 and 22 shares were issued under the ESPP plan, respectively. The Company recorded compensation charges related to the ESPP of $12 and $4 for the three months ended June 30, 2023 and 2022, respectively, and $24 and $26 for the six months ended June 30, 2023 and 2022, respectively.

(c) Stock-Based Compensation Expense

The following table presents stock-based compensation expense, including expense for the ESPP, in the Company's consolidated statements of operations for the three and six months ended June 30, 2023 and 2022:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
Cost of product sales	$ 9	$ 61	$ 16	$ 135
Cost of service sales	5	3	9	5
Research and development	149	190	237	331
Sales, marketing and support	59	25	97	211
General and administrative	356	426	515	904
	$ 578	**$ 705**	**$ 874**	**$ 1,586**

(d) Accumulated Other Comprehensive Loss (AOCL)

Comprehensive income (loss) includes net income (loss), unrealized gains and losses from foreign currency translation, and unrealized gains and losses on available for sale marketable securities. 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).

The balances for the three months ended June 30, 2023 and 2022 are as follows:

	Foreign Currency Translation	Unrealized Gain (Loss) on Available for Sale Marketable Securities	Total Accumulated Other Comprehensive Loss
Balance, March 31, 2023	**$ (4,030)**	**$ 1**	**$ (4,029)**
Other comprehensive income (loss)	75	(1)	74
Net other comprehensive income (loss)	75	(1)	74
Balance, June 30, 2023	**$ (3,955)**	**$ —**	**$ (3,955)**

	Foreign Currency Translation	Total Accumulated Other Comprehensive Loss
Balance, March 31, 2022	**$ (3,602)**	**$ (3,602)**
Other comprehensive loss	(419)	(419)
Net other comprehensive loss	(419)	(419)
Balance, June 30, 2022	**$ (4,021)**	**$ (4,021)**

The balances for the six months ended June 30, 2023 and 2022 are as follows:

	Foreign Currency Translation	Unrealized (Loss) Gain on Available for Sale Marketable Securities	Total Accumulated Other Comprehensive Loss
Balance, December 31, 2022	**$ (4,098)**	**$ (12)**	**$ (4,110)**
Other comprehensive income	143	12	155
Net other comprehensive income	143	12	155
Balance, June 30, 2023	**$ (3,955)**	**$ —**	**$ (3,955)**

	Foreign Currency Translation		Total Accumulated Other Comprehensive Loss	
Balance, December 31, 2021	**$**	**(3,409)**	**$**	**(3,409)**
Other comprehensive loss		(612)		(612)
Net other comprehensive loss		(612)		(612)
Balance, June 30, 2022	**$**	**(4,021)**	**$**	**(4,021)**

(6) Net Income (Loss) from Continuing Operations per Common Share

Basic net income (loss) per share is calculated based on the weighted average number of common shares outstanding during the period. Diluted net income 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 June 30, 2022, since there was a net loss from continuing operations, the Company excluded 2,035 shares underlying outstanding stock options and non-vested restricted shares from its diluted loss per share calculation, as inclusion of these convertible securities would have reduced the net loss per share. For the six months ended June 30, 2022, since there was a net loss from continuing operations, the Company excluded 1,802 shares underlying outstanding stock options and non-vested restricted shares, from its diluted loss per share calculation, as inclusion of these convertible 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 June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
Weighted average common shares outstanding—basic	19,153	18,564	19,018	18,507
Dilutive common shares issuable in connection with stock plans	122	—	143	—
Weighted average common shares outstanding—diluted	19,275	18,564	19,161	18,507

(7) Inventories

Inventories are stated at the lower of cost or net realizable value using the first-in first-out costing method. Inventories as of June 30, 2023 and December 31, 2022 include the costs of material, labor, and factory overhead. Components of inventories consist of the following:

	June 30, 2023		December 31, 2022	
Raw materials	$	14,748	$	14,203
Work in process		3,305		4,164
Finished goods		6,126		4,363
	$	24,179	$	22,730

(8) Property and Equipment

Property and equipment, net, as of June 30, 2023 and December 31, 2022 consist of the following:

	June 30, 2023	December 31, 2022
Land	$ 2,833	$ 2,833
Building and improvements	18,839	18,869
Leasehold improvements	442	513
Machinery and equipment	5,794	5,948
Revenue-generating assets	75,190	72,527
Office and computer equipment	15,058	14,652
Motor vehicles	31	31
	118,187	115,373
Less accumulated depreciation	(67,397)	(62,255)
	$ 50,790	$ 53,118

Depreciation expense was $3,404 and $3,243 for the three months ended June 30, 2023 and 2022, respectively and $6,772 and $6,308 for the six months ended June 30, 2023 and 2022, respectively.

Certain revenue-generating hardware assets are utilized by the Company in the delivery of the Company's airtime services, media and other content.

(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 June 30, 2023 and December 31, 2022, the Company had accrued product warranty costs of $688 and $1,287, respectively.

The following table summarizes product warranty activity during 2023 and 2022:

	Six Months Ended June 30,	
	2023	2022
Beginning balance	$ 1,287	$ 1,084
Charges to expense	321	579
Costs incurred	(920)	(440)
Ending balance	$ 688	$ 1,223

(10) Legal Matters

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.

(11) 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 United States treasuries.

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 has no Level 2 assets or liabilities.

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 following tables present financial assets and liabilities at June 30, 2023 and December 31, 2022 for which the Company measures fair value on a recurring basis, by level, within the fair value hierarchy:

June 30, 2023	Total	Level 1	Level 2	Level 3	Valuation Technique
Assets					
Money market mutual funds	$ 56,966	$ 56,966	$ —	$ —	(a)

December 31, 2022	Total	Level 1	Level 2	Level 3	Valuation Technique
Assets					
Money market mutual funds	$ 30,977	$ 30,977	$ —	$ —	(a)
United States treasuries	$ 24,703	$ 24,703	$ —	$ —	(a)

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

The carrying amount of certain financial instruments 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 operating and financing lease liabilities approximates fair value based on currently available quoted rates of similarly structured borrowings.

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 indications of impairment exist. There was no impairment of the Company's non-financial assets noted during the six months ended June 30, 2023. The Company does not have any liabilities that are recorded at fair value on a non-recurring basis.

(12) Goodwill and Intangible Assets

Goodwill

The following table sets forth the changes in the carrying amount of goodwill for the six months ended June 30, 2023:

		Amounts
Balance at December 31, 2022	$	5,308
Foreign currency translation adjustment		43
Balance at June 30, 2023	$	5,351

Intangible Assets

The changes in the carrying amount of intangible assets during the six months ended June 30, 2023 are as follows:

		Amounts
Balance at December 31, 2022	$	404
Amortization expense		(148)
Intangible assets acquired in asset acquisition		23
Foreign currency translation adjustment		4
Balance at June 30, 2023	$	283

Intangible assets arose from the acquisition of KVH Media Group (acquired as Headland Media Limited) in May 2013. These intangible assets are being amortized on a straight-line basis over the estimated useful life of 10 years for acquired subscriber relationships. The intangible assets were recorded in pounds sterling and fluctuations in exchange rates 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 June 30, 2023, the carrying value of the intangible assets acquired in the asset acquisition was $485. 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. An additional $23 and $28 of consideration was earned under the contingent consideration arrangement during the six months ended June 30, 2023 and 2022, respectively.

Acquired intangible assets are subject to amortization. The following table summarizes acquired intangible assets at June 30, 2023 and December 31, 2022, respectively:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
June 30, 2023			
Subscriber relationships	$ 7,672	$ 7,389	$ 283
Distribution rights	315	315	—
Internally developed software	446	446	—
Proprietary content	153	153	—
Intellectual property	2,284	2,284	—
	$ 10,870	$ 10,587	$ 283
December 31, 2022			
Subscriber relationships	$ 7,649	$ 7,245	$ 404
Distribution rights	315	315	—
Internally developed software	446	446	—
Proprietary content	153	153	—
Intellectual property	2,284	2,284	—
	$ 10,847	$ 10,443	$ 404

Amortization expense related to intangible assets was $55 and $125 for the three months ended June 30, 2023 and 2022, respectively, and $148 and $319 for the six months ended June 30, 2023 and 2022, respectively. Amortization expense was categorized as general and administrative expense.

As of June 30, 2023, the total weighted average remaining useful lives of the definite-lived intangible assets was 0.3 years.

Estimated future amortization expense remaining at June 30, 2023 for intangible assets acquired was as follows:

Years ending December 31,	
Remainder of 2023	39
2024	78
2025	78
2026	78
2027	6
2028 and thereafter	4
Total future amortization expense	$ 283

For definite-lived 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 six months ended June 30, 2023 which indicated that an assessment of the impairment of goodwill and intangible assets was required.

(13) Revenue from Contracts with Customers

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 which the Company expects to be entitled to receive in exchange for these products and services.

Disaggregation of Revenue for Continuing Operations

The following table summarizes net sales from contracts with customers for the three and six months ended June 30, 2023 and 2022:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
Product, transferred at point in time	$ 4,544	$ 5,976	$ 9,047	$ 12,083
Product, transferred over time	881	644	1,327	1,100
Service	28,746	27,933	57,486	54,521
Total net sales	$ 34,171	$ 34,553	$ 67,860	$ 67,704

Revenue recognized during the three months ended June 30, 2023 and 2022 from amounts included in contract liabilities at the beginning of the period was $846 and $621, respectively. Revenue recognized during the six months ended June 30, 2023 and 2022 from amounts included in contract liabilities at the beginning of the period was $1,293 and $1,073, respectively.

For product sales, the delivery of the Company’s performance obligations are generally transferred to the customer, and associated revenue is recognized, at a point in time, with the exception of certain VSAT contracts which are transferred to customers over time. For service sales, the delivery of the Company’s performance obligations are transferred to the customer, and associated revenue is recognized, over time. The Company's performance is impacted by the levels of activity in the marine and land mobile markets, among others. Performance in any particular period could be impacted by the timing of sales to certain large customers.

The Company primarily manufactures and distributes a comprehensive family of mobile satellite antenna products and services that provide access to the Internet, television, and VoIP services while on the move. Product sales accounted for 16% and 19% of the Company's consolidated net sales for the three months ended June 30, 2023 and 2022, respectively, and 15% and 19% of the Company's consolidated net sales for the six months ended June 30, 2023 and 2022, respectively. Service sales of VSAT Broadband airtime service accounted for 79% and 75% of the Company's consolidated net sales for the three months ended June 30, 2023 and 2022, respectively, and 80% and 74% of the Company's consolidated net sales for the six months ended June 30, 2023 and 2022, respectively. The balance of service sales are comprised of distribution of commercially licensed entertainment and news, product repairs, and extended warranty sales.

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, including internationally. Revenues from international locations primarily include Singapore, Canada, European Union countries and other European countries, countries in Africa, Asia/Pacific and the Middle East, and India. Revenues are based upon customer location and internationally represented 66% and 61% of consolidated net sales for the three months ended June 30, 2023 and 2022, respectively, and 66% and 61% of consolidated net sales for the six months ended June 30, 2023 and 2022, respectively. Sales to Singapore customers represented 19% and 16% of the Company's consolidated net sales for the three months ended June 30, 2023 and 2022, respectively. No other individual foreign country represented 10% or more of the Company's consolidated net sales for the three months ended June 30, 2023 and 2022. Sales to Singapore customers represented 18% and 16% of the Company's consolidated net sales for the six months ended June 30, 2023 and 2022, respectively. No other individual foreign country represented 10% or more of the Company's consolidated net sales for the six months ended June 30, 2023 and 2022.

As of June 30, 2023 and December 31, 2022, the long-lived tangible assets related to the Company’s international subsidiaries were less than 10% of the Company’s long-lived tangible assets.

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 credit losses and evaluates, on a monthly basis, the adequacy of those reserves based upon expected losses, historical experience and its expectation for future collectability concerns.

No single customer accounted for 10% or more of consolidated net sales for the six months ended June 30, 2023 or 2022. One customer accounted for 22% of accounts receivable at June 30, 2023. Two customers accounted for approximately 16% and 12%, respectively, of accounts receivable at December 31, 2022. One customer accounted for 59% and 66% of long-term accounts receivable included in other non-current assets on the consolidated balance sheets related to sales-type leases at June 30, 2023 and December 31, 2022, respectively.

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.

Customer Contract Balances

The following table provides the balance sheet location and amounts of contract assets, or unbilled accounts receivable, and contract liabilities, or deferred revenue, from contracts with customers as of June 30, 2023 and December 31, 2022:

Contract Balance Type	Balance Sheet Location	June 30, 2023	December 31, 2022
Current portion of deferred costs	Current contract assets	$ 1,162	$ 1,243
Non-current portion of deferred costs	Non-current contract assets	2,757	3,033
Current portion of deferred revenues	Contract liabilities*	1,708	1,743
Non-current portion of deferred revenues	Long-term contract liabilities	4,220	4,315

*Management notes that the remaining "Contract liabilities" balance not included in the above table (which as of June 30, 2023 and December 31, 2022 is $1,602 and $1,365, respectively) relates to deferred income unaffiliated with the Company's primary revenue streams, the majority of which relates to our content subscription business. These values are therefore excluded from the contract assets and contract liabilities from contracts with customers.

There were no material changes to contract asset balances for the six months ended June 30, 2023 as a result of changes in estimates or impairments. The change in the contract liability balance from December 31, 2022 to June 30, 2023 was primarily due to the increase in upfront support billings received in the first six months of 2023 in comparison to revenues recognized in the prior period from historical support billings.

(14) Income Taxes

The Company's effective tax rate from continuing operations for the three and six months ended June 30, 2023 was 4.7% and 6.6%, respectively, compared with 510.9% and (14.5)% 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 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 and six months ended June 30, 2023 and 2022, the effective tax rates from continuing operations differed from the statutory tax rate primarily due to the Company maintaining a valuation allowance reserve on its U.S. deferred tax assets, discrete tax adjustments and the composition of income from foreign jurisdictions taxed at lower rates.

As of June 30, 2023 and December 31, 2022, the Company had reserves for uncertain tax positions of $674 and $637, respectively. There were no material changes during the six months ended June 30, 2023 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 June 30, 2023 may decrease $37 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, Japan and India. In general, the statute of limitations with respect to the Company's United States federal income taxes has expired for years prior to 2019, 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.

(15) Leases

Lessee

The Company has operating leases for office facilities, equipment, and satellite service capacity and related equipment. Lease expense from continuing operations was $422 and $537 for the three months ended June 30, 2023 and 2022, respectively, and was $874 and $1,081 for the six months ended June 30, 2023 and 2022, respectively. Short-term operating lease costs were $15 and $43 for the three months ended June 30, 2023 and 2022, respectively, and were $40 and $98 for the six months ended June 30, 2023 and 2022, respectively. Maturities of lease liabilities as of June 30, 2023 under operating leases having an initial or remaining non-cancelable term of one year or more are as follows:

Remainder of 2023	$	820
2024		611
2025		92
2026		48
2027 and thereafter		82
Total minimum lease payments	$	1,653
Less amount representing interest	$	(75)
Present value of net minimum operating lease payments	$	1,578
Less current installments of obligation under current-operating lease liabilities	$	1,207
Obligations under long-term operating lease liabilities, excluding current installments	$	371
Weighted-average remaining lease term - operating leases (years)		1.57
Weighted-average discount rate - operating leases		5.50 %

Lessor

The Company enters into leases with certain customers primarily for the TracPhone VSAT systems. These leases are classified as sales-type leases because title to the equipment transfers to the customer at the end of the lease term. The Company records the leases at a price typically equivalent to normal selling price and in excess of the cost or carrying amount. Upon delivery, the Company records the net present value of all payments under these leases as product revenue, and the related costs of the product are charged to cost of sales. Interest income is recognized throughout the lease term (typically three to five years) using an implicit interest rate. The sales-type leases do not have unguaranteed residual assets.

The current portion of the net investment in these leases was $4,145 as of June 30, 2023 and the non-current portion of the net investment in these leases was $4,584 as of June 30, 2023. The current portion of the net investment in the leases is included in accounts receivable, net of allowance for doubtful accounts on the accompanying consolidated balance sheets and the non-current portion of the net investment in these leases is included in other non-current assets on the accompanying consolidated balance sheets. Interest income from sales-type leases was $174 and $193 during the three months ended June 30, 2023 and 2022, respectively, and was $342 and $400 during the six months ended June 30, 2023 and 2022, respectively.

The future undiscounted cash flows from these leases as of June 30, 2023 are:

Remainder of 2023	$	2,822
2024		3,306
2025		1,972
2026		1,029
2027		493
2028		82
Total undiscounted cash flows	$	9,704
Present value of lease payments	$	8,729
Difference between undiscounted cash flows and discounted cash flows	$	975

In 2021, the Company began entering into three-year leases for its TracPhone VSAT systems, in which ownership of the hardware does not transfer to the lessee by the end of the lease term. As a result, and in light of other factors indicated in ASC 842, these leases are classified as operating leases.

As of June 30, 2023, the gross costs and accumulated depreciation associated with these operating leases are included in revenue generating assets and amounted to $1,880 and $704, respectively. They are depreciated on a straight-line basis over a five-year estimated useful life. Depreciation expense for these assets was $94 and $188 for the three and six months ended June 30, 2023, respectively.

Lease revenue recognized was $139 and $277 for the three and six months ended June 30, 2023, respectively, in service sales in the consolidated statements of operations.

As of June 30, 2023, minimum future lease payments to be recognized on the operating leases are as follows:

Remainder of 2023	$	277
2024		343
2025		25
Total	$	645

(16) Discontinued Operations

During the third quarter of 2022, the Company sold its inertial navigation business. The Company determined that the sale met the requirements for reporting as discontinued operations in accordance with Accounting Standards Codification (ASC) 205-20. There were no assets or liabilities of the inertial navigation business as of December 31, 2022 or June 30, 2023. Please see Note 1 for further discussion.

The following table presents a reconciliation of the major financial line items constituting the results for discontinued operations to the net income from discontinued operations, net of tax, presented separately in the Company's consolidated statement of operations for the three and six months ended 2022:

	Three Months Ended June 30, 2022	Six Months Ended June 30, 2022
Sales:		
Product	$ 6,959	$ 14,766
Service	325	461
Net sales	7,284	15,227
Costs and expenses:		
Costs of product sales	5,917	11,228
Costs of service sales	222	288
Research and development	1,135	2,773
Sales, marketing and support	1,299	2,687
Loss from discontinued operations before income tax expense	(1,289)	(1,749)
Other income, net	34	69
Loss from discontinued operations before tax expense	$ (1,255)	$ (1,680)
Income tax expense on discontinued operations	—	—
Net loss from discontinued operations, net of tax	$ (1,255)	$ (1,680)
Net loss from discontinued operations per common share		
Basic	**$ (0.07)**	**$ (0.09)**
Diluted	**$ (0.07)**	**$ (0.09)**
Weighted average number of common shares outstanding:		
Basic	**18,564**	**18,507**
Diluted	**18,564**	**18,507**

The following table presents supplemental cash flow information of the discontinued operations:

	Three Months Ended June 30, 2022	Six Months Ended June 30, 2022
Cash used in operating activities - discontinued operations	$ (3,967)	$ (3,601)
Cash provided by (used in) investing activities - discontinued operations	$ 35	$ (87)

The following table presents non-cash expenses from discontinued operations:

	Three Months Ended June 30, 2022	Six Months Ended June 30, 2022
Depreciation	$ 223	$ 531
Compensation expense related to stock-based awards and employee stock purchase plan	$ 91	$ 238

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 of these 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, 2022 as updated in Item 1A of Part II of this quarterly report on Form10-Q. 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 interim 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. We manufacture and sell our solutions in a number of major geographic areas, including internationally. We generate a majority of our revenues from various international locations, primarily consisting of Singapore, Canada, countries in South America, European Union countries and other European countries, countries in Africa, Asia/Pacific and the Middle East, and India.

We offer satellite communications products and services. Our satellite-only and hybrid products enable marine customers to receive data, Voice over Internet Protocol (VoIP), and value-added services via satellite, cellular, and shore-based Wi-Fi networks onboard commercial, leisure, and military/government vessels. In addition, the Company’s in-motion television terminals permit customers to receive live digital television via regional satellite services in marine vessels, recreational vehicles, buses and automobiles. We sell our products through an extensive international network of dealers and distributors. We also sell and lease products to service providers and end users.

Our service sales primarily represent revenue earned from satellite internet airtime services. We provide, for monthly fixed fees and per-usage fees, satellite connectivity encompassing broadband internet, data and VoIP services, to our TracNet H-series and TracPhone V-HTS series customers via our global HTS network. Revenue from our cellular airtime service has increasingly supplemented, and we expect will continue to supplement, our satellite-only airtime revenue following the mid-2022 launch of the KVH ONE hybrid network and TracNet H-series terminals. This product and service combination integrates global satellite service with KVH-provided cellular service in more than 150 countries, along with shore-based Wi-Fi access. The May 2023 introduction of the KVH ONE OpenNet Program expanded access to KVH's global HTS network and airtime services to non-KVH terminals for the first time. Our service sales also include the distribution of entertainment, including news, sports, music, and movies, to commercial customers in the maritime, hotel, and retail markets through KVH Media Group, along with supplemental value-added cybersecurity, email, and crew internet services. In addition, we earn monthly usage fees for third-party satellite connectivity for VoIP, data and Internet services to our Inmarsat and Iridium customers who choose to activate their subscriptions with us. Service sales also include sales from product repairs and extended warranty sales.

Our marine leisure business 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.

Disposition of Business

On April 29, 2022, KVH Media Group Limited, our wholly owned subsidiary, sold its subsidiary KVH Media Group Entertainment Limited for net cash proceeds of approximately $2.4 million. This transaction did not meet the criteria as a discontinued operation under ASC 205-20. We recorded a gain on the sale of approximately $0.6 million, which is recorded in other income, net in the accompanying consolidated statements of operations.

Management Transition and Restructuring

On March 7, 2022, we announced that our President and Chief Executive Officer, Martin Kits van Heyningen, was retiring from his executive and Board roles after more than 40 years of service and assuming a consulting position with us. We incurred approximately $0.5 million of costs associated with the management transition through March 31, 2022, including a separation payment, consulting fees and health insurance coverage for Mr. Kits van Heyningen, as well as professional and advisory fees. As of June 30, 2023, all payments related to the additional fees had been completed.

In March 2022, we also restructured our operations to reduce costs and better pursue a more focused strategy. We reduced our workforce by approximately 10% and began incurring reduced expenses from these actions beginning in the second quarter of 2022. Approximately $2.2 million of severance payments, other employee benefits, and legal and advisory fees were incurred for the six months ended March 31, 2022. For the six months ended June 30, 2023, we did not incur any additional expenses associated with this restructuring. We also modified impacted employee's stock option and restricted stock awards.

During the third quarter of 2022, we restructured our foreign operations by closing our India and Cyprus offices and our Denmark warehouse to reduce costs. All costs associated with the severance payments, other employee benefits, and legal and advisory fees were incurred in 2022.

Executive Employment Agreements

In May 2022, we entered into executive employment agreements with each of Brent C. Bruun, Roger A. Kuebel, Felise Feingold and Robert Balog in order to retain their services and provide them with certain benefits in the event that we terminate the executive’s employment without cause (as defined in the agreement) or the executive terminates his or her employment for good reason (as defined in the agreement) (either such termination, a “Qualifying Termination”), including following a change of control. The terms of the agreements are substantially identical except as to title, salary, target bonus and reporting responsibilities. The agreements provided that, if the executive continued to serve as an employee through December 31, 2022 (the “Retention Date”), we would pay the executive a retention bonus equal to 75% of the executive’s base salary at the agreement date, and we would accelerate the vesting of the executive’s equity awards that would otherwise have vested in the twelve months after the Retention Date.

On October 11, 2022, we entered into an amendment to the employment agreement with Mr. Bruun that, among other things, increased his annual base salary to $448,360 per year, retroactive to July 1, 2022, increased his target annual incentive compensation for the second half of 2022 to 80% of his base salary (without changing his target annual incentive compensation for the first half of 2022), extended his Retention Date from December 31, 2022 to December 31, 2023, which effectively extended the period during which Mr. Bruun must remain employed by us in order to earn his retention bonus, and modified the amount of the retention bonus from 75% of his base salary in effect on May 2, 2022 to 75% of the highest base salary in effect for Mr. Bruun on or before the date he becomes entitled to receive the retention bonus or the “Partial Retention Bonus” (as defined in the employment agreement). If a Qualifying Termination occurs before December 31, 2023, Mr. Bruun will receive a pro rata portion of the retention bonus. If in connection with such a termination he becomes entitled to receive the change in control severance payments and benefits, he will also become entitled to receive the full retention bonus, and the Retention Date will be the later of the date of such change in control or such termination of employment. The amendment did not modify the terms of the employment agreement relating to acceleration of vesting of certain equity awards if Mr. Bruun remains employed by us through December 31, 2022.

In January 2023, we paid out all contracted benefits to Roger A. Kuebel, Felise Feingold and Robert Balog as the conditions of their agreements were satisfied on December 31, 2022. As of June 30, 2023, we have accrued approximately $0.2 million for the retention bonus payable to Brent Bruun.

In addition to the amendment to Mr. Bruun’s employment agreement, the Compensation Committee also granted Mr. Bruun a restricted stock award and a non-statutory stock option, which together had an aggregate grant date fair value of approximately $100,000. The restricted stock award and the non-statutory stock option have terms that are materially consistent with the previously disclosed terms of similar grants to our executive officers.

Supply Chain

During the six months ended June 30, 2023, we continued to experience delays in the availability and delivery of certain raw material components. We also experienced increased raw material costs, which we expect to continue throughout 2023. We are continuing to monitor global developments and are prepared to implement any actions that we determine to be necessary to sustain our business.

International Sales

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 Singapore, Canada, countries in South America, European Union countries and other European countries, as well as countries in Africa, Asia/Pacific and the Middle East, and India. International revenues represented 66% and 61% of our consolidated net sales for the three months ended June 30, 2023 and 2022, respectively, and 66% and 61% of our consolidated net sales for the six months ended June 30, 2023 and 2022 and 2022, respectively. Sales to Singapore customers represented 19% and 16% of our consolidated net sales for the three months ended June 30, 2023 and 2022, respectively. No other individual foreign country represented 10% or more of our consolidated net sales for the three months ended June 30, 2023 and 2022. Sales to Singapore customers represented 18% and 16% of our consolidated net sales for the six months ended June 30, 2023 and 2022, respectively. No other individual foreign country represented 10% or more of our consolidated net sales for the six months ended June 30, 2023 and 2022.

Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated interim financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these interim financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosure at the date of our interim 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, 2022.

Critical accounting estimates are those estimates made that involve a significant level of estimation uncertainty and have had or are reasonably likely to have an impact on our statement of operations. As described in our annual report on Form 10-K for the year ended December 31, 2022, our accounting policies for goodwill, intangible assets, and other long-lived assets are the estimates most critical to an understanding and evaluation of our consolidated financial statements. We have reviewed our accounting policies and critical accounting estimates and determined that these remain our most critical accounting policies and estimates for the six months ended June 30, 2023.

Readers should refer to our annual report on Form 10-K for the year ended December 31, 2022 under “Management’s Discussion and Analysis of Financial Condition and Results of Operation—Critical Accounting Estimates” for descriptions of these policies and estimates, as well as the notes to the consolidated interim financial statements included elsewhere within this report.

Results of Operations

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Sales:				
Product	15.9 %	19.2 %	15.3 %	19.5 %
Service	84.1	80.8	84.7	80.5
Net sales	100.0	100.0	100.0	100.0
Cost and expenses:				
Costs of product sales	19.4	15.0	17.5	15.7
Costs of service sales	45.5	44.0	46.6	44.5
Research and development	7.1	7.6	7.3	8.3
Sales, marketing and support	15.0	16.4	16.0	18.7
General and administrative	12.1	20.0	12.9	20.6
Total costs and expenses	99.1	103.0	100.3	107.8
Income (loss) from operations	0.9	(3.0)	(0.3)	(7.8)
Interest income	2.6	0.6	2.5	0.6
Interest expense	—	—	—	—
Other (expense) income, net	(0.7)	2.6	(0.7)	1.5
Income (loss) from continuing operations before income tax expense	2.8	0.2	1.5	(5.7)
Income tax expense from continuing operations	0.1	0.7	0.1	0.8
Net income (loss) from continuing operations	2.7 %	(0.5)%	1.4 %	(6.5)%

Three months ended June 30, 2023 and 2022

Net Sales

Our net sales for the three months ended June 30, 2023 and 2022 were as follows:

	For the three months ended June 30,		Change 2023 vs. 2022	
	2023	2022	$	%
	(dollars in thousands)			
Product	$ 5,425	$ 6,620	$ (1,195)	(18)%
Service	28,746	27,933	813	3 %
Net sales	$ 34,171	$ 34,553	$ (382)	(1)%

Net sales decreased by $0.4 million, or 1%, for the three months ended June 30, 2023 as compared to the three months ended June 30, 2022. Product sales decreased by $1.2 million, or 18%, to $5.4 million for the three months ended June 30, 2023 from $6.6 million for the three months ended June 30, 2022. The decrease in product sales was primarily due to a $1.8 million decrease in TracVision product sales, partially offset by a $0.3 million increase in Starlink product sales and a $0.2 million increase in VSAT Broadband product sales. The decline in TracVision product sales is primarily due to increasing competition from low-cost, low-earth orbit, or LEO, and cellular streaming solutions.

Service sales increased by $0.8 million, or 3%, to $28.7 million for the three months ended June 30, 2023 from $27.9 million for the three months ended June 30, 2022. The increase was primarily due to a $1.1 million increase in our VSAT airtime sales, partially offset by a $0.2 million decrease in our content service sales.

Costs of Sales

Costs of sales consists of costs of product sales and costs of service sales. Costs of sales increased by $1.8 million, or 9%, in the three months ended June 30, 2023 to $22.2 million from $20.4 million in the three months ended June 30, 2022. The increase in costs of sales was driven by a $1.4 million increase in costs of product sales and a $0.3 million increase in costs of service sales. As a percentage of net sales, costs of sales were 65% and 59% for the three months ended June 30, 2023 and 2022, respectively.

Our costs of product sales consist primarily of materials, manufacturing overhead, and direct labor used to produce our products. For the three months ended June 30, 2023, costs of product sales increased by $1.4 million, or 28%, to $6.6 million from $5.2 million in the three months ended June 30, 2022, primarily due to a $1.5 million increase in our marine cost of product sales. As a percentage of product sales, costs of product sales were 122% and 79% for the three months ended June 30, 2023 and 2022, respectively. Cost of product sales increased as a percentage of product sales primarily due to three factors: a $0.4 million unfavorable reclassification of first quarter costs from costs of service sales to costs of product sales, a $0.3 million increase in the excess and obsolescence reserve and $0.4 million of higher unit component costs.

Our costs of service sales consist primarily of satellite service capacity, depreciation, service network overhead expense associated with our VSAT Broadband network infrastructure, direct network service labor, Inmarsat service costs, product installation costs, media materials and distribution costs, and service repair materials. For the three months ended June 30, 2023, costs of service sales increased by $0.3 million, or 2%, to $15.5 million from $15.2 million for the three months ended June 30, 2022, primarily due to a $0.3 million increase in VSAT airtime costs of service sales. The increase in airtime cost of sales is primarily related to capacity increases necessary to support growth in our airtime subscriber base. As a percentage of service sales, costs of service sales were 54% for both the three months ended June 30, 2023 and 2022.

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 for the three months ended June 30, 2023 decreased by $0.2 million, or 8%, to $2.4 million from $2.6 million for the three months ended June 30, 2022. The decrease primarily resulted from a $0.2 million decrease in expensed materials. As a percentage of net sales, research and development expense was 7% and 8% for the three months ended June 30, 2023 and 2022, respectively.

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 June 30, 2023 decreased by $0.5 million, or 9%, to $5.1 million from $5.7 million for the three months ended June 30, 2022. The decrease primarily resulted from a $0.5 million decrease in bad debt expense and a $0.4 million decrease in salaries, benefits and taxes, partially offset by a $0.3 million increase in facilities expenses. As a percentage of net sales, sales, marketing and support expense was 15% and 16% for the three months ended June 30, 2023 and 2022, respectively.

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 June 30, 2023 decreased by $2.8 million, or 40%, to $4.1 million from $6.9 million, for the three months ended June 30, 2022. The decrease primarily resulted from a $1.1 million decrease in salaries, benefits, and taxes, which was driven by the reduction in our workforce in March 2022, and a $0.6 million decrease in recruiting expenses, which was driven by professional fees incurred during the three months ended June 30, 2022 associated with the search for a new Chief Executive Officer and replacements for two departed members of our board of directors. In addition, there was a $0.5 million decrease in legal and professional fees, as well as a $0.2 million reimbursement by EMCORE for expenses incurred under the Transition Service Agreement relating to the sale of the inertial navigation business in 2022. As a percentage of net sales, general and administrative expense was 12% and 20% for the three months ended June 30, 2023 and 2022, respectively.

Interest and Other (Expense) Income, Net

Interest income represents interest earned on our cash and cash equivalents, as well as from investments and our sale-type lease receivables. Interest income increased $0.7 million for the three months ended June 30, 2023 to $0.9 million from $0.2 million for the three months ended June 30, 2022. Of the current period interest income of $0.9 million, $0.7 million is attributable to interest gained from cash and cash equivalents, while the remaining $0.2 million was due to interest from lease receivables. Interest expense remained flat period-over-period at less than $0.1 million for both of the three months ended June 30, 2023 and 2022. Other (expense) income, net changed to other expense, net of $0.2 million for the three months ended June 30, 2023 from other income, net of $0.9 million for the three months ended June 30, 2022 primarily due to the sale of KVH Media Group Entertainment Limited during the three months ended June 30, 2022 and an increase in foreign exchange losses from our UK operations.

Income Tax Expense

Income tax expense for the three months ended June 30, 2023 was less than $0.1 million and related to taxes on income earned in foreign jurisdictions. Income tax expense for the three months ended June 30, 2022 was $0.2 million and related to taxes on income earned in foreign jurisdictions.

Six months ended June 30, 2023 and 2022

Net Sales

Our net sales for the six months ended June 30, 2023 and 2022 were as follows:

	For the six months ended June 30,		Change	
	2023	2022	2023 vs. 2022 $	2023 vs. 2022 %
	(dollars in thousands)			
Product	$ 10,374	$ 13,183	$ (2,809)	(21)%
Service	57,486	54,521	2,965	5 %
Net sales	$ 67,860	$ 67,704	$ 156	— %

Net sales increased by $0.2 million, or less than 1%, for the six months ended June 30, 2023 as compared to the six months ended June 30, 2022. Product sales decreased by $2.8 million, or 21%, to $10.4 million for the six months ended June 30, 2023 from $13.2 million for the six months ended June 30, 2022. The decrease in product sales was primarily due to a $2.0 million decrease in TracVision product sales and a $1.3 million decrease in VSAT Broadband product sales, partially offset by a $0.3 million increase in Starlink product sales. The decline in product sales was primarily due to a decrease in unit sales volume, particularly in our global leisure segment. Alternative solutions offered by recent LEO entrants have heightened competition in other segments of the market, but low-cost alternatives to VSAT, which include streaming capabilities, have had a more significant impact on both TracVision and VSAT Broadband product sales in the leisure segment.

Service sales increased by $3.0 million, or 5%, to $57.5 million for the six months ended June 30, 2023 from $54.5 million for the six months ended June 30, 2022. The increase was primarily due to a $4.1 million increase in our VSAT service sales, partially offset by a $1.0 million decrease in our content services sales, primarily driven by the sale of a subsidiary in April 2022.

Costs of Sales

Costs of sales increased by $2.7 million, or 7%, in the six months ended June 30, 2023 to $43.5 million from $40.7 million in the six months ended June 30, 2022. The increase in costs of sales was driven by a $1.5 million increase in costs of service sales and a $1.3 million increase in costs of product sales. As a percentage of net sales, costs of sales were 64% and 60% for the six months ended June 30, 2023 and 2022, respectively.

For the six months ended June 30, 2023, costs of product sales increased by $1.3 million, or 12%, to $11.9 million from $10.6 million in the six months ended June 30, 2023, primarily due to a $1.2 million increase in our marine cost of product sales. As a percentage of product sales, costs of product sales were 114% and 81% for the six months ended June 30, 2023 and 2022, respectively. Cost of product sales increased as a percentage of product sales primarily due to three factors: a $0.7 million write-down of inventory, a $0.3 million increase in the excess and obsolescence reserve and $0.5 million of higher unit component costs.

For the six months ended June 30, 2023, costs of service sales increased by $1.5 million, or 5%, to $31.6 million from $30.1 million for the six months ended June 30, 2022, primarily due to a $1.8 million increase in VSAT airtime costs of service sales. The increase in airtime cost of sales is primarily related to capacity increases to support growth in our airtime subscriber base. This was partially offset by a $0.4 million decrease in content services cost of service sales, primarily driven by the sale of a subsidiary in April 2022. As a percentage of service sales, costs of service sales were 55% for both the six months ended June 30, 2023 and 2022.

Operating Expenses

Research and development expense for the six months ended June 30, 2023 decreased by $0.7 million, or 12%, to $5.0 million from $5.6 million for the six months ended June 30, 2022. The decrease in research and development expense resulted primarily from a $0.4 million decrease in expensed materials and a $0.3 million decrease in salaries, benefits and taxes driven by the previously mentioned reduction in our workforce in March 2022. As a percentage of net sales, research and development expense was 7% and 8% for the six months ended June 30, 2023 and 2022, respectively.

Sales, marketing and support expense for the six months ended June 30, 2023 decreased by $1.8 million, or 14%, to $10.9 million from $12.6 million for the six months ended June 30, 2022. The decrease in sales, marketing and support expense resulted primarily from a $1.9 million decrease in salaries, benefits and taxes driven by the previously mentioned reduction in our workforce in March 2022 and a $0.3 million decrease in bad debt expense, partially offset by a $0.5 million increase in facilities expenses. As a percentage of net sales, sales, marketing and support expense was 16% and 19% for the six months ended June 30, 2023 and 2022, respectively.

General and administrative expense for the six months ended June 30, 2023 decreased by $5.2 million, or 37%, to $8.8 million from $14.0 million for the six months ended June 30, 2022. The decrease in general and administrative expense resulted primarily from a $3.2 million decrease in salaries, benefits and taxes driven by the previously mentioned reduction in our workforce in March 2022, as well as expenses related to the separation and retirement of Mr. Kits van Heyningen in March 2022. In addition, we were also reimbursed by EMCORE for $0.7 million of expenses incurred under the Transition Service Agreement relating to the sale of the inertial navigation business in 2022. There was also a $0.6 million decrease in recruiting expenses, which was driven by professional fees incurred during the six months ended June 30, 2022 associated with the search for a new Chief Executive Officer and replacements for two departed members of our board of directors. There was also a $0.3 million decrease in facilities expenses and a $0.3 million decrease in depreciation and amortization. As a percentage of net sales, general and administrative expense was 13% and 21% for the six months ended June 30, 2023 and 2022, respectively.

Interest and Other (Expense) Income, Net

Interest income increased by $1.3 million to $1.7 million for the six months ended June 30, 2023 from $0.4 million for the six months ended June 30, 2022. Of the current period interest income of $1.7 million, $1.3 million is attributable to interest gained from cash and cash equivalents, while the remaining $0.4 million was due to interest from lease receivables. Interest expense remained flat period-over-period at less than $0.1 million for both the six months ended June 30, 2023 and 2022. Other (expense) income, net changed to other expense, net of $0.5 million for the six months ended June 30, 2023 from other income, net of $1.0 million for the prior period primarily due to the sale of KVH Media Group Entertainment Limited during the six months ended June 30, 2023 and an increase in foreign exchange losses from our UK operations.

Income Tax Expense

Income tax expense for the six months ended June 30, 2023 was $0.1 million and related to taxes on income earned in foreign jurisdictions. Income tax expense for the six months ended June 30, 2022 was $0.6 million and related to taxes on income earned in foreign jurisdictions.

Discontinued Operations

On August 9, 2022, we sold our inertial navigation business for net proceeds of $54.9 million, less specified deductions. We determined that the sale met the requirements for reporting as discontinued operations in accordance with ASC 205-20. Accordingly, we have classified the results of the inertial navigation business as discontinued operations for all prior periods presented. Please see Notes 1 and 18 for further discussion. Results for discontinued operations are as follows:

	Three months ended June 30,	Six months ended June 30,
	2022	2022
	(dollars in thousands)	
Sales from discontinued operations	$ 7,284	$ 15,227
Net loss from discontinued operations, net of tax	$ (1,255)	$ (1,680)

Liquidity and Capital Resources

Our primary liquidity needs have been to fund general business requirements, including working capital requirements and capital expenditures. In recent years, we have funded our operations primarily from the sale of two businesses in 2022, the sale of a business in 2019, a PPP loan, cash flows from operations, bank financings and proceeds received from exercises of stock options and the issuance of stock.

On August 9, 2022, we sold our inertial navigation business to EMCORE Corporation for net proceeds of $54.9 million, less specified deductions.

As of June 30, 2023, we had $71.0 million in cash, cash equivalents, and marketable securities, of which $2.6 million in cash and cash equivalents was held in local currencies by our foreign subsidiaries. Our foreign subsidiaries held no marketable securities as of June 30, 2023. As of June 30, 2023, we had $99.7 million in working capital. Based upon our current working capital position, current operating plans and expected business conditions, we expect to have sufficient funds, through at least twelve months from the date that this report is filed with the SEC, to fund our short-term and long-term working capital requirements, including capital expenditures and contractual obligations. Our funding plans for our working capital needs and other commitments may be adversely impacted if our underlying assumptions regarding our anticipated revenues and expenses are not realized. If our operating results fail to meet our expectations, we could be required to seek additional funding through public or private financings or other arrangements. In that event, adequate funds may not be available when needed or may be available only on terms which could have a negative impact on our business and results of operations. In addition, if we raise funds by issuing equity securities, our stockholders may experience dilution.

Net cash used in operations was $3.2 million for both the six months ended June 30, 2023 and 2022. Between the two periods, there was a $7.0 million increase in net income, a $4.9 million decrease in cash outflows relating to inventories, a $1.2 million decrease in cash outflows related to prepaid expenses and current assets, and a $1.1 million increase in cash inflows relating to accounts receivable. Offsetting these items were an $8.2 million increase in cash outflows related to accounts payable, a $5.3 million increase in cash outflows relating to accrued compensation, product warranty and other expenses, a $0.5 million increase cash outflows related to non-current assets, and a change of $0.2 million related to non-cash items.

Net cash used in investing activities was $6.0 million for the six months ended June 30, 2023 compared to net cash provided by investing activities of $2.3 million for the six months ended June 30, 2022. The $8.4 million increase in net cash used in investing activities was primarily the result of a $9.3 million increase in net investment in marketable securities and a decrease of $2.4 million in proceeds from the sale of KVH Media Group Entertainment Limited, partially offset by a $3.3 million decrease in capital expenditures.

Net cash provided by financing activities was $2.1 million for the six months ended June 30, 2023 compared to net cash provided by financing activities of $0.2 million for the six months ended June 30, 2022. The $1.9 million increase in net cash provided by financing activities is primarily attributable to the $2.0 million increase in cash inflows relating to proceeds from stock options exercised and the employee stock purchase plan, partially offset by a $0.2 million increase in cash outflows related to the repurchase of common stock to satisfy specific tax withholding obligations arising from accelerated vesting of executive stock grants.

Other Matters

We intend to continue to invest in our global HTS network on a worldwide basis. As part of the future potential capacity expansion, we plan 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.

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 June 30, 2023, 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 June 30, 2023.

Evaluation of 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 second quarter of 2023. 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 second quarter of 2023 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

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 1A. RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors in evaluating our business. If any of these risks, or other risks not presently known to us or that we currently believe are not significant, develops into an actual event, then our business, financial condition and results of operations could be adversely affected. If that happens, the market price of our common stock could decline.

Risks related to our financial performance

We have a history of losses, and achieving sustained profitability may take longer than we anticipate or may not be achievable.

We recorded substantial losses from continuing operations in each of the last three fiscal years (notwithstanding the income we recognized in 2022 from the sale of the inertial navigation business and in 2021 from the forgiveness of the PPP Loan). Although our continuing operations were profitable in the fourth quarter of 2022 and second quarter of 2023, we may incur losses in the future as we face increasing competition, as we increase satellite capacity to handle our growing subscriber base, as we confront supply chain constraints and as we continue to invest in research and development to improve our existing products and develop new products. In order to achieve sustained profitability, we must grow our airtime subscriber base, reduce our bandwidth costs, and continue to introduce new and improved products in order to maintain and improve our competitive position and generate revenue. Our inability to accomplish any of these goals could have a material adverse effect on our revenues, profitability and cash flow, and we cannot assure you when, or whether, we will regain sustained profitability.

Fluctuations in our quarterly net sales and results of operations could depress the market price of our common stock.

Our quarterly net sales and results of operations could continue to vary significantly for various reasons, many of which are outside our control. You should not rely on quarter-to-quarter comparisons of our results of operations as an indication of future performance. Our net sales or results of operations in a quarter may fall below the expectations of securities analysts or investors. If this occurs, the market price of our common stock could fall significantly. Our results of operations can fluctuate for many reasons, including changes in demand for our products and services; delays in order fulfillment, including as a result of shortages of components and raw materials; the mix of products and services we sell, including the mix of fixed rate and metered contracts for airtime services; our ability to manufacture, test and deliver products in a timely and cost-effective manner; the timing of new product introductions by us or our competitors; the scope and success of our investments in research and development; expenses incurred in pursuing acquisitions and investments; expenses incurred in expanding, maintaining, or improving our global HTS network; market and competitive pricing pressures; unanticipated charges or expenses; expenses incurred in responding to stockholder activism; general economic climate; seasonality of pleasure boat and recreational vehicle usage; and the impact of supply chain disruptions.

A large portion of our expenses, including expenses for network infrastructure, facilities, equipment, and personnel, are relatively fixed. If our net sales decline or do not grow as we anticipate, we may be unable to maintain or improve our operating margins. Any failure to achieve anticipated net sales could therefore significantly harm our operating results.

Additional impairments to goodwill could result in significant charges against earnings.

As a result of our acquisitions, we have recorded, and may continue to record, a significant amount of goodwill. Under current accounting guidelines, we must assess, at least annually and potentially more frequently, whether the value of goodwill has been impaired. In 2020, our annual impairment test resulted in an impairment charge of $10.5 million in our KVH Media reporting unit. Even after recording this impairment, our consolidated balance sheet at June 30, 2023 includes $5.4 million of goodwill, of which $0.9 million relates to KVH Media Group. Our annual impairment analysis as of October 1, 2022 did not identify any further impairments. However, there can be no assurance that our remaining goodwill will not be further impaired.

Risks related to our operations

Our future success will depend in part on the services of our executive officers.

The Company's future success depends to a significant degree on the skills and efforts of our executive officers. Our executive officers are at-will employees, competition is intense for executive management, and they could terminate their employment with us at any time. We do not maintain key-person life insurance on any of our personnel. Accordingly, the loss of one or more of our executive officers or key employees could have a material adverse effect on our business.

If we cannot effectively manage changes in our business and continue to attract and retain skilled personnel, our business may suffer.

We are highly dependent on qualified personnel at all levels, including our senior management team and other key technical, operational, managerial and sales and marketing personnel, each of whom would be difficult to replace. If we fail to retain and attract the necessary personnel, we may be unable to achieve our business objectives and may lose our competitive position, which could lead to a significant decline in net sales. The current job market for personnel is very competitive, resulting in increased compensation. We face challenges retaining our personnel and attracting new personnel to fulfill our unmet needs. Replacing key personnel may be difficult and may take an extended period of time because of the limited number of individuals with the skills and experience to execute our business strategy. We may be unable to identify or employ qualified personnel for any such position on acceptable terms, if at all. We may also need to pay higher compensation than we expect, which would make it more difficult to achieve our goal of sustained profitability.

If we cannot adjust expenses in response to changes in our operations, our results of operations may be harmed. To manage changes in our business effectively, we must, among other things, match our manufacturing facilities and capacity to demand for our products and services; secure appropriate satellite capacity to match demand for airtime services; effectively manage our inventory and working capital; ensure robust cybersecurity protection of Company and customers data and systems; and ensure that our procedures and internal controls are revised and updated to remain appropriate for our workforce and the size and scale of our business operations.

We must generate a certain level of sales of the TracNet H-series and TracPhone V-HTS series products in order to maintain or improve our service gross margins.

As a result of our global HTS network infrastructure, we incur certain costs that generally do not vary directly in proportion to the volume of service sales, and we have limited ability to reduce these fixed costs in the short term. The cost of our HTS network has increased significantly each year as we have expanded our network to accommodate additional subscriber demand and/or coverage areas. We expect that this trend will continue in 2023. If sales of our TracNet H-series and TracPhone V-HTS series products, including through our AgilePlans subscription model, do not generate the level of revenue that we expect or if those revenues decline, our service gross margins may decline. The failure to improve our global HTS service gross margins and unit or subscriber sales would have a material adverse effect on our overall profitability.

Our ability to compete in the maritime airtime services market will be impaired if we are unable to provide sufficient service capacity to meet customer demand.

We currently offer our global HTS VSAT service in the Americas, Europe, the Middle East, Africa, Asia-Pacific, Indian, and Australian and New Zealand waters. We may need to expand capacity in existing coverage areas to support our subscriber base. If we are unable to reach economical agreements with third-party satellite providers to support our global HTS service and its technology or if transponder capacity is unavailable to meet growing demand in a given region, our ability to provide airtime services will be at risk and could reduce the attractiveness of our products and services.

Our results of operations are adversely affected by unseasonably cold weather, prolonged winter conditions, disasters or similar events.

Our leisure marine business is highly seasonal, and seasonality can also impact our commercial marine business. Historically, we have generated the majority of our leisure marine 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 winter months. Our leisure marine business is also significantly affected by the weather. Unseasonably cool weather, prolonged winter conditions, hurricanes, unusual amounts of rain, and natural and other disasters may decrease boating, which could reduce our revenues. Specifically, we may encounter a decrease in new airtime activations as well as an increase in the number of cancellations or temporary suspensions of our airtime service.

We have a single manufacturing facility, and any significant disruption to this facility will impair our ability to deliver our products.

We manufacture all of our products at our manufacturing facility in Middletown, Rhode Island. Some of our production processes are complex, and we may be unable to respond rapidly to the loss of the use of our production facility. For example, we use some specialized equipment that may take time to replace if it is damaged or becomes unusable for any reason. In that event, shipments would be delayed, which could result in customer or dealer dissatisfaction, loss of sales and damage to our reputation.

Acquisitions and strategic relationships may disrupt our operations or adversely affect our results.

We evaluate opportunities to acquire other businesses and pursue other strategic relationships as they arise. The expenses we incur evaluating and pursuing acquisitions and strategic relationships could have a material adverse effect on our results of operations. If we acquire a business, we may be unable to manage it profitably or successfully integrate its operations with our own. Moreover, we may be unable to realize the strategic, financial, operational and other benefits we anticipate, and any acquisition or strategic relationship may increase our operating expenses. Further, our approach to acquisitions and strategic relationships may involve a number of special financial and business risks, such as entry into new and unfamiliar lines of business or markets, which may present challenges or risks that we did not anticipate; entry into new or unfamiliar geographic regions, including exposure to additional tax and regulatory regimes; increased expenses associated with the amortization of acquired intangible assets; increased exposure to fluctuations in foreign currency exchange rates; charges related to any abandoned acquisition; diversion of our management's time, attention, and resources; loss of key personnel; increased costs to improve or coordinate managerial, operational, financial, and administrative systems, including internal control over financial reporting; dilutive issuances of equity securities; the assumption of legal liabilities; and losses arising from impairment charges associated with goodwill or intangible assets.

Risks related to our dependence on third parties and third-party technology

Our mobile satellite products currently depend on satellite services, gateway teleports and terrestrial networks provided by third parties, and a disruption in those services could adversely affect sales.

Our satellite antenna products include the equipment necessary to utilize satellite services. We do not own the satellites that provide two-way satellite communications or the terrestrial networks that interconnect our facilities with the satellite teleports that communicate with the satellites. Intelsat and Sky Perfect-JSAT currently provide the satellite capacity to support our global high-throughput satellite (HTS) broadband service and our TracNet H-series and TracPhone V-HTS series products. Vodafone provides the 5G/LTE services used by our TracNet H-series terminals to provide cellular service in 150+ countries. We rely on Inmarsat for satellite communications services for our FleetBroadband-compatible and FleetOne-compatible TracPhone products. We also have an arrangement with Iridium for additional satellite communications services that we make available to our customers as a backup option to provide communications redundancy with our primary service offerings.

In addition, we have agreements with various teleports and Internet service providers around the globe to support our global HTS broadband service. The terrestrial fiber links that we use to connect with the Internet and to move our VoIP and data services between our facilities and the various satellite earth stations that support our services are provided to us through numerous service providers, some of which have contractual relationships with our satellite service providers and not directly with us.

We currently offer satellite television products compatible with the DIRECTV and DISH Network services in the United States, the Bell TV service in Canada, the Sky Mexico service in Mexico, the Sky UK service in the United Kingdom, Canal+ service in France and Movistar service in Spain, and other regional satellite TV services in other parts of the world.

We exercise little or no control over these third-party providers of satellite, teleport, and terrestrial network services, which increases our vulnerability to problems with the services they provide. Due to our reliance on these service providers, when problems occur, it may be difficult to identify the source of the problem. Service disruption or outages, regardless of whether they are caused by our service, the equipment or services of our third-party service providers, or our customers' or their equipment and systems, may result in loss of market acceptance of our service, and any necessary repairs or other remedial actions may cause us to incur significant costs and expenses. Any failure on the part of third-party service providers to achieve or maintain expected performance levels, stability, and security could harm our relationships with our customers, result in claims for credits or damages, damage our reputation, significantly reduce customer demand for our solution and seriously harm our financial condition and operating results.

If customers become dissatisfied with the pricing, service, availability, programming or other aspects of any of these satellite services, or if any one or more of these services becomes unavailable for any reason, we could suffer a substantial decline in sales of our satellite products or services. There may be no alternative satellite service provider available to us in a particular geographic area, and our modem or other technology may not be compatible with the technology of any alternative service provider that may be available. Even if available, delays caused by switching our technology to another service provider, if available, and qualifying this new service provider could materially harm our customer relationships, business, financial condition, and operating results. In addition, the unexpected failure of a satellite could disrupt the availability of programming and services, which could reduce the demand for, or customer satisfaction with, our products and services.

We depend on cloud-based data services operated by third parties, and any disruption in the operation of these services could harm our business.

Some of our content services and business records are hosted by various cloud-based data services operated by third parties. Any failure or downtime in one of these services could affect a significant percentage of our customers. Although we control and have access to our servers and the components of our network that are located in our internal facilities and certain of our external data facilities, we do not control the operation of external facilities. The providers of our data management services have no obligation to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew these agreements on commercially reasonable terms, or if one or more of our data management service providers is acquired, closes, suffers financial difficulty or is unable to meet our growing capacity needs, we may be required to transfer our data to other services, and we may incur significant costs and service interruptions in connection with doing so, which could harm our reputation with our customers and adversely affect our revenues and results of operations.

Our media and entertainment business relies on licensing arrangements with content providers, and the loss of, or changes in, those arrangements could adversely affect our business.

We distribute premium news, television shows, sports, and movies to commercial customers in the maritime and hotel markets. We license this content from third parties on a non-exclusive basis without long-term license agreements. Any content provider could terminate our arrangements without notice or could adversely modify the terms of the arrangement, including price increases. Further, the licenses we obtain are limited in scope, and any violation of the terms of a license could expose us to liability for copyright infringement. We pay license fees based in part on the revenue we generate from sublicenses, and our licensors generally have the right to audit our records. Failure to pay required license fees could result in termination of our license rights, penalties and damages. The loss of content could adversely affect the attractiveness of our media and entertainment offerings, which could in turn adversely affect our revenues. Any increase in the cost of content could reduce the profitability of these offerings.

Cybersecurity breaches could disrupt our operations, expose us to liability, damage our reputation, and require us to incur significant costs or otherwise adversely affect our financial results.

We are highly dependent on information technology networks and systems, including the Internet and third-party systems, to securely process, transmit and store electronic information, including personal information of our customers. We also retain sensitive data, including intellectual property, proprietary business information, personally identifiable information, credit card information, and usage data of our employees and customers on our computer networks and those of third parties. Although we take certain protective measures and endeavor to modify them as we believe circumstances warrant, invasive technologies and techniques continue to evolve rapidly, and increasingly sophisticated hacking organizations are targeting business systems. As a result, the computer systems, software and networks that we use are vulnerable to disruption, shutdown, unauthorized access, misuse, erasure, alteration, employee error, phishing, computer viruses, ransomware or other malicious code, and other events that could have a material security impact. The protective measures on which we rely may be inadequate to prevent or detect all material cybersecurity breaches or determine the extent of any material breach, and there can be no assurance that material undetected breaches have not already occurred. If any material cybersecurity event were to occur, it could disrupt our operations, distract our management, cause us to lose existing customers and fail to attract new customers, as well as subject us to regulatory actions, litigation, fines, damage to our reputation or competitive position, or orders or decrees requiring us to modify our business practices, any of which could have a material adverse effect on our financial position, results of operations or cash flows.

Risks related to economic conditions and trade relations

Our revenues, results of operations and financial condition may be adversely impacted by economic turmoil, political instability, declines in consumer and enterprise spending.

Economic and political conditions in the geographic markets we serve have experienced significant turmoil over the last several years, including a potential global recession, slow economic activity, tight credit markets, inflation and deflation concerns, low consumer confidence, limited capital spending, adverse business conditions, war and refugee crises in the Middle East and Europe, terrorist attacks, changes in government priorities, trade wars, restrictions on commercial fishing, a government shutdown, gridlock from a divided Congress, and liquidity concerns. These factors vary in intensity by region. We cannot predict the timing, duration, or ultimate impact of turmoil on our markets or our suppliers. We expect our business would be adversely impacted by any significant turmoil, to varying degrees and for varying amounts of time, in all our geographic markets.

Changes in U.S. trade policy, including changes to existing trade agreements and any resulting changes in international trade relations, may have a material adverse effect on us.

The U.S. may continue to alter its approach to international trade, which may impact existing bilateral or multi-lateral trade agreements and treaties with foreign countries. The U.S. has imposed tariffs on certain foreign goods and may increase tariffs or impose new ones, and certain foreign governments have retaliated and may continue to do so. We derive a majority of our revenues from international sales, which makes us especially vulnerable to increased tariffs. Changes in U.S. trade policy have created ongoing turmoil in international trade relations, and it is unclear what future actions governments will or will not take with respect to tariffs or other international trade agreements and policies. Ongoing or new trade wars or other governmental action related to tariffs or international trade agreements or policies could reduce demand for our products and services, increase our costs, reduce our profitability, adversely impact our supply chain or otherwise have a material adverse effect on our business and results of operations.

Changes in foreign currency exchange rates may negatively affect our financial condition and results of operations.

We face significant exposure to movements in exchange rates for foreign currencies, particularly the pound sterling and the euro. For example, during 2022, the U.S. dollar strengthened against certain foreign currencies, which adversely affected revenues reported in U.S. dollars and decreased the reported value of our assets in foreign countries. We also have intragroup receivables and liabilities, such as loans, that can generate significant foreign currency effects. Changes in exchange rates, particularly the U.S. dollar against the pound sterling, could lead to the recognition of unrealized foreign exchange losses.

Certain of our products and services are sold internationally in U.S. dollars; if the U.S. dollar continues to strengthen, the relative cost of these products and services to customers located in foreign countries would increase, which could adversely affect export sales. In addition, most of our financial obligations must be satisfied in U.S. dollars. Our exposures to changes in foreign currency exchange rates may change over time as our business practices evolve and could result in increased costs or reduced revenue and could adversely affect our cash flow. Changes in the relative values of currencies occur regularly and may have a significant impact on our operating results. We cannot predict with any certainty changes in foreign currency exchange rates or the degree to which we can cost-effectively mitigate this exposure.

Risks related to the sale of our inertial navigation business

We face potential liabilities and disruptions arising from the sale of our inertial navigation business.

On August 9, 2022, we sold our inertial navigation business to EMCORE Corporation. The sale of the inertial navigation business required us to separate and allocate specific assets to the business, including some shared assets. We could face disputes with EMCORE regarding whether or not certain assets were included in the sale. Moreover, we agreed, for a period of time after the sale, to continue to perform certain services that we historically performed for the inertial navigation business, and we also undertook other customary obligations associated with a disposition of a business by means of asset sale.

We incurred significant legal, accounting and financial advisory fees negotiating and consummating the sale of the inertial navigation business, and we may incur additional fees to resolve any dispute that may arise over the terms of the transaction or the parties' compliance with their obligations under the transaction agreements. Although EMCORE agreed to assume most liabilities associated with the inertial navigation business, it did not assume all such liabilities, which could lead to a dispute. Any such disputes could divert the attention of our management or otherwise have a material adverse effect on our business, financial condition and results of operations.

Risks related to our industry

Increasing competition may limit our ability to sell our products and services.

The mobile connectivity market is very competitive, and competition is increasing. We may not be able to compete successfully against current and future competitors, which would impair our ability to sell our products and services. Competition has intensified significantly in recent years, both from companies that seek to compete primarily on price as well as new, emerging non-geostationary satellite orbit (NGSO) services, such as Starlink, OneWeb, Kuiper, Telesat, and others. These companies may continue to implement price reductions and discounts for both products and services, which have required us to reduce our prices or offer discounts in an effort to maintain or increase our market share. We believe increased competition contributed to the decrease in our product sales in the six months ended June 30, 2023, and this trend may continue in future periods.

Some of our VSAT competitors have already leveraged partnerships amongst themselves in order to capture larger combined market share. Further, some of the companies that we depend on to supply us with capacity on satellite communications networks may vertically integrate by introducing their own products and services to compete with ours, which might motivate them to stop providing satellite network capacity to us, or to make it available only on less favorable terms.

The Starlink LEO service has adversely impacted our business, particularly within the global leisure segment. A significant number of leisure customers have adopted Starlink systems for both two-way communications as well as streaming, which has impacted both our VSAT Broadband and TracVision businesses. Although our leisure business accounts for less than 20% of our total revenue, competition from Starlink is beginning to impact our commercial business. If we are unable to develop a competitive alternative and this trend continues, it could have a material adverse effect on our revenue, profitability and cash flow.

In the marine market for satellite TV equipment, we compete primarily with Intellian, Cobham SATCOM and Raymarine (Intellian-made). In the marine market for two-way communications equipment, we compete primarily with Intellian and Cobham SATCOM. In the marine market for high-speed Internet, voice, fax, and data services, we compete primarily with Inmarsat, Marlink, Speedcast, Viasat, and Network Innovations, along with smaller, single-hub regional services. Additionally, we are starting to face competition from new NGSO networks such as SpaceX's Starlink and OneWeb. We also face competition from providers of low-speed data services, which include Inmarsat and Iridium Satellite LLC. In the market for land mobile satellite TV equipment, we compete primarily with King Controls and Winegard Company. In the markets for media content, the KVH Media Group competes primarily with Swank Motion Pictures, Baze Technology, and NewspaperDirect, Inc. Many of our competitors are well-established companies that have substantially greater financial, managerial, technical, marketing, personnel and other resources than we do, which may help them to compete more effectively against us.

We depend on sole or limited source suppliers, and any disruption in supply could impair our ability to deliver our products on time or at expected cost.

We obtain many key components for our products from third-party suppliers, and in some cases we use a single or a limited number of suppliers. Any interruption in supply could impair our ability to deliver our products until we identify and qualify a new source of supply, which could take several weeks, months or longer and could increase our costs significantly. For example, the global chip shortage and supply chain constraints resulting from the COVID-19 pandemic adversely impacted our ability to deliver products in a timely manner and increased our cost of sales due to rising prices for materials. In the second quarter of 2023, we estimate that raw material costs exceeded our expectations by approximately $0.4 million. We may not be able to pass along any of these cost increases to our customers, and customers may not wait for our products to become available. These disruptions in our supply chain could worsen, which could delay delivery of our products and services and adversely affect our revenue and results of operations. Suppliers might change or discontinue key components, which could require us to modify our product designs. In general, we do not have written long-term supply agreements with our suppliers but instead buy components through purchase orders, which expose us to potential price increases and termination of supply without notice or recourse. We generally do not carry significant inventories of product components, which could magnify the impact of the loss of a supplier. If we must use a new source of supply, we could face unexpected manufacturing difficulties and loss of product performance or reliability. In addition, lead times for certain components can increase significantly due to imbalances in overall market supply and demand. This, in turn, could limit our ability to satisfy demand for our products and could result in the cancellation of customer orders.

We may source more materials and components from international suppliers, which could disrupt our business.

We may increase sourcing of raw materials, manufactured components and subassemblies from international suppliers. Increased reliance on foreign manufacturing and/or raw material supply could lengthen our supply chain and increased the risk that a disruption in that supply chain could have a material adverse effect on our operations and financial performance.

Changes in the competitive environment, customer demand, supply chain issues, and the transition to new products may require inventory write-downs.

From time to time, we have recorded significant inventory charges and/or inventory write-offs as a result of substantial declines in customer demand. For example, in 2019, we recorded a $2.3 million inventory reserve relating to our TracPhone V-IP products as we decided to no longer promote sales of these products but instead to focus our efforts on migrating customers to our HTS network and products. Market or competitive changes, such as a continuation of the decline in demand for our TracVision products that we experienced in the first six months of 2023, could lead to future charges for excess or obsolete inventory, especially if we are unable to appropriately adjust the supply of material from our vendors.

Risks related to intellectual property and technological innovation

Our research and development efforts may be unsuccessful. If we are unable to improve our existing products and services and develop new, innovative products and services, our sales and market share may decline.

The market for mobile connectivity products and services is characterized by rapid technological change, frequent new product innovations, changes in customer requirements and expectations, and evolving industry standards. For example, we are starting to face competition from new LEO networks such as SpaceX's Starlink and OneWeb. If we fail to make innovations in our existing products and services and reduce the costs of our products and services, our market share may decline. For example, the introductions of our TracVision TV-series antennas in 2014 occurred later than we had anticipated, which we believe led certain customers to purchase competing products. Products or services using new technologies, or emerging industry standards, could render our products and services obsolete. If our competitors successfully introduce new or enhanced products or services that outperform our products or services, or are perceived as doing so, we may be unable to compete successfully in the markets affected by these changes.

Research and development is inherently complex and uncertain, and our current and anticipated research and development projects may not achieve the results we seek. The financial resources that we can devote to our research and development efforts may be insufficient to achieve our goals. Our efforts may not result in any viable products or may result in products whose performance, features, price or availability may not be attractive to customers or that we cannot manufacture and sell profitably.

Our business may suffer if we cannot protect our proprietary technology.

Our ability to compete depends significantly upon our patents, copyrights, source code, and other proprietary technology. The steps we have taken to protect our technology may be inadequate to prevent others from using what we regard as our technology to compete with us. Our patents will eventually expire and could be challenged, invalidated or circumvented. Customers or others with access to our proprietary or licensed media content could copy that content without permission or otherwise violate the terms of our customer agreements, which would adversely affect our revenues and could impair our relationships with content providers. In addition, the laws of some foreign countries do not protect our proprietary technology to the same extent as the laws of the United States, which could increase the likelihood of misappropriation. Any misappropriation of our technology could seriously harm our competitive position, which could lead to a substantial reduction in net sales. If we resort to legal proceedings to enforce our intellectual property rights, the proceedings could be burdensome, disruptive and expensive. The proceedings could distract the attention of management, and we may not prevail.

Claims by others that we infringe their intellectual property rights could harm our business and financial condition.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. We cannot be certain that our products do not and will not infringe issued patents, patents that may be issued in the future, or other intellectual property rights of others.

Risks related to government regulation

Our international operations complicate our business and require us to comply with multiple regulatory environments.

Historically, sales to customers outside the United States have accounted for a significant portion of our net sales. We derived 66%, 62% and 58% of our revenues from continuing operations in the six months ended June 30, 2023 and the years ended December 31, 2022 and 2021, respectively, from sales to these foreign customers. We have foreign offices in Denmark, the United Kingdom, Singapore, Japan, Norway and the Philippines, as well as a subsidiary in Brazil that manages local sales. Nonetheless, substantially all of our operations and approximately one-half of our personnel are located in the United States. Our limited international operations may impair our ability to compete successfully in international markets and to meet the service and support needs of our customers in countries where we have little to no infrastructure. Risks associated with our international business activities may increase our costs and require significant management attention. These risks include restrictions on international travel, which may restrict our ability to grow and service our business; tariffs; sanctions or other trade restrictions that preclude or restrict doing business with particular foreign governments, companies or individuals; technical challenges we may face in adapting our products to function with different satellite services and technology in use in various regions around the world; satisfaction of international regulatory requirements and delays and costs associated with procurement of any necessary licenses or permits; the potential unavailability of content licenses covering international waters and foreign locations; increased costs of providing customer support in multiple languages; increased costs of managing operations that are international in scope; potentially adverse tax consequences, including restrictions on the repatriation of earnings; protectionist laws and business practices that favor local competitors, which could slow our growth in international markets; potentially longer sales cycles; potentially longer accounts receivable payment cycles and difficulties in collecting accounts receivable; and economic and political instability in some international markets.

We could incur additional legal compliance costs associated with our international operations and could become subject to legal penalties if we do not comply with certain regulations.

Our international operations subject us to a number of legal requirements, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and the customs, export, trade sanctions and anti-boycott laws of the United States, including those administered by the U.S. Customs and Border Protection, the Bureau of Industry and Security, the Department of Commerce, the Department of State, and the Office of Foreign Assets Control of the Treasury Department, as well as those of other nations. In addition, many of the countries where our customers use our products and services have licensing and regulatory requirements for the importation and use of satellite communications and reception equipment, including the use of such equipment in territorial waters, the transmission of satellite signals on certain radio frequencies, the transmission of VoIP services using such equipment and the reception of certain video programming services. These laws and regulations are continually changing, making compliance complex. We incur significant costs identifying and maintaining compliance with applicable licensing and regulatory requirements. Our training and compliance programs and our other internal control policies may be insufficient to protect us from acts committed by our employees, agents or third-party contractors. Any violation of these requirements by us or our employees, agents or third-party contractors may subject us to significant criminal and civil liability.

We are subject to FCC rules and regulations, and any non-compliance could subject us to FCC enforcement actions, fines, loss of licenses and possibly restrictions on our ability to operate or offer certain of our services

The satellite communications industry in the United States is regulated by the Federal Communications Commission (FCC), and we are subject to FCC regulations relating to privacy, contributions to the Universal Service Fund, or USF, and other requirements. If we do not comply with FCC regulations, we could face enforcement actions, substantial fines, penalties, loss of licenses and possibly restrictions on our ability to operate or offer services. Any enforcement action by the FCC, which may be a public process, could hurt our reputation, impair our ability to sell our services to customers and harm our business and results of operations.

Privacy concerns and domestic or foreign laws and regulations may reduce demand for our services, increase our costs and harm our business.

Our company and our customers can use our services to collect, use and store personal, confidential and sensitive information regarding the content and manner of usage of our services by them, their employees and maritime crews. Federal, state and foreign governments have adopted and are proposing new and more stringent laws and regulations regarding the collection, use, storage and transfer of information, such as the European Union’s General Data Protection Regulation (“GDPR”). The costs of compliance with, and other burdens imposed by, such laws and regulations may limit the use and adoption of our services and reduce overall demand. Non-compliance with these laws and regulations could lead to significant remediation expenses, fines, penalties or other liabilities, such as orders or consent decrees that require modifications to our privacy practices, as well as reputational damage or third-party lawsuits seeking damages or other relief. For example, the GDPR imposes a strict data protection compliance regime with penalties of up to the greater of 2%-4% of worldwide revenue or €11-22 million.

Domestic and international legislative and regulatory initiatives may harm our ability, and the ability of our customers, to process, handle, store, use and transmit information, which could reduce demand for our services, increase our costs and force us to change our business practices. These laws and regulations are still evolving, are likely to be in flux and may be subject to uncertain interpretation for the foreseeable future. Our business also could be harmed if legislation or regulations are adopted, interpreted or implemented in a manner that is inconsistent from country to country or inconsistent with our current policies and practices or those of our customers.

Risks related to owning our common stock

The market price of our common stock may be volatile.

Our stock price has historically been volatile. During the period from January 1, 2018 to June 30, 2023, the trading price of our common stock ranged from $6.36 to $15.29. Many factors may cause our stock price to fluctuate, including variations in quarterly results; the introduction of new products and services by us or our competitors; changes in estimates of our performance or recommendations by securities analysts; the hiring or departure of key personnel; acquisitions or strategic alliances involving us or our competitors; market conditions in our industry; and the global macroeconomic and geopolitical environment. Broad market fluctuations may adversely affect our stock price. When the market price of a company’s stock drops significantly, stockholders often institute securities litigation against that company. Any such litigation could cause us to incur significant expenses defending against the claim, divert the time and attention of our management and result in significant damages.

ITEM 6. EXHIBITS

Exhibits:

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	Certificate of Designations of Series A Junior Participating Cumulative Preferred Stock of KVH Industries, Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock		8-A	August 19, 2022	3.1
3.3	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 June 30, 2023, formatted in Inline XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets (unaudited), (ii) the Consolidated Statements of Operations (unaudited), (iii) the Consolidated Statements of Comprehensive Income (Loss) (unaudited), (iv) the Consolidated Statements of Stockholders' Equity (unaudited), (v) the Consolidated Statements of Cash Flows (unaudited), and (vi) the Notes to Consolidated Interim Financial Statements (unaudited).	X			
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)	X			

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: August 9, 2023

KVH Industries, Inc.

By: /s/ ROGER A. KUEBEL

Roger A. Kuebel
(Duly Authorized Officer and Chief Financial Officer)

Exhibit 31.1

Certification of Principal Executive Officer
Pursuant to Rule 13a-14 or 15d-14 under the Securities Exchange Act of 1934 as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Brent C. Bruun, certify that:

1. I have reviewed this quarterly report on Form 10-Q of KVH Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2023

/s/ Brent C. Bruun

Brent C. Bruun

President, Chief Executive Officer and Director

Exhibit 31.2

Certification of Principal Financial Officer
Pursuant to Rule 13a-14 or 15d-14 under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Roger A. Kuebel, certify that:

1. I have reviewed this quarterly report on Form 10-Q of KVH Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2023

/s/ Roger A. Kuebel

Roger A. Kuebel

Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. §1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of KVH Industries, Inc. (the "Company") for the quarter ended June 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned President, Chief Executive Officer and Director, and Chief Financial Officer of the Company, certifies, to his best knowledge and belief, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

	/s/ Brent C. Bruun		/s/ Roger A. Kuebel
	Brent C. Bruun		Roger A. Kuebel
	President, Chief Executive Officer and Director		Chief Financial Officer
Date:	August 9, 2023	Date:	August 9, 2023