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

FORM 10-Q

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

For the quarterly period ended September 30, 2018

OR

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

For the transition period from _____ to _____

Commission File Number: 0-23081

FARO TECHNOLOGIES, INC.

(Exact Name of Registrant as Specified in Its Charter)

Florida
(State or other Jurisdiction of Incorporation or Organization)

59-3157093
(I.R.S. Employer Identification No.)

250 Technology Park, Lake Mary, Florida
(Address of Principal Executive Offices)

32746
(Zip Code)

(407) 333-9911
(Registrant's Telephone Number, including Area Code)

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

Indicate by check mark whether the registrant has submitted electronically 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

There were 17,252,953 shares of the registrant's common stock outstanding as of October 29, 2018.

FARO TECHNOLOGIES, INC.

Quarterly Report on Form 10-Q
Quarter Ended September 30, 2018

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PART I. FINANCIAL INFORMATION**Item 1. Financial Statements****FARO TECHNOLOGIES, INC. AND SUBSIDIARIES**
CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)	September 30, 2018 (unaudited)	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 115,098	\$ 140,960
Short-term investments	19,871	10,997
Accounts receivable, net	75,361	72,105
Inventories, net	62,471	53,786
Prepaid expenses and other current assets	22,024	16,311
Total current assets	294,825	294,159
Property and equipment:		
Machinery and equipment	73,748	66,514
Furniture and fixtures	6,817	6,945
Leasehold improvements	20,049	19,872
Property and equipment at cost	100,614	93,331
Less: accumulated depreciation and amortization	(69,919)	(61,452)
Property and equipment, net	30,695	31,879
Goodwill	66,201	52,750
Intangible assets, net	36,030	22,540
Service and sales demonstration inventory, net	35,288	39,614
Deferred income tax assets, net	15,685	15,606
Other long-term assets	4,689	2,030
Total assets	\$ 483,413	\$ 458,578
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 16,401	\$ 11,569
Accrued liabilities	29,186	27,362
Income taxes payable	908	4,676
Current portion of unearned service revenues	30,517	29,674
Customer deposits	2,538	2,604
Total current liabilities	79,550	75,885
Unearned service revenues - less current portion	13,940	11,815
Deferred income tax liabilities	613	695
Income taxes payable - less current portion	14,579	15,952
Other long-term liabilities	3,772	2,165
Total liabilities	112,454	106,512
Commitments and contingencies - See Note 16		
Shareholders' equity:		
Common stock - par value \$.001, 50,000,000 shares authorized; 18,675,208 and 18,277,142 issued, respectively; 17,252,160 and 16,796,884 outstanding, respectively	19	18
Additional paid-in capital	249,284	223,055
Retained earnings	170,161	168,624
Accumulated other comprehensive loss	(16,896)	(7,822)
Common stock in treasury, at cost; 1,423,048 and 1,480,258 shares, respectively	(31,609)	(31,809)
Total shareholders' equity	370,959	352,066
Total liabilities and shareholders' equity	\$ 483,413	\$ 458,578

The accompanying notes are an integral part of these condensed consolidated financial statements.

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

(in thousands, except share and per share data)	Three Months Ended		Nine Months Ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Sales				
Product	\$ 75,817	\$ 68,563	\$ 222,118	\$ 193,476
Service	23,888	21,687	68,665	61,018
Total sales	99,705	90,250	290,783	254,494
Cost of Sales				
Product	34,004	26,673	88,766	78,186
Service	13,384	11,543	38,223	33,765
Total cost of sales (exclusive of depreciation and amortization, shown separately below)	47,388	38,216	126,989	111,951
Gross Profit	52,317	52,034	163,794	142,543
Operating Expenses				
Selling and marketing	27,811	25,990	86,166	74,884
General and administrative	12,496	10,307	34,889	32,883
Depreciation and amortization	4,747	4,368	13,467	12,075
Research and development	9,975	9,019	29,364	26,530
Total operating expenses	55,029	49,684	163,886	146,372
(Loss) income from operations	(2,712)	2,350	(92)	(3,829)
Other expense (income)				
Interest income, net	(96)	(78)	(205)	(249)
Other expense (income), net	226	(147)	868	320
(Loss) income before income tax (benefit) expense	(2,842)	2,575	(755)	(3,900)
Income tax (benefit) expense	(354)	947	73	(442)
Net (loss) income	\$ (2,488)	\$ 1,628	\$ (828)	\$ (3,458)
Net (loss) income per share - Basic	\$ (0.15)	\$ 0.10	\$ (0.05)	\$ (0.21)
Net (loss) income per share - Diluted	\$ (0.15)	\$ 0.10	\$ (0.05)	\$ (0.21)
Weighted average shares - Basic	17,122,705	16,708,446	16,976,459	16,697,729
Weighted average shares - Diluted	17,122,705	16,796,518	16,976,459	16,697,729

The accompanying notes are an integral part of these condensed consolidated financial statements.

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)

(in thousands)	Three Months Ended		Nine Months Ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Net (loss) income	\$ (2,488)	\$ 1,628	\$ (828)	\$ (3,458)
Currency translation adjustments, net of income tax	(4,911)	3,875	(9,074)	15,174
Comprehensive (loss) income	\$ (7,399)	\$ 5,503	\$ (9,902)	\$ 11,716

The accompanying notes are an integral part of these condensed consolidated financial statements.

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

(in thousands)	Nine Months Ended	
	September 30, 2018	September 30, 2017
Cash flows from:		
Operating activities:		
Net loss	\$ (828)	\$ (3,458)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	13,467	12,075
Stock-based compensation	5,717	4,823
Provision for bad debts	360	321
Loss on disposal of assets	401	263
Provision for excess and obsolete inventory	5,357	1,271
Deferred income tax (benefit) expense	(161)	224
Change in operating assets and liabilities:		
Decrease (Increase) in:		
Accounts receivable	(1,882)	3,701
Inventories	(12,104)	(11,450)
Prepaid expenses and other current assets	(4,257)	(3,834)
(Decrease) Increase in:		
Accounts payable and accrued liabilities	569	(2,774)
Income taxes payable	(5,082)	(598)
Customer deposits	(107)	(6)
Unearned service revenues	3,415	(1,326)
Net cash provided by (used in) operating activities	4,865	(768)
Investing activities:		
Proceeds from sale of investments	—	32,000
Purchases of investments	(9,000)	—
Purchases of property and equipment	(6,895)	(6,081)
Payments for intangible assets	(1,716)	(1,345)
Acquisition of businesses	(27,638)	(5,496)
Equity investments and advances to affiliates	(1,786)	—
Net cash (used in) provided by investing activities	(47,035)	19,078
Financing activities:		
Payments on capital leases	(84)	(6)
Payment of contingent consideration for acquisitions	(638)	(521)
Proceeds from issuance of stock related to stock option exercises	20,901	387
Net cash provided by (used in) financing activities	20,179	(140)
Effect of exchange rate changes on cash and cash equivalents	(3,871)	5,502
(Decrease) increase in cash and cash equivalents	(25,862)	23,672
Cash and cash equivalents, beginning of period	140,960	106,169
Cash and cash equivalents, end of period	\$ 115,098	\$ 129,841

The accompanying notes are an integral part of these condensed consolidated financial statements.

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

(in thousands, except share and per share data, or as otherwise noted)

NOTE 1 – DESCRIPTION OF BUSINESS

FARO Technologies, Inc. and its subsidiaries (collectively “FARO,” the “Company,” “us,” “we” or “our”) is a global technology company that designs, develops, manufactures, markets and supports software driven, three-dimensional (“3D”) measurement, imaging and realization systems. This technology permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes. Our devices are used for inspection of components and assemblies, rapid prototyping, reverse engineering, documenting large volume or structures in 3D, surveying and construction, as well as for investigation and reconstruction of accident sites or crime scenes. We sell the majority of our products through a direct sales force across a broad number of customers in a range of manufacturing, industrial, architecture, surveying, building information modeling, construction, public safety forensics, cultural heritage, dental, and other applications. Our FaroArm[®], FARO ScanArm[®], FARO Laser Tracker[™], FARO Cobalt Array Imager, FARO Laser Projector, and their companion CAM2[®], BuildIT, and BuildIT Projector software solutions, provide for Computer-Aided Design (“CAD”) based inspection, factory-level statistical process control, high-density surveying and laser-guided assembly and production. Together, these products integrate the measurement, quality inspection, and reverse engineering functions with CAD and 3D software to improve productivity, enhance product quality, and decrease rework and scrap in the manufacturing process, mainly supporting applications in our 3D Factory (formerly known as “Factory Metrology”) vertical. Our FARO Focus and FARO Scanner Freestyle^{3DX} laser scanners, and their companion FARO SCENE, BuildIT Construction, FARO As-Built[™], and FARO Zone public safety forensics software offerings, are utilized for a wide variety of 3D modeling, documentation and high-density surveying applications in our Construction Building Information Modeling (“Construction BIM,” formerly known as “Construction BIM-CIM”) and Public Safety Forensics verticals. Our FARO ScanArm[®], FARO Cobalt Array Imager, FARO Scanner Freestyle^{3DX} laser scanners and their companion SCENE software, and other 3D structured light scanning solutions specific to the dental industry also enable a fully digital workflow used to capture real world geometry for the purpose of empowering design, enabling innovation, and speeding up the design cycle, supporting our 3D Design (formerly known as “Product Design”) vertical. Our line of galvanometer-based scan heads and laser scan controllers are used in a variety of laser applications and are integrated into larger components and systems, supporting our Photonics vertical.

We report our segment information in accordance with the provisions of Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 280, *Segment Reporting* (“FASB ASC Topic 280”). We evaluate business performance based upon several metrics, using segment profit as the primary financial measure. During the nine months ended September 30, 2018, the following changes were made to our verticals and reporting segments when compared to our Annual Report on Form 10-K for the fiscal year ended December 31, 2017:

- In the first quarter of 2018, we combined our historical Factory Metrology and 3D Machine Vision verticals under a single reporting segment, 3D Factory, which replaced our Factory Metrology reporting segment, due to the linkage between the two historical verticals related to the type or class of customers served, the nature of the products and services provided, and the nature of the production processes. The 3D Machine Vision vertical was previously reported in our Other reporting segment.
- In the first quarter of 2018, we renamed our Other reporting segment “Emerging Verticals.”
- In the third quarter of 2018, we merged the historical Factory Metrology and 3D Machine Vision verticals into one vertical named “3D Factory” for greater consistency with our realigned reporting segments.
- In the third quarter of 2018, we segregated the operations of our recent acquisitions of Laser Control Systems Limited and Lanmark Controls, Inc., along with the operations resulting from our recent acquisition of substantially all of the assets of Instrument Associates, LLC d/b/a Nutfield Technology, into a vertical that we have named “Photonics.” The creation of this vertical will enable us to better focus on our product range directed at laser steering. These operations were historically reported in the 3D Factory reporting segment in the first six months of 2018 and the historical Factory Metrology reporting segment in 2017 and will now be included in the Emerging Verticals (formerly known as “Other”) reporting segment. Due to this change, we performed a qualitative goodwill impairment analysis. Management has concluded there was no goodwill impairment at the time of this vertical reporting change.
- In the third quarter of 2018, we renamed our Product Design vertical “3D Design.”

There has been no change in our total consolidated financial condition or results of operations previously reported as a result of the changes in our verticals and reportable segments. The amounts related to our reporting segment information for the three and nine months ended September 30, 2017 have been restated throughout this Quarterly Report on Form 10-Q to reflect the changes in our reporting segments. Each of our reporting segments continue to employ consistent accounting policies. As a result of this assessment, we now report our activities in the following three reportable segments:

- The 3D Factory reporting segment contains solely our 3D Factory vertical (formerly our Factory Metrology and 3D Machine Vision verticals) and provides both standardized and customized solutions for 3D measurement and inspection in an industrial or manufacturing environment. Applications include alignment, part inspection, dimensional analysis, first article inspection, incoming and in-process inspection, machine calibration, non-contact inspection, robot calibration, tool building and set-up, and assembly guidance.
- The Construction BIM reporting segment contains solely our Construction BIM vertical and provides solutions for as-built data capturing and 3D visualization in building information modeling applications, allowing our customers in the architecture, engineering and construction markets to quickly and accurately extract two-dimensional (“2D”) and 3D measurement points. Applications include as-built documentation, construction monitoring, surveying, asset and facility management, and heritage preservation.
- The Emerging Verticals reporting segment (formerly known as “Other”) includes our 3D Design (formerly known as “Product Design”), Public Safety Forensics, and Photonics verticals. Our 3D Design vertical provides advanced 3D solutions to assist in the engineering or design of a movable object, enabling a full digital workflow for applications that include reverse engineering and virtual simulation. This vertical also includes our 3D dental solutions business, which enables customers to utilize 3D structured light solutions specific to the dental industry. Our Public Safety Forensics vertical provides solutions to public safety officials and professionals to capture environmental or situational scenes in 2D and 3D for crime, crash and fire scene investigations and environmental safety evaluations. Our Photonics vertical develops and markets galvanometer-based laser measurement products and solutions.

All operating segments that do not meet the criteria to be reportable segments are aggregated in the Emerging Verticals reporting segment and have been combined based on the aggregation criteria and quantitative thresholds in accordance with the provisions of FASB ASC Topic 280. See Note 15 – Segment Reporting for further information.

NOTE 2 – PRINCIPLES OF CONSOLIDATION

Our condensed consolidated financial statements include the accounts of FARO Technologies, Inc. and its subsidiaries, all of which are wholly-owned. All intercompany transactions and balances have been eliminated. The financial statements of our foreign subsidiaries are translated into U.S. dollars using exchange rates in effect at period-end for assets and liabilities and average exchange rates during each reporting period for results of operations. Adjustments resulting from financial statement translations are reflected as a separate component of accumulated other comprehensive loss. Foreign currency transaction gains and losses are included in net income (loss).

NOTE 3 – BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements and notes thereto have been prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”) for interim financial information and with the instructions of Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. These condensed consolidated financial statements include all normal recurring accruals and adjustments considered necessary by management for a fair presentation in conformity with U.S. GAAP. Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates. The condensed consolidated results of operations for the three or nine months ended September 30, 2018 are not necessarily indicative of results that may be expected for the year ending December 31, 2018 or any future period.

The information included in this Quarterly Report on Form 10-Q, including the interim condensed consolidated financial statements and the accompanying notes, should be read in conjunction with the audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017. The accompanying December 31, 2017 condensed consolidated balance sheet has been derived from those audited consolidated financial statements.

As described in Note 1 – Description of Business, we changed our reporting segment structure. Amounts related to our reporting segment information for the three and nine months ended September 30, 2017 have been restated throughout this Quarterly Report on Form 10-Q to reflect the changes in our reporting segments.

NOTE 4 – IMPACT OF RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Impact of Recently Adopted Accounting Standards -

In January 2017, the FASB issued Accounting Standards Update (“ASU”) No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* (“ASU 2017-01”) in order to clarify the definition of a business and provide additional guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. ASC Topic 805 recognizes three elements of a business: inputs, processes, and outputs. While an integrated set of assets and activities (collectively referred to as a “set”) that is a business usually has outputs, outputs are not required to be present. Additionally, all the inputs and processes that a seller uses in operating a set are not required if market participants can acquire the set and continue to produce outputs. ASU 2017-01 provides a screen to determine when a set is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. If the screen is not met, the new guidance (1) requires that to be considered a business, a set must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output and (2) removes the evaluation of whether a market participant could replace missing elements. The new guidance provides a framework to assist entities in evaluating whether both an input and a substantive process are present. This framework includes two sets of criteria to consider that depend on whether a set has outputs. Although outputs are not required for a set to be a business, outputs generally are a key element of a business. ASU 2017-01 provides more stringent criteria for sets without outputs and more narrowly defines the term output. ASU 2017-01 became effective for us on January 1, 2018 and was applied prospectively. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* (“ASU 2016-16”), which removes the prohibition in ASC Topic 740 against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. This ASU requires the tax effects of intercompany transactions, other than sales of inventory, to be recognized when the transfer occurs, instead of deferred until the transferred asset is sold to a third party or otherwise recovered through use of the asset. The new guidance must be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. ASU 2016-16 became effective for us on January 1, 2018 and was applied on a modified retrospective basis. Our adoption of the new guidance did not have an impact on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which clarifies how companies present and classify certain cash receipts and cash payments in the statement of cash flows. ASU 2016-15 became effective for us on January 1, 2018 and was applied on a modified retrospective basis. Our adoption of the new guidance did not have an impact on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers: (Topic 606)* (“ASU 2014-09”), amending its accounting guidance related to revenue recognition. Under this ASU and subsequently issued amendments, revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Additional disclosures are required to provide the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The following represents the impact of our adoption by significant revenue stream:

- **Measurement equipment and related software:** Under the prior accounting guidance, sales of measurement, imaging and realization equipment and related software sales were generally recognized upon shipment, as we considered the earnings process complete as of the shipping date. The related software sold with our measurement, imaging and realization equipment functions together with such equipment to deliver the tangible product’s essential functionality. Customers frequently purchase extended warranties when purchasing measurement equipment and related software. Under the new guidance, we allocate the contract price to performance obligations based on our best estimate of the standalone selling price, utilizing data from the sale of our applicable products and services to customers separately in similar circumstances, with the exception of software licenses. We use the residual method for allocating the contract price to performance obligations relating to software licenses. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to our measurement, imaging and realization equipment and related software.
- **Extended warranties:** Under the prior accounting guidance, extended warranty sales were recognized on a straight-line basis over the term of the warranty. Extended warranty sales include contract periods that extend between one month and three years. The unearned service revenues reported in current and noncurrent liabilities on our condensed consolidated balance sheets appropriately reflect the remaining performance obligations related to these contracts. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to extended warranties.
- **Software:** Under the prior accounting guidance, software-only sales were recognized when no further significant production, modification or customization of the software was required and when the following criteria were met: persuasive evidence of a sales agreement existed, delivery had occurred, and the sales price was fixed or determinable and deemed collectible. These software arrangements generally include short-term maintenance that is considered to be post-contract support. Maintenance renewals, when sold, were recognized on a straight-line basis over the term of the maintenance agreement. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to software-only sales and maintenance renewals.

The unearned service revenue liabilities reported on our condensed consolidated balance sheets reflect the contract liabilities to satisfy the remaining performance obligations for extended warranties and software maintenance. The current portion of unearned service revenues on our condensed consolidated balance sheets is what we expect to recognize to revenue within twelve months after the applicable balance sheet date relating to extended warranty and software maintenance contract liabilities. The unearned service revenues - less current portion on our condensed consolidated balance sheets is what we expect to recognize to revenue extending beyond twelve months after the applicable balance sheet date relating to extended warranty and software maintenance contract liabilities. Customer deposits on our condensed consolidated balance sheets represent customer prepayments on contracts for performance obligations that we must satisfy in the future to recognize the related contract revenue. During the three months ended September 30, 2018, we recognized \$5.3 million of service revenue that was deferred on our consolidated balance sheet as of December 31, 2017. During the nine months ended September 30, 2018, we recognized \$21.5 million of service revenue that was deferred on our consolidated balance sheet as of December 31, 2017.

Under the prior accounting guidance, we recognized sales commission expense as incurred. Under the new guidance, we must capitalize commission expense and amortize such costs ratably over the term of the contract. In accordance with the modified retrospective method of adoption, we recorded a net increase to opening retained earnings as of January 1, 2018 of \$2.4 million and recognized an associated \$2.4 million deferred cost asset due to the cumulative impact of adopting the new guidance. As of September 30, 2018, the deferred cost asset related to deferred commissions was approximately \$2.6 million. For classification purposes, \$1.8 million and \$0.8 million are comprised within the Prepaid expenses and other current assets and Other long-term assets, respectively, on our condensed consolidated balance sheet as of September 30, 2018. The impact of adopting the new guidance was not material to the consolidated operating results for the three and nine months ended September 30, 2018.

We have elected to account for shipping and handling as activities to fulfill the promise to transfer the good. As such, shipping and handling fees billed to customers in a sales transaction are recorded in Product Sales and shipping and handling costs incurred are recorded in Cost of Sales. Additionally, we have elected to exclude from Sales any value add, sales and other taxes that we collect concurrent with revenue-producing activities. These accounting policy elections are consistent with the manner in which we have historically recorded shipping and handling fees and taxes.

The nature of certain of our contracts gives rise to variable consideration, which may be constrained, primarily related to an allowance for sales returns. In accordance with the adoption of the new guidance, we are required to estimate the contract asset related to sales returns and record a corresponding adjustment to Cost of Sales. Historically, our allowance for sales returns has not been material and was approximately \$0.1 million as of September 30, 2018. As such, our adoption of the new guidance did not result in material changes to our accounting for variable consideration related to sales returns, and the corresponding contract asset related to such returns. See Note 5 – Revenues for further information.

Impact of Recently Issued Accounting Standards -

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* (“ASU 2017-04”), which is intended to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the current guidance, performance of Step 2 requires us to calculate the implied fair value of goodwill by following procedures that would be required to determine the fair value of assets acquired and liabilities assumed in a business combination. Under the new guidance, we will perform our goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge will be recognized for the amount by which the carrying amount exceeds the reporting unit’s fair value up to the amount of the goodwill allocated to the reporting unit. The new guidance also eliminates the requirements for any reporting unit with a zero or negative carrying amount to perform Step 2 of the goodwill impairment test if it fails the qualitative assessment. As a result, all reporting units will be subject to the same impairment assessment. We will still have the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. ASU 2017-04 becomes effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted for annual or any interim goodwill impairment tests after January 1, 2017. The amendments in this ASU will be applied on a prospective basis. Disclosure of the nature and reason for the change in accounting principle is required upon transition. This disclosure is required in the first annual period and in the interim period within the first annual period when we initially adopt the amendments in this ASU. We plan to adopt this guidance for our fiscal year ending December 31, 2020. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements to enable users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, was issued by the

FASB in July 2018 and allows for a cumulative-effect adjustment transition method of adoption. The new guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those years. We plan to adopt this guidance in the first quarter of 2019 using the cumulative-effect adjustment transition method. Although we are in the process of evaluating the impact of adoption of this ASU on our consolidated financial statements, we currently believe the most significant changes will be related to the recognition of new right-of-use assets and lease liabilities on our consolidated balance sheet for operating leases.

NOTE 5 – REVENUES

The following tables present our revenues by Sales type as presented in our condensed consolidated statements of operations disaggregated by the timing of transfer of goods or services (in thousands, unaudited):

	For the Three Months Ended September 30,	
	2018	2017
Product sales		
Product transferred to customers at a point in time	\$ 75,817	\$ 68,563
Product transferred to customers over time	—	—
	<u>\$ 75,817</u>	<u>\$ 68,563</u>

	For the Nine Months Ended September 30,	
	2018	2017
Product sales		
Product transferred to customers at a point in time	\$ 222,118	\$ 193,476
Product transferred to customers over time	—	—
	<u>\$ 222,118</u>	<u>\$ 193,476</u>

	For the Three Months Ended September 30,	
	2018	2017
Service sales		
Service transferred to customers at a point in time	\$ 11,580	\$ 9,522
Service transferred to customers over time	12,308	12,165
	<u>\$ 23,888</u>	<u>\$ 21,687</u>

	For the Nine Months Ended September 30,	
	2018	2017
Service sales		
Service transferred to customers at a point in time	\$ 30,939	\$ 26,694
Service transferred to customers over time	37,726	34,324
	<u>\$ 68,665</u>	<u>\$ 61,018</u>

The following table presents our revenues disaggregated by geography, based on the billing addresses of our customers (in thousands, unaudited):

	For the Three Months Ended September 30,	
	2018	2017
Net sales to external customers		
United States	\$ 38,090	\$ 35,316
EMEA ⁽¹⁾	29,577	27,975
APAC ⁽¹⁾	27,942	23,810
Other Americas ⁽¹⁾	4,096	3,149
	<u>\$ 99,705</u>	<u>\$ 90,250</u>

	For the Nine Months Ended September 30,	
	2018	2017
Net sales to external customers		
United States	\$ 115,670	\$ 99,229
EMEA ⁽¹⁾	88,858	77,256
APAC ⁽¹⁾	75,475	67,951
Other Americas ⁽¹⁾	10,780	10,058
	<u>\$ 290,783</u>	<u>\$ 254,494</u>

⁽¹⁾ Regions represent Europe, the Middle East, and Africa (EMEA); Asia-Pacific (APAC); and Canada, Mexico, and Brazil (Other Americas).

NOTE 6 – STOCK-BASED COMPENSATION

Stock-based compensation expense reflects the fair value of stock-based awards measured at the grant date and is recognized over the requisite service period.

We have two compensation plans that provide for the granting of stock options and other share-based awards to key employees and non-employee members of the Board of Directors (the “Board”). The 2009 Equity Incentive Plan (the “2009 Plan”) and the 2014 Equity Incentive Plan (the “2014 Plan”) provide for granting options, restricted stock, restricted stock units or stock appreciation rights to employees and non-employee directors. In May 2018, our shareholders approved an amendment to the 2014 Plan, which increased the number of shares available for issuance under the 2014 Plan by 1,000,000 shares. A maximum of 2,974,543 shares are available for issuance under the 2014 Plan, as amended, plus the number of shares (not to exceed 891,960) underlying awards outstanding under the 2004 Equity Incentive Plan (the “2004 Plan”) and the 2009 Plan as of May 29, 2014 that thereafter terminate or expire unexercised or are canceled, forfeited or lapse for any reason. No awards were outstanding under the 2004 Plan as of September 30, 2018, and no further grants will be made under the 2004 Plan or the 2009 Plan.

Upon election to the Board, each non-employee director receives an initial equity grant of shares of restricted common stock with a value equal to \$100,000, calculated using the closing share price on the date of the non-employee director’s election to the Board. The initial restricted stock grant vests on the third anniversary of the grant date, subject to the non-employee director’s continued membership on the Board. Annually, the non-employee directors are granted restricted shares with a value equal to \$100,000 on the first business day following the annual meeting of shareholders, calculated using the closing price of our common stock on that day. In addition, the Lead Director is annually granted restricted shares with a value equal to \$40,000 on the first business day following the annual meeting of shareholders, calculated using the closing price of our common stock on that day. The shares of restricted stock granted annually to our non-employee directors and our Lead Director vest on the day prior to the following year’s annual meeting date, subject to the non-employee director’s continued membership on the Board. We record compensation cost associated with our restricted stock grants on a straight-line basis over the vesting term.

Annually, upon approval by our Compensation Committee, we grant stock options and restricted stock units to certain employees. We also grant stock options and restricted stock units to certain new employees throughout the year. The fair value of these stock-based awards is determined by using (a) the current market price of our common stock on the grant date in the case of restricted stock units or (b) the Black-Scholes option valuation model in the case of stock options.

Our annual grants in March 2018 and March 2017 consisted of stock options and restricted stock units that are subject to only time-based vesting. The number of stock options and/or restricted stock units granted was based on the employee's individual objectives, performance against operational metrics assigned to the employee and overall contribution to FARO. The stock options vest in three equal annual installments beginning one year after the grant date. The restricted stock unit awards vest in full on the three-year anniversary of the grant date. The fair value of these stock-based awards is determined by using (a) the Black-Scholes option valuation model in the case of stock options or (b) the current market price of our common stock on the grant date in the case of restricted stock units.

In 2015, we granted performance-based stock options and restricted stock units to certain executives. These awards vested in three annual installments beginning one year after the grant date if the applicable performance measures or strategic objectives were achieved. The related stock-based compensation expense was recognized over the requisite service period, taking into account the probability that we would satisfy the performance measures or strategic objectives. In addition to certain strategic objectives, the performance-based stock options and restricted stock units granted in 2015 were earned and vested based upon (1) our achievement of specified revenue and earnings per share targets, and (2) our total shareholder return ("TSR") relative to the TSR attained by companies within our defined peer group.

Due to the TSR presence in certain performance-based grants, the fair value of these awards was determined using the Monte Carlo Simulation valuation model. We expensed these market condition awards over the three-year vesting period regardless of the value the award recipients ultimately received. In March 2018, our Compensation Committee determined that 7,743 performance-based stock options and 266 restricted stock units were earned for the 2017 performance period and 17,160 stock options and 640 restricted stock units were unearned, as the required metrics were not achieved. As of September 30, 2018, all performance-based stock options and restricted stock units granted in 2015 were either vested or were forfeited because they were not earned.

The Black-Scholes option valuation model incorporates assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. The weighted-average grant-date fair value of the stock options that were granted during the nine months ended September 30, 2018 and September 30, 2017 and valued using the Black-Scholes option valuation model was \$23.43 and \$14.51 per option, respectively. For stock options granted during the nine months ended September 30, 2018 and September 30, 2017 valued using the Black-Scholes option valuation model, we used the following assumptions:

	Nine Months Ended	
	September 30, 2018	September 30, 2017
Risk-free interest rate	2.65%	1.88% - 2.02%
Expected dividend yield	—%	—%
Expected term of option	4 years	5 years
Expected volatility	45.0%	45.2%
Weighted-average expected volatility	45.0%	45.2%

Historical information was the primary basis for the selection of the expected dividend yield, expected volatility and the expected lives of the options. The risk-free interest rate was based on the yields of U.S. zero coupon issues and U.S. Treasury issues, with a term approximating the expected life of the option being valued.

A summary of stock option activity and weighted-average exercise prices during the nine months ended September 30, 2018 follows:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value as of September 30, 2018
Outstanding at January 1, 2018	1,156,763	\$ 45.93		
Granted	174,439	61.30		
Forfeited or expired	(72,785)	51.66		
Exercised	(439,677)	47.25		
Unearned performance-based options	(17,160)	59.97		
Outstanding at September 30, 2018	801,580	\$ 47.61	4.6	\$ 13,419
Options exercisable at September 30, 2018	393,321	\$ 49.65	2.1	\$ 5,780

The total intrinsic value of stock options exercised during the three months ended September 30, 2018 and September 30, 2017 was \$4.7 million and less than \$0.1 million, respectively. For the nine months ended September 30, 2018 and September 30, 2017, the total intrinsic value of the stock options exercised in the respective period was \$7.5 million and \$0.1 million.

The fair value of stock options vested during the three months ended September 30, 2018 and September 30, 2017 was \$0.1 million and less than \$0.1 million, respectively. The fair value of stock options vested during the nine months ended September 30, 2018 and September 30, 2017 was \$3.2 million and \$3.0 million, respectively.

The following table summarizes the restricted stock and restricted stock unit activity and weighted average grant-date fair values for the nine months ended September 30, 2018:

	Shares	Weighted-Average Grant Date Fair Value
Non-vested at January 1, 2018	257,492	\$ 34.75
Granted	102,458	60.26
Forfeited	(20,578)	38.07
Vested	(18,618)	35.03
Unearned performance-based awards	(640)	51.15
Non-vested at September 30, 2018	320,114	\$ 42.64

We recorded total stock-based compensation expense of \$2.3 million and \$1.6 million for the three months ended September 30, 2018 and September 30, 2017, respectively, and \$5.7 million and \$4.8 million for the nine months ended September 30, 2018 and September 30, 2017, respectively.

As of September 30, 2018, there was \$12.7 million of total unrecognized stock-based compensation expense related to non-vested stock-based compensation arrangements. The expense is expected to be recognized over a weighted average period of 2.0 years.

NOTE 7 – SHORT TERM INVESTMENTS

Short-term investments at September 30, 2018 consisted of U.S. Treasury Bills totaling \$19.9 million, consisting of \$11.0 million maturing on December 6, 2018 and \$8.9 million maturing on March 14, 2019, respectively. Short-term investments at December 31, 2017 consisted of U.S. Treasury Bills totaling \$11.0 million that matured on January 11, 2018. The interest rates on the U.S. Treasury Bills held on September 30, 2018 and maturing on December 6, 2018 and March 14, 2019 were 1.9% and 2.2%, respectively, and were less than one percent for the U.S. Treasury Bills held as of December 31, 2017. The investments are classified as held-to-maturity and recorded at cost plus accrued interest, which approximates fair value. The fair value of the U.S. Treasury Bills at September 30, 2018 and December 31, 2017 were classified as Level 1, as they are traded with sufficient frequency and volume to enable us to obtain pricing information on an ongoing basis. For further discussion of fair value, refer to Note 13 – Fair Value of Financial Instruments.

NOTE 8 – ACCOUNTS RECEIVABLE

Accounts receivable consist of the following:

	As of September 30, 2018	As of December 31, 2017
Accounts receivable	\$ 77,394	\$ 74,062
Allowance for doubtful accounts	(2,033)	(1,957)
Total	<u>\$ 75,361</u>	<u>\$ 72,105</u>

NOTE 9 – INVENTORIES

Inventories are stated at the lower of cost or net realizable value using the first-in first-out (FIFO) method. We have four principal categories of inventory: 1) raw materials; 2) manufactured product to be sold; 3) sales demonstration inventory, which consists of completed product used to support our sales force and demonstrations; and 4) service inventory, which consists of completed product and parts used to support our service department. Shipping and handling costs associated with third party sales transactions are classified as a component of cost of sales in our condensed consolidated statements of operations.

Sales demonstration inventory is held by our sales representatives for up to three years, at which time it would be refurbished and transferred to finished goods as used equipment, stated at the lower of cost or net realizable value. Management expects these refurbished units to remain in finished goods inventory and to be sold within 12 months at prices that may produce reduced gross margins.

Service inventory is used to provide a temporary replacement product to a customer covered by a premium warranty when the customer's unit requires service or repair and as training equipment. Service inventory is available for sale; however, management does not expect service inventory to be sold within 12 months and, as such, classifies this inventory as a long-term asset. Service inventory that we utilize for training or repairs and which we deem as no longer available for sale is transferred to fixed assets at the lower of cost or net realizable value and depreciated over its remaining life, typically three years.

Inventories consist of the following:

	As of September 30, 2018	As of December 31, 2017
Raw materials	\$ 39,799	\$ 36,328
Finished goods	22,672	17,458
Inventories, net	<u>\$ 62,471</u>	<u>\$ 53,786</u>
Service and sales demonstration inventory, net	<u>\$ 35,288</u>	<u>\$ 39,614</u>

NOTE 10 – EARNINGS (LOSS) PER SHARE

Basic earnings (loss) per share is computed by dividing net income or (loss) by the weighted average number of shares outstanding. Diluted earnings per share is computed by also considering the impact of potential common stock on both net income and the weighted average number of shares outstanding. Our potential common stock consists of employee stock options, restricted stock units and performance-based awards. Our potential common stock is included in the diluted earnings per share calculation, when adding such potential common stock would not be anti-dilutive. Performance-based awards are included in the computation of diluted earnings per share only to the extent that the underlying performance conditions (and any applicable market condition) (i) are satisfied as of the end of the reporting period or (ii) would be considered satisfied if the end of the reporting period were the end of the related contingency period and the result would be dilutive under the treasury stock method. When we report a net loss, which we did for the three and nine months ended September 30, 2018 and for the nine months ended September 30, 2017, the calculation of diluted net loss per share excludes our potential common stock, as the effect would be anti-dilutive.

For the three and nine months ended September 30, 2018, there were approximately 546,538 shares and 627,733 shares, respectively, issuable upon the exercise of options that were excluded from the dilutive calculations, as they were anti-dilutive. For the three and nine months ended September 30, 2017, there were approximately 1,143,523 and 1,145,632 shares, respectively, issuable upon the exercise of options and the contingent vesting of performance-based awards that were excluded from the dilutive calculations, as they were anti-dilutive.

A reconciliation of the number of common shares used in the calculation of basic and diluted earnings (loss) per share (“EPS”) is presented below:

	Three Months Ended			
	September 30, 2018		September 30, 2017	
	Shares	Per-Share Amount	Shares	Per-Share Amount
Basic (loss) earnings per share	17,122,705	\$ (0.15)	16,708,446	\$ 0.10
Effect of dilutive securities	—	—	88,072	—
Diluted (loss) earnings per share	17,122,705	\$ (0.15)	16,796,518	\$ 0.10

	Nine Months Ended			
	September 30, 2018		September 30, 2017	
	Shares	Per-Share Amount	Shares	Per-Share Amount
Basic loss per share	16,976,459	\$ (0.05)	16,697,729	\$ (0.21)
Effect of dilutive securities	—	—	—	—
Diluted loss per share	16,976,459	\$ (0.05)	16,697,729	\$ (0.21)

NOTE 11 – ACCRUED LIABILITIES

Accrued liabilities consist of the following:

	As of September 30, 2018	As of December 31, 2017
Accrued compensation and benefits	\$ 14,617	\$ 16,144
Accrued warranties	2,605	2,628
Professional and legal fees	2,088	1,541
Taxes other than income	2,922	3,787
Other accrued liabilities	6,954	3,262
	<u>\$ 29,186</u>	<u>\$ 27,362</u>

Activity related to accrued warranties was as follows:

	Nine Months Ended	
	September 30, 2018	September 30, 2017
Balance, beginning of period	\$ 2,628	\$ 2,594
Provision for warranty expense	2,888	2,606
Fulfillment of warranty obligations	(2,911)	(2,616)
Balance, end of period	<u>\$ 2,605</u>	<u>\$ 2,584</u>

NOTE 12 – INCOME TAXES

For the three months ended September 30, 2018, we recorded an income tax benefit of \$0.4 million compared with income tax expense of \$0.9 million for the three months ended September 30, 2017. Our effective tax rate was 12.5% for the three months ended September 30, 2018 compared with 36.8% in the prior year period. The change in our income tax (benefit) expense was primarily due to a pretax loss during the three months ended September 30, 2018 compared to pretax income for the three months ended September 30, 2017.

Our quarterly estimate of our annual effective tax rate, and our quarterly tax provision for income tax (benefit) expense, is subject to significant variation due to numerous factors, including variability in accurately predicting our pretax and taxable income and loss and the mix of jurisdictions to which they relate. Also, our effective tax rate may fluctuate more based on the amount of pretax income or loss recognized during the quarter. The change in our effective tax rate during the three months ended September 30, 2018 compared with the same prior year period was primarily due to a shift in the geographic mix of pretax income expected for the full year.

For the nine months ended September 30, 2018, we recorded income tax expense of \$0.1 million compared with an income tax benefit of \$0.4 million for the nine months ended September 30, 2017. Our effective tax rate was 9.7% for the nine months ended September 30, 2018 compared with 11.3% in the prior year period. The change in our income tax (benefit) expense during the nine months ended September 30, 2018 compared to the nine months ended September 30, 2017 was primarily due to the decrease in pretax book loss for the nine months ended September 30, 2018 when compared to the same prior year period, a shift in the geographic area where income was recognized and the exclusion of tax benefit for certain jurisdictions in a loss position in calculating income tax expense.

Our effective tax rate could be impacted positively or negatively by geographic changes in the manufacturing or sales of our products and the resulting effect on taxable income in each jurisdiction, as well as by any change in statutory tax rates in a jurisdiction.

On December 22, 2017, the United States enacted the U.S. Tax Cuts and Jobs Act (the “Tax Cuts Act”), resulting in significant modifications to existing tax law. We are following the guidance in SEC Staff Accounting Bulletin 118 (“SAB 118”), which provides additional clarification regarding the application of ASC Topic 740 in situations where a company does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Cuts Act for the reporting period in which the Tax Cuts Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Tax Cuts Act’s December 2017 enactment date and ending when we have obtained, prepared, and analyzed the information needed in order to complete the accounting for such income tax effects, but in no circumstances will the measurement period extend beyond one year from the enactment date.

Under the Tax Cuts Act, changes include lowering the statutory corporate tax rate from 35% to 21%, eliminating certain deductions, imposing a mandatory tax on accumulated earnings in foreign subsidiaries, introducing new tax regimes, and changing how foreign earnings are subject to United States taxation. The statutory corporate tax rate reduction is effective for tax years beginning on or after January 1, 2018. Based on our best estimate, we have calculated the impact of the Tax Cuts Act in our current tax provision in accordance with our understanding of the Tax Cuts Act and available guidance. The portion of the provisional amount that related to the transition tax on the mandatory deemed repatriation of foreign earnings was \$17.4 million based on our best estimate and guidance available as of the date of this filing, which was recorded in the fourth quarter of 2017. The provisional amount related to the transition tax on the mandatory deemed repatriation of foreign earnings has not changed as of September 30, 2018 when compared to December 31, 2017. Additional work is necessary to finalize our analysis of historical foreign earnings. Upon gathering all necessary data, interpreting any additional guidance from tax authorities, and completing the analysis, our provisional amount will be adjusted in the measurement period allowable in accordance with SAB 118. Our provisional amount relating to the transition tax may materially differ upon completing the analysis compared to the amount accrued as of September 30, 2018. We expect our analysis to be completed during the fourth quarter of 2018.

Additionally, the Tax Cuts Act included a new provision designed to impose a tax on global intangible low-taxed income (“GILTI”) of foreign subsidiaries but allows the possibility of using foreign tax credits to offset the tax liability, subject to some limitations. For the three and nine months ended September 30, 2018, our income tax expense included an estimate of the current GILTI impact on our tax provision, which we currently estimate would result in a tax liability of approximately \$0.5 million for the year ended December 31, 2018. Based on our current forecast of taxable income for the United States and foreign tax jurisdictions, the estimated \$0.5 million GILTI tax liability would be fully offset by the utilization of foreign tax credits and have an immaterial impact on our income tax expense for the year ended December 31, 2018. Our amount relating to GILTI may materially differ if the geographical mix of taxable earnings or total taxable earnings change compared to the assumptions used in our forecast.

NOTE 13 – FAIR VALUE OF FINANCIAL INSTRUMENTS

Our financial instruments include cash and cash equivalents, short-term investments, accounts receivable, customer deposits, accounts payable and accrued liabilities. The carrying amounts of such financial instruments approximate their fair value due to the short-term nature of these instruments.

Assets and liabilities measured at fair value on a recurring basis are categorized in the tables below based upon the lowest level of significant input to the valuations:

	As of September 30, 2018		
	Level 1	Level 2	Level 3
Assets:			
Short-term investments (1)	\$ 19,871	\$ —	\$ —
Total	\$ 19,871	\$ —	\$ —
Liabilities:			
Contingent consideration (2)	\$ —	\$ —	\$ 5,846
Total	\$ —	\$ —	\$ 5,846
	As of December 31, 2017		
	Level 1	Level 2	Level 3
Assets:			
Short-term investments (1)	\$ 10,997	\$ —	\$ —
Total	\$ 10,997	\$ —	\$ —
Liabilities:			
Contingent consideration (2)	\$ —	\$ —	\$ 412
Total	\$ —	\$ —	\$ 412

- (1) Short-term investments in the accompanying consolidated balance sheets are U.S. Treasury Bills. The fair values of these assets are based on Level 1 inputs in the fair value hierarchy.
- (2) Contingent consideration liability represents arrangements to pay the former owners of certain companies we acquired. The remaining undiscounted maximum payment under the arrangements is \$6.3 million. We paid \$0.6 million as part of these arrangements during the nine months ended September 30, 2018. The change in the fair value of the contingent consideration from December 31, 2017 to September 30, 2018 is primarily related to our acquisition of Laser Control Systems Limited on March 9, 2018, our acquisition of Lanmark Controls, Inc. on July 6, 2018, our acquisition of Opto-Tech s.r.l. on July 13, 2018, and the payment of contingent consideration for historical acquisitions in the third quarter of 2018. See Note 17 – Business Combinations for further information regarding these acquisitions.

NOTE 14 – VARIABLE INTEREST ENTITY

A variable interest entity (“VIE”) is an entity that has one of three characteristics: (1) it is controlled by someone other than its shareowners or partners, (2) its shareowners or partners are not economically exposed to the entity’s earnings (for example, they are protected against losses), or (3) it lacks sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties.

On April 27, 2018, we invested \$1.8 million in Present4D GmbH (“Present4D”), a software solutions provider for professional virtual reality presentations and training environments, in the form of an equity capital contribution. This contribution represents a minority investment in Present4D.

As of our investment date, Present4D was thinly capitalized and lacked the sufficient equity to finance its activities without additional subordinated financial support and is classified as a VIE. We do not have power over decisions that significantly affect Present4D’s economic performance and do not represent its primary beneficiary. After April 27, 2020, Present4D may request additional equity financing of up to \$1.8 million from us in exchange for additional share capital. Our investment in this unconsolidated VIE at September 30, 2018 was \$1.8 million and included in Other long-term assets in our condensed consolidated balance sheet as of September 30, 2018. We had no VIE investments as of December 31, 2017.

NOTE 15 – SEGMENT REPORTING

We have three reportable segments: 3D Factory, Construction BIM, and Emerging Verticals. These segments are based upon the vertical markets that we currently serve. Business activities that do not meet the criteria to be reportable segments are aggregated in the Emerging Verticals segment.

We develop, manufacture, market, support and sell CAD-based quality assurance products integrated with CAD-based inspection and statistical process control software and three-dimensional documentation systems in each of these reportable segments. These activities represent more than 99% of consolidated sales.

Our Chief Operating Decision Maker (CODM), our Chief Executive Officer, evaluates segment performance and allocates resources based upon profitable growth. We use segment profit to evaluate the performance of our reportable segments. Segment profit is calculated as gross profit, net of selling and marketing expenses, for the reporting segment. Our definition of segment profit may not be comparable to similarly-titled measures reported by other companies.

Our segment structure presented below represents a change from the prior year as further described in Note 1 – Description of Business. The amounts for the three and nine months ended September 30, 2017 have been restated to reflect the change in reporting segments. Each of our segments employs consistent accounting policies.

The following tables present information about our reportable segments, including a reconciliation of total segment profit to (loss) income from operations included in the condensed consolidated statements of operations for the three and nine months ended September 30, 2018 and 2017:

	3D Factory	Construction BIM	Emerging Verticals	Total
Three Months Ended September 30, 2018				
Total sales	\$ 64,182	\$ 23,710	\$ 11,813	\$ 99,705
Segment profit	\$ 16,421	\$ 6,860	\$ 1,225	\$ 24,506
General and administrative				12,496
Depreciation and amortization				4,747
Research and development				9,975
Loss from operations				<u>\$ (2,712)</u>

	<u>3D Factory</u>	<u>Construction BIM</u>	<u>Emerging Verticals</u>	<u>Total</u>
Three Months Ended September 30, 2017				
Total sales	\$ 58,529	\$ 22,751	\$ 8,970	\$ 90,250
Segment profit	\$ 19,648	\$ 5,407	\$ 989	\$ 26,044
General and administrative				10,307
Depreciation and amortization				4,368
Research and development				9,019
Income from operations				<u>\$ 2,350</u>

	<u>3D Factory</u>	<u>Construction BIM</u>	<u>Emerging Verticals</u>	<u>Total</u>
Nine Months Ended September 30, 2018				
Total sales	\$ 190,584	\$ 69,994	\$ 30,205	\$ 290,783
Segment profit	\$ 56,248	\$ 19,287	\$ 2,093	\$ 77,628
General and administrative				34,889
Depreciation and amortization				13,467
Research and development				29,364
Loss from operations				<u>\$ (92)</u>

	<u>3D Factory</u>	<u>Construction BIM</u>	<u>Emerging Verticals</u>	<u>Total</u>
Nine Months Ended September 30, 2017				
Total sales	\$ 172,524	\$ 60,550	\$ 21,420	\$ 254,494
Segment profit	\$ 52,757	\$ 13,799	\$ 1,103	\$ 67,659
General and administrative				32,883
Depreciation and amortization				12,075
Research and development				26,530
Loss from operations				<u>\$ (3,829)</u>

NOTE 16 – COMMITMENTS AND CONTINGENCIES

Leases — We lease buildings and equipment in the normal course of business under non-cancellable operating leases that expire in or before 2026. Total remaining obligations under these leases are approximately \$1.3 million for 2018.

Purchase Commitments — We enter into purchase commitments for products and services in the ordinary course of business. These purchases generally cover production requirements for 60 to 120 days as well as materials necessary to service customer units through the product lifecycle and for warranty commitments. As of September 30, 2018, we had approximately \$72.0 million in purchase commitments that are expected to be delivered within the next 12 months. To ensure adequate component availability in preparation for new product introductions, as of September 30, 2018, we also had \$4.7 million in long-term commitments for purchases to be delivered after 12 months.

Legal Proceedings — We are not involved in any legal proceedings, including routine litigation arising in the normal course of business, that we believe will have a material adverse effect on our business, financial condition or results of operations.

NOTE 17 – BUSINESS COMBINATIONS

In April 2017, we completed the acquisition of substantially all of the assets of Instrument Associates, LLC d/b/a Nutfield Technology (“Nutfield”), a component technology business located in Hudson, New Hampshire, which specializes in the design and manufacture of advanced galvanometer-based optical scanners, scan heads and laser kits, for a total purchase price of approximately \$5.5 million. This acquisition supports our long-term strategy to expand our presence in key markets and improve our existing product lines with innovative technology. The results of Nutfield’s operations as of and after the date of acquisition have been included in our condensed consolidated financial statements as of September 30, 2018 and December 31, 2017, and for the three and nine months ended September 30, 2018 and September 30, 2017.

On March 9, 2018, we acquired all of the outstanding shares of Laser Control Systems Limited (“Laser Control Systems”), a laser component technology business located in Bedfordshire, United Kingdom, which specializes in the design and manufacture of advanced digital scan heads and laser software, for a purchase price of \$1.7 million. An additional \$0.7 million in contingent consideration may be earned by the former owners if certain milestones are met. This acquisition supports our long-term strategy to expand our presence in key markets and improve our existing product lines with innovative technology. The results of Laser Control Systems’ operations as of and after the date of acquisition have been included in our condensed consolidated financial statements as of, and for the three and nine months ended, September 30, 2018.

On March 16, 2018, we acquired all of the outstanding shares of Photocore AG, a vision-based 3D measurement application and software developer, for a total purchase price of \$2.4 million. This acquisition supports our long-term strategy to improve our existing software offerings with innovative technology. The results of PhotoCore AG’s operations as of and after the date of acquisition have been included in our condensed consolidated financial statements as of, and for the three and nine months ended, September 30, 2018.

On July 6, 2018, we acquired all of the outstanding shares of Lanmark Controls, Inc. (“Lanmark”), a high-speed laser marking control boards and laser marking software provider, for a purchase price of \$6.0 million. An additional \$1.0 million in contingent consideration may be earned by the former owners if certain milestones are met. This acquisition supports the development of components used in new 3D laser inspection product development. The results of Lanmark’s operations as of and after the date of acquisition have been included in our condensed consolidated financial statements as of, and for the three and nine months ended, September 30, 2018.

On July 13, 2018, we acquired all of the issued and outstanding corporate capital of Opto-Tech SRL and its subsidiary Open Technologies SRL (collectively, “Open Technologies”), a 3D structured light scanning solution company located in Brescia, Italy, for an aggregate purchase price of up to €18.5 million, subject to post-closing adjustments based on actual net working capital, net financial position and transaction expenses. The aggregate purchase price includes up to €4.0 million in contingent consideration that may be earned by the former owners if certain product development milestones are met. This acquisition supports our long-term strategy to establish a presence in 3D measurement technology used in other industries and applications. The results of Open Technologies’ operations as of and after the date of acquisition have been included in our condensed consolidated financial statements as of, and for the three and nine months ended, September 30, 2018.

The acquisitions of Nutfield, Laser Control Systems, Photocore AG, Lanmark, and Open Technologies constitute business combinations as defined by ASC Topic 805. Accordingly, the assets acquired and liabilities assumed were recorded at their fair values on the date of acquisition. The purchase price allocations marked as “Preliminary” below are based on the information that was available to make estimates of the fair value and may change as further information becomes available and additional analyses are completed. While we believe such information provides a reasonable basis for estimating the fair values, we may obtain more information and evidence during the measurement period that result in changes to the estimated fair value amounts. The measurement period ends on the earlier of one year after the acquisition date or the date we received the information about the facts and circumstances that existed at the acquisition date. Subsequent adjustments, if necessary, will be recognized during the period in which the amounts are determined. These refinements include: (1) changes in the estimated fair value of certain intangible assets acquired; and (2) changes in deferred tax assets and liabilities related to the fair value estimates. The purchase price allocation marked as “Final” below represents our final determination of the fair value of the assets acquired and liabilities assumed for such acquisition.

Following is a summary of our allocations of the purchase price to the fair values of the assets acquired and liabilities assumed as of the date of each acquisition:

	Nutfield (Final)		Laser Control Systems (Final)		Photocore AG (Final)		Lanmark (Preliminary)		Open Technologies (Preliminary) ⁽³⁾	
Accounts receivable	\$	160	\$	—	\$	—	\$	592	\$	2,735
Inventory		539		—		—		328		1,852
Other assets		96		—		—		41		645
Deferred income tax assets		131		—		—		—		—
Intangible assets		2,329		1,400		1,435		2,276		11,084
Goodwill ⁽¹⁾		2,357		928		1,010		3,851		9,225
Accounts payable and accrued liabilities		(12)		—		—		(117)		(2,926)
Other liabilities ⁽²⁾		(104)		(579)		—		(971)		(5,201)
Total purchase price, net of cash acquired	\$	5,496	\$	1,749	\$	2,445	\$	6,000	\$	17,414

⁽¹⁾ A portion of the goodwill is expected to be tax deductible for Nutfield.

⁽²⁾ For Laser Control Systems, Lanmark and Open Technologies, this total consists primarily of the fair value of the projected contingent consideration.

⁽³⁾ Amounts converted from Euros to US Dollars based on the foreign exchange rate on the closing date of the acquisition.

Following are the details of the purchase price allocated to the intangible assets acquired for the acquisitions noted above:

	Nutfield (Final)		Laser Control Systems (Final)		Photocore AG (Final)		Lanmark (Preliminary)		Open Technologies (Preliminary)	
	Amount	Weighted Average Life (Years)	Amount	Weighted Average Life (Years)	Amount	Weighted Average Life (Years)	Amount	Weighted Average Life (Years)	Amount	Weighted Average Life (Years)
Trade name	\$ 29	1	\$ —	0	\$ —	0	\$ —	0	\$ —	0
Brand	—	0	26	1	22	1	26	1	98	1
Non-competition agreement	144	5	29	3	9	3	—	0	—	0
Technology	1,970	10	1,319	7	1,343	7	1,170	7	5,493	7
Customer relationship	95	10	26	10	61	10	1,080	10	5,493	10
Favorable in-place lease	91	12	—	0	—	0	—	0	—	0
Fair value of intangible assets acquired	\$ 2,329	10	\$ 1,400	7	\$ 1,435	7	\$ 2,276	8	\$ 11,084	8

The goodwill for the Nutfield, Laser Control Systems, Lanmark and Open Technologies acquisitions has been allocated to the Emerging Verticals reporting segment. The goodwill for the Photocore AG acquisition has been allocated to the Construction BIM reporting segment.

Acquisition and integration costs are not included as components of consideration transferred, but are recognized as expense in the period in which such costs are incurred. To date, we have incurred approximately \$0.7 million in acquisition and integration costs for the acquisitions in 2017 and during the nine months ended September 30, 2018. Pro forma financial results for Nutfield, Laser Control Systems, Photocore AG, Lanmark, and Open Technologies have not been presented because the effects of these transactions, individually and in the aggregate, were not material to our consolidated financial results.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following information should be read in conjunction with the Condensed Consolidated Financial Statements, including the notes thereto, included elsewhere in this Form 10-Q and Management’s Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2017.

FARO Technologies, Inc. (“FARO,” the “Company,” “us,” “we” or “our”) has made “forward-looking statements” in this report (within the meaning of the Private Securities Litigation Reform Act of 1995). Statements that are not historical facts or that describe our plans, beliefs, goals, intentions, objectives, projections, expectations, assumptions, strategies, or future events are forward-looking statements. In addition, words such as “may,” “might,” “would,” “will,” “will be,” “future,” “strategy,” “believe,” “plan,” “should,” “could,” “seek,” “expect,” “anticipate,” “intend,” “estimate,” “goal,” “objective,” “project,” “forecast,” “target” and similar words identify forward-looking statements.

Forward-looking statements are not guarantees of future performance and are subject to a number of known and unknown risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Consequently, undue reliance should not be placed on these forward-looking statements. We do not intend to update any forward-looking statements, whether as a result of new information, future events, or otherwise, unless otherwise required by law. Important factors that could cause actual results to differ materially from those contemplated in such forward-looking statements include, among others, the following:

- an economic downturn in the manufacturing industry or the domestic and international economies in the regions of the world where we operate;
- our inability to further penetrate our customer base and target markets;
- development by others of new or improved products, processes or technologies that make our products less competitive or obsolete;
- our inability to maintain what we believe to be our technological advantage by developing new products and enhancing our existing products;
- risks associated with expanding international operations, such as difficulties in staffing and managing foreign operations, increased political and economic instability, compliance with potentially evolving import and export regulations, and the burdens and potential exposure of complying with a wide variety of U.S. and foreign laws and labor practices;
- changes in regulation which result in rising prices of imported steel, steel byproducts, aluminum, and aluminum byproducts used as raw materials in the production of measurement devices, and our ability to pass those costs on to our customers or require our suppliers to absorb such costs;
- changes in foreign regulation which may result in rising prices of our measurement devices sold as exports to our international customers, our customers’ willingness to absorb incremental import tariffs, and the corresponding impact on our profitability;
- our inability to successfully identify and acquire target companies and achieve expected benefits from, and effectively integrate, acquisitions that are consummated;
- the cyclical nature of the industries of our customers and material adverse changes in our customers’ access to liquidity and capital;
- change in the potential for the computer-aided measurement (“CAM2”) market and the potential adoption rate for our products, which are difficult to quantify and predict;
- our inability to protect our patents and other proprietary rights in the United States and foreign countries;
- our inability to adequately establish and maintain effective internal controls over financial reporting;

- fluctuations in our annual and quarterly operating results and the inability to achieve our financial operating targets as a result of a number of factors including, without limitation (i) litigation and regulatory action brought against us, (ii) quality issues with our products, (iii) excess or obsolete inventory, shrinkage or other inventory losses due to product obsolescence, change in demand for our products, scrap or material price changes, (iv) raw material price fluctuations and other inflationary pressures, (v) expansion of our manufacturing capability, (vi) the size and timing of customer orders, (vii) the amount of time that it takes to fulfill orders and ship our products, (viii) the length of our sales cycle to new customers and the time and expense incurred in further penetrating our existing customer base, (ix) manufacturing inefficiencies associated with new product introductions, (x) costs associated with new product introductions, such as product development, marketing, assembly line start-up costs and low introductory period production volumes, (xi) the timing and market acceptance of new products and product enhancements, (xii) customer order deferrals in anticipation of new products and product enhancements, (xiii) the inability of our sales and marketing programs to achieve their sales targets, (xiv) start-up costs associated with opening new sales offices outside of the United States, (xv) fluctuations in revenue without proportionate adjustments in fixed costs, (xvi) inefficiencies in the management of our inventories and fixed assets, (xvii) compliance with government regulations including health, safety, and environmental matters, and (xviii) investment costs associated with the training and ramp-up time for new sales people;
- changes in gross margins due to a changing mix of products sold and the different gross margins on different products and sales channels;
- our inability to successfully comply with the requirements of the Restriction of Hazardous Substances Directive and the Waste Electrical and Electronic Equipment Directive in the European Union;
- the inability of our products to displace traditional measurement devices and attain broad market acceptance;
- the impact of competitive products and pricing on our current offerings;
- the loss of our Chief Executive Officer or other key personnel;
- difficulties in recruiting research and development engineers and application engineers;
- the failure to effectively manage the effects of our growth;
- the impact of reductions or projected reductions in government spending, or uncertainty regarding future levels of government expenditures, particularly in the defense sector;
- variations in our effective income tax rate, which makes it difficult to predict our effective income tax rate on a quarterly and annual basis, and the impact of the U.S. Tax Cuts and Jobs Act of 2017 (the “Tax Cuts Act”), including the global intangible low-taxed income of foreign subsidiaries;
- the loss of key suppliers and the inability to find sufficient alternative suppliers in a reasonable period of time or on commercially reasonable terms;
- the impact of fluctuations in exchange rates;
- the effect of estimates and assumptions with respect to critical accounting policies and the impact of the adoption of recently issued accounting pronouncements;
- the magnitude of increased warranty costs from new product introductions and enhancements to existing products;
- the sufficiency of our plants to meet manufacturing requirements;
- the continuation of our share repurchase program;
- the sufficiency of our working capital and cash flow from operations to fund our long-term liquidity requirements;
- the impact of geographic changes in the manufacturing or sales of our products on our effective income tax rate;
- our ability to comply with the requirements for favorable tax rates in foreign jurisdictions; and
- other risks and uncertainties discussed in Part I, Item 1A. Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2017 and Part II, Item 1A. Risk Factors in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.

Moreover, new risks and uncertainties emerge from time to time, and we undertake no obligation to update publicly or review the risks and uncertainties included in this Quarterly Report on Form 10-Q, unless otherwise required by law.

Overview

FARO Technologies, Inc. and its subsidiaries (collectively “FARO,” the “Company,” “us,” “we” or “our”) is a global technology company that designs, develops, manufactures, markets and supports software driven, three-dimensional (“3D”) measurement, imaging and realization systems. This technology permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes. Our devices are used for inspection of components and assemblies, rapid prototyping, reverse engineering, documenting large volume or structures in 3D, surveying and construction, as well as for investigation and reconstruction of accident sites or crime scenes. We sell the majority of our products through a direct sales force across a broad number of customers in a range of manufacturing, industrial, architecture, surveying, building information modeling, construction, public safety forensics, cultural heritage, dental, and other applications. Our FaroArm®, FARO ScanArm®, FARO Laser Tracker™, FARO Cobalt Array Imager, FARO Laser Projector, and their companion CAM2®, BuildIT, and BuildIT Projector software solutions, provide for Computer-Aided Design (“CAD”) based inspection, factory-level statistical process control, high-density surveying and laser-guided assembly and production. Together, these products integrate the measurement, quality inspection, and reverse engineering functions with CAD and 3D software to improve productivity, enhance product quality, and decrease rework and scrap in the manufacturing process, mainly supporting applications in our 3D Factory (formerly known as “Factory Metrology”) vertical. Our FARO Focus and FARO Scanner Freestyle^{3DX} laser scanners, and their companion FARO SCENE, BuildIT Construction, FARO As-Built™, and FARO Zone public safety forensics software offerings, are utilized for a wide variety of 3D modeling, documentation and high-density surveying applications in our Construction Building Information Modeling (“Construction BIM,” formerly known as “Construction BIM-CIM”) and Public Safety Forensics verticals. Our FARO ScanArm®, FARO Cobalt Array Imager, FARO Scanner Freestyle^{3DX} laser scanners and their companion SCENE software, and other 3D structured light scanning solutions specific to the dental industry also enable a fully digital workflow used to capture real world geometry for the purpose of empowering design, enabling innovation, and speeding up the design cycle, supporting our 3D Design (formerly known as “Product Design”) vertical. Our line of galvanometer-based scan heads and laser scan controllers are used in a variety of laser applications and are integrated into larger components and systems, supporting our Photonics vertical.

We derive our revenues primarily from the sale of our measurement equipment and related multi-faceted software programs. Revenue related to these products is generally recognized upon shipment. In addition, we sell extended warranties and training and technology consulting services relating to our products. We recognize the revenue from extended warranties on a straight-line basis over the term of the warranty, and revenue from training and technology consulting services when the services are provided.

We operate in international markets throughout the world and maintain sales offices in Australia, Brazil, Canada, China, France, Germany, India, Italy, Japan, Malaysia, Mexico, the Netherlands, Poland, Portugal, Singapore, South Korea, Spain, Switzerland, Thailand, Turkey, the United Kingdom, and the United States.

We manufacture our FaroArm® and FARO ScanArm® products in our manufacturing facility located in Switzerland for customer orders from Europe, the Middle East and Africa, in our manufacturing facility located in Singapore for customer orders from the Asia-Pacific region, and in our manufacturing facility located in Florida for customer orders from the Americas. We manufacture our FARO Focus in our manufacturing facilities located in Germany and Switzerland for customer orders from Europe, the Middle East and Africa and the Asia-Pacific region, and in our manufacturing facility located in Pennsylvania for customer orders from the Americas. We manufacture our FARO Freestyle^{3DX} products in our facility located in Germany. We manufacture our FARO Cobalt Array Imager, FARO Laser Projector and FARO Laser Tracker™ products in our facility located in Pennsylvania. We expect all of our existing plants to have the production capacity necessary to support our volume requirements through the remainder of 2018.

We account for wholly-owned foreign subsidiaries in the currency of the respective foreign jurisdiction; therefore, fluctuations in exchange rates may have an impact on the value of the intercompany account balances denominated in different currencies and reflected in our condensed consolidated financial statements. We are aware of the availability of off-balance sheet financial instruments to hedge exposure to foreign currency exchange rates, including cross-currency swaps, forward contracts and foreign currency options. However, we have not used such instruments in the past, and none were utilized in 2017 or the nine months ended September 30, 2018.

Over the past decade, we have achieved profitability on an annual basis, with the exception of a loss in 2009 that resulted primarily from the decline of the global economy that year, and a loss in 2017 that resulted primarily from the enactment and the impact of the Tax Cuts Act further described in Note 12 – Income Taxes in Part I, Item 1 of this Quarterly Report on Form 10-Q. Historically, our sales have grown as a result of continuing market demand for and acceptance of our products, increased sales activity in part through additional sales staff worldwide, new product launches or enhancements, and acquisitions. Our historical financial performance may not be indicative of our future financial performance.

During the nine months ended September 30, 2018, the following changes were made to our verticals and reporting segments when compared to our Annual Report on Form 10-K for the fiscal year ended December 31, 2017:

- In the first quarter of 2018, we combined our historical Factory Metrology and 3D Machine Vision verticals under a single reporting segment, 3D Factory, which replaced our Factory Metrology reporting segment, due to the linkage between the two historical verticals related to the type or class of customers served, the nature of the products and services provided, and the nature of the production processes. The 3D Machine Vision vertical was previously reported in our Other reporting segment.
- In the first quarter of 2018, we renamed our Other reporting segment “Emerging Verticals.”
- In the third quarter of 2018, we merged the historical Factory Metrology and 3D Machine Vision verticals into one vertical named “3D Factory” for greater consistency with our realigned reporting segments.
- In the third quarter of 2018, we segregated the operations of our recent acquisitions of Laser Control Systems Limited and Lanmark Controls, Inc., along with the operations resulting from our recent acquisition of substantially all of the assets of Instrument Associates, LLC d/b/a Nutfield Technology, into a vertical that we have named “Photonics.” The creation of this vertical will enable us to better focus on our product range directed at laser steering. These operations were historically reported in the 3D Factory reporting segment in the first six months of 2018 and the historical Factory Metrology reporting segment in 2017 and will now be included in the Emerging Verticals (formerly known as “Other”) reporting segment. Due to this change, we performed a qualitative goodwill impairment analysis. Management has concluded there was no goodwill impairment at the time of this vertical reporting change.
- In the third quarter of 2018, we renamed our Product Design vertical “3D Design.”

The amounts for the three and nine months ended September 30, 2017 have been restated to reflect the changes in our reporting segments. Each of our reporting segments employs consistent accounting policies.

Amounts reported in millions within this Quarterly Report on Form 10-Q are computed based on the amounts in thousands. As a result, the sum of the components reported in millions may not equal the total amount reported in millions due to rounding. Certain columns and rows within the tables that follow may not add due to the use of rounded numbers. Percentages presented are calculated based on the respective amounts in thousands.

Results of Operations

The following table sets forth, for the periods indicated, our unaudited results of operations expressed as dollar amounts and as a percentage of total sales.

(dollars in thousands)	Three months ended September 30,				Nine months ended September 30,			
	2018	% of Sales	2017	% of Sales	2018	% of Sales	2017	% of Sales
Sales								
Product	\$ 75,817	76.0 %	\$ 68,563	76.0 %	\$ 222,118	76.4 %	\$ 193,476	76.0 %
Service	23,888	24.0 %	21,687	24.0 %	68,665	23.6 %	61,018	24.0 %
Total sales	99,705	100.0 %	90,250	100.0 %	290,783	100.0 %	254,494	100.0 %
Cost of Sales								
Product	34,004	34.1 %	26,673	29.6 %	88,766	30.5 %	78,186	30.7 %
Service	13,384	13.4 %	11,543	12.8 %	38,223	13.1 %	33,765	13.3 %
Total cost of sales (exclusive of depreciation and amortization, shown separately below)	47,388	47.5 %	38,216	42.3 %	126,989	43.7 %	111,951	44.0 %
Gross Profit	52,317	52.5 %	52,034	57.7 %	163,794	56.3 %	142,543	56.0 %
Operating Expenses:								
Selling and marketing	27,811	27.9 %	25,990	28.8 %	86,166	29.6 %	74,884	29.4 %
General and administrative	12,496	12.5 %	10,307	11.4 %	34,889	12.0 %	32,883	12.9 %
Depreciation and amortization	4,747	4.8 %	4,368	4.8 %	13,467	4.6 %	12,075	4.7 %
Research and development	9,975	10.0 %	9,019	10.0 %	29,364	10.1 %	26,530	10.4 %
Total operating expenses	55,029	55.2 %	49,684	55.1 %	163,886	56.4 %	146,372	57.5 %
(Loss) income from operations	(2,712)	(2.7)%	2,350	2.6 %	(92)	— %	(3,829)	(1.5)%
Other expense (income)								
Interest income, net	(96)	(0.1)%	(78)	(0.1)%	(205)	(0.1)%	(249)	(0.1)%
Other expense (income), net	226	0.2 %	(147)	(0.2)%	868	0.3 %	320	0.1 %
(Loss) income before income tax (benefit) expense	(2,842)	(2.9)%	2,575	2.9 %	(755)	(0.3)%	(3,900)	(1.5)%
Income tax (benefit) expense	(354)	(0.4)%	947	1.0 %	73	— %	(442)	(0.2)%
Net (loss) income	\$ (2,488)	(2.5)%	\$ 1,628	1.8 %	\$ (828)	(0.3)%	\$ (3,458)	(1.4)%

Consolidated Results

Three Months Ended September 30, 2018 Compared to the Three Months Ended September 30, 2017

Sales. Total sales increased by \$9.4 million, or 10.5%, to \$99.7 million for the three months ended September 30, 2018 from \$90.3 million for the three months ended September 30, 2017. Total product sales increased by \$7.2 million, or 10.6%, to \$75.8 million for the three months ended September 30, 2018 from \$68.6 million for the three months ended September 30, 2017. Our product sales increased primarily due to increased unit sales and higher average selling prices across all segments and increased sales in our APAC region. Service revenue increased by \$2.2 million, or 10.1%, to \$23.9 million for the three months ended September 30, 2018 from \$21.7 million for the three months ended September 30, 2017, primarily due to an increase in customer service revenue driven by the growth of our installed, serviceable base and an increase in training revenue driven by higher unit sales. Foreign exchange rates had a negative impact on sales of \$2.0 million, decreasing our overall sales growth rate by approximately 2.2 percentage points, primarily due to the weakening of the Euro, Chinese Yuan, Brazilian Real, and Turkish Lira relative to the U.S. dollar.

Gross profit. Gross profit increased by \$0.3 million, or 0.5%, to \$52.3 million for the three months ended September 30, 2018 from \$52.0 million for the three months ended September 30, 2017, primarily due to increases in both product revenue and service revenue, partially offset by an increase in our inventory reserve. During the third quarter of 2018, we performed an analysis of our inventory reserves in connection with our recent new product introductions and acquisitions and recorded a charge increasing our reserve for excess and obsolete inventory based on the determination that quantities on-hand for certain legacy products exceeded our revised sales projections. Gross margin decreased to 52.5% for the three months ended September 30, 2018 from 57.7% in the prior year period. Gross margin from product revenue decreased by 6.0 percentage points to 55.1% for the three months ended September 30, 2018 from 61.1% for the prior year period, primarily as a result of the increase in our inventory reserve. Gross margin from service revenue decreased by 2.8 percentage points to 44.0% for the three months ended September 30, 2018 from 46.8% for the prior year period, primarily as a result of an increased contribution from customer service sales with lower margins than other service revenue types.

Selling and marketing expenses. Selling and marketing expenses increased by \$1.8 million, or 7.0%, to \$27.8 million for the three months ended September 30, 2018 from \$26.0 million for the three months ended September 30, 2017. This increase was driven primarily by higher compensation expense, reflecting an increase in selling headcount as part of our strategic initiatives to drive sales growth, as well as an increase in commission expense driven by our increased sales. Selling and marketing expenses as a percentage of sales decreased to 27.9% for the three months ended September 30, 2018, compared with 28.8% of sales for the three months ended September 30, 2017 primarily due to the leveraging effect of higher sales. Our worldwide period-ending selling headcount increased by 72, or 11.3%, to 707 at September 30, 2018, from 635 at September 30, 2017.

General and administrative expenses. General and administrative expenses increased by \$2.2 million, or 21.2%, to \$12.5 million for the three months ended September 30, 2018 from \$10.3 million for the three months ended September 30, 2017. This increase was driven primarily by an increase in headcount and professional advisory services related to our recent acquisitions and associated business integration activities. General and administrative expenses increased to 12.5% of sales for the three months ended September 30, 2018 from 11.4% of sales for the three months ended September 30, 2017.

Depreciation and amortization expenses. Depreciation and amortization expenses increased by \$0.3 million, or 8.7%, to \$4.7 million for the three months ended September 30, 2018 from \$4.4 million for the three months ended September 30, 2017. This increase was driven primarily by higher amortization of intangible assets related to our recent acquisitions.

Research and development expenses. Research and development expenses increased by \$1.0 million, or 10.6%, to \$10.0 million for the three months ended September 30, 2018 from \$9.0 million for the three months ended September 30, 2017. This increase was mainly driven by higher compensation expense resulting from increased engineering headcount due to our acquisitions and activities to accelerate new product development for both hardware and software platforms in all of our segments. Research and development expenses as a percentage of sales were 10.0% for both the three months ended September 30, 2018 and September 30, 2017.

Other expense (income). For the three months ended September 30, 2018, we had other expense of \$0.1 million compared to other income of \$0.2 million for the three months ended September 30, 2017. This change was primarily driven by the effect of foreign exchange rates on the value of intercompany account balances of our subsidiaries denominated in other currencies.

Income tax (benefit) expense. Income tax benefit was \$0.4 million for the three months ended September 30, 2018, compared with income tax expense of \$0.9 million for the three months ended September 30, 2017. Our effective tax rate was 12.5% for the three months ended September 30, 2018 compared with 36.8% in the prior year period. The change in our income tax (benefit) expense was primarily due to a pretax loss during the three months ended September 30, 2018 compared to pretax income during the three months ended September 30, 2017.

Our quarterly estimate of our annual effective tax rate, and our quarterly tax provision for income tax (benefit) expense, is subject to significant variation due to numerous factors, including variability in accurately predicting our pretax and taxable income and loss and the mix of jurisdictions to which they relate. Also, our effective tax rate may fluctuate more based on the amount of pretax income or loss recognized during the quarter. The change in our effective tax rate during the three months ended September 30, 2018 compared with the same prior year period was primarily due to a shift in the geographic mix of pretax income expected for the full year.

Net (loss) income. Our net loss was \$2.5 million for the three months ended September 30, 2018 compared to net income of \$1.6 million for the prior year period, reflecting the impact of the factors described above.

Nine Months Ended September 30, 2018 Compared to the Nine Months Ended September 30, 2017

Sales. Total sales increased by \$36.3 million, or 14.3%, to \$290.8 million for the nine months ended September 30, 2018 from \$254.5 million for the nine months ended September 30, 2017. Total product sales increased by \$28.6 million, or 14.8%, to \$222.1 million for the nine months ended September 30, 2018 from \$193.5 million for the nine months ended September 30, 2017. Our product sales increase reflected higher unit sales in the Construction BIM and Emerging Verticals segments and higher average selling prices in the 3D Factory segment. Service revenue increased by \$7.7 million, or 12.5%, to \$68.7 million for the nine months ended September 30, 2018 from \$61.0 million for the nine months ended September 30, 2017, primarily due to an increase in warranty and customer service revenue driven by the growth of our installed, serviceable base and focused sales initiatives in all of our segments. Foreign exchange rates had a positive impact on sales of \$5.3 million, increasing our overall sales growth rate by approximately 2.1 percentage points, due to the strengthening of the Euro, Japanese Yen, British Pound, and Chinese Yuan relative to the U.S. dollar.

Gross profit. Gross profit increased \$21.3 million, or 14.9%, to \$163.8 million for the nine months ended September 30, 2018 from \$142.5 million for the nine months ended September 30, 2017 primarily due to the increased product revenue and service revenue. Gross margin increased to 56.3% for the nine months ended September 30, 2018 from 56.0% in the prior year period. Gross margin from product revenue increased by 0.4% percentage points to 60.0% for the nine months ended September 30, 2018 from 59.6% in the prior year period. This increase was primarily due to higher average selling prices in our 3D Factory segment and improved manufacturing efficiencies, mostly offset by the increase in our inventory reserve during the third quarter of 2018. During the third quarter of 2018, we performed an analysis of our inventory reserves in connection with our recent new product introductions and acquisitions and recorded a charge increasing our reserve for excess and obsolete inventory based on the determination that quantities on-hand for certain legacy products exceeded our revised sales projections. Gross margin from service revenue decreased by 0.4% percentage points to 44.3% for the nine months ended September 30, 2018 from 44.7% for the prior year period primarily as a result of an increased contribution from customer service sales with lower margins than other service revenue types.

Selling and marketing expenses. Selling and marketing expenses increased by \$11.3 million, or 15.1% to \$86.2 million for the nine months ended September 30, 2018 from \$74.9 million for the nine months ended September 30, 2017. This increase was driven primarily by higher compensation expense, reflecting an increase in selling headcount as part of our strategic initiatives to drive sales growth, as well as an increase in commission expense driven by our increased sales. Selling and marketing expenses as a percentage of sales were 29.6% for the nine months ended September 30, 2018, compared with 29.4% of sales for the nine months ended September 30, 2017. Our worldwide period-ending selling headcount increased by 72, or 11.3%, to 707 at September 30, 2018, from 635 at September 30, 2017.

General and administrative expenses. General and administrative expenses increased by \$2.0 million, or 6.1%, to \$34.9 million for the nine months ended September 30, 2018 from \$32.9 million for the nine months ended September 30, 2017. This increase was driven primarily by an increase in outside professional services spending related to acquisition and integration costs related to our recent acquisitions. General and administrative expenses decreased to 12.0% of sales for the nine months ended September 30, 2018 from 12.9% of sales for the nine months ended September 30, 2017 primarily due to the leveraging effect of increased sales.

Depreciation and amortization expenses. Depreciation and amortization expenses increased by \$1.4 million, or 11.5%, to \$13.5 million for the nine months ended September 30, 2018 from \$12.1 million for the nine months ended September 30, 2017. This increase was driven primarily by higher amortization of intangible assets related to our recent acquisitions and new production tooling for the manufacture of new products.

Research and development expenses. Research and development expenses increased by \$2.9 million, or 10.7%, to \$29.4 million for the nine months ended September 30, 2018 from \$26.5 million for the nine months ended September 30, 2017. This increase was mainly driven by higher compensation expense resulting from increased engineering headcount due to our acquisitions and activities to accelerate new product development for both hardware and software platforms in all of our segments. Research and development expenses as a percentage of sales decreased to 10.1% for the nine months ended September 30, 2018 from 10.4% for the nine months ended September 30, 2017.

Other expense (income). For the nine months ended September 30, 2018, other expense increased by \$0.6 million to \$0.7 million from \$0.1 million for the nine months ended September 30, 2017. This increase was primarily driven by the effect of foreign exchange rates on the value of intercompany account balances of our subsidiaries denominated in other currencies.

Income tax (benefit) expense. Income tax expense was \$0.1 million for the nine months ended September 30, 2018, compared with income tax benefit of \$0.4 million for the nine months ended September 30, 2017. This change of \$0.5 million was primarily due to the decrease in pretax book loss for the nine months ended September 30, 2018 when compared to the same prior year period, a shift in the geographic area where income was recognized, and the exclusion of tax benefit for certain jurisdictions in a loss position in calculating income tax expense. Our effective tax rate was 9.7% for the nine months ended September 30, 2018 compared with 11.3% in the prior year period. Our effective tax rate could be impacted positively or negatively by geographic changes in the manufacturing or sales of our products and the resulting effect on taxable income in each jurisdiction, as well as by any change in statutory tax rates in a jurisdiction.

Net loss. Our net loss was \$0.8 million for the nine months ended September 30, 2018 compared to net loss of \$3.5 million for the prior year period, reflecting the impact of the factors described above.

Segment Results

We use segment profit to evaluate the performance of our reportable segments, which are 3D Factory, Construction BIM and Emerging Verticals. Segment profit is calculated as gross profit, net of selling and marketing expenses, for the reporting segment. The discussion of segment results for the three and nine months ended September 30, 2018 and 2017 presented below is based on segment profit, as described above, and segment profit as a percent of sales, which is calculated as segment profit divided by net sales for such reporting segment, which we believe will aid investors in understanding and analyzing our operating results. Our definition of segment profit may not be comparable to similarly-titled measures reported by other companies. For additional information, including a reconciliation of total segment profit to income (loss) from operations, see Note 15 – Segment Reporting, in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Three Months Ended September 30, 2018 Compared to the Three Months Ended September 30, 2017

Total sales by segment for the three months ended September 30, 2018 and September 30, 2017 were as follows (in thousands):

	Three Months Ended			
	September 30, 2018	% of Total	September 30, 2017	% of Total
3D Factory	\$ 64,182	64.4%	\$ 58,529	64.9%
Construction BIM	23,710	23.8%	22,751	25.2%
Emerging Verticals	11,813	11.8%	8,970	9.9%
Total sales	<u>\$ 99,705</u>		<u>\$ 90,250</u>	

3D Factory

(dollars in thousands)

	Three Months Ended	
	September 30, 2018	September 30, 2017
Total sales	\$ 64,182	\$ 58,529
Segment profit	\$ 16,421	\$ 19,648
Segment profit as a % of 3D Factory segment sales	25.6%	33.6%

Sales. Total sales in our 3D Factory segment increased by \$5.7 million, or 9.7%, to \$64.2 million for the three months ended September 30, 2018 from \$58.5 million in the prior year period. This increase was principally driven by an increase in units sold, higher average selling prices, and continued growth in service revenue.

Segment profit. Segment profit in our 3D Factory segment decreased by \$3.2 million, or 16.4%, to \$16.4 million for the three months ended September 30, 2018 from \$19.6 million in the prior year period. This decrease was primarily due to the increase in our inventory reserve and higher selling and marketing expenses resulting from an increase in headcount as part of our strategic initiatives to drive sales growth. During the third quarter of 2018, we performed an analysis of our inventory reserves in connection with our recent new product introductions and acquisitions and recorded a charge increasing our reserve for excess and obsolete inventory based on the determination that quantities on-hand for certain legacy products exceeded our revised sales projections. These cost increases were partially offset by higher product revenue driven by increases in average selling prices and growth in service revenue.

Construction BIM

(dollars in thousands)

	Three Months Ended	
	September 30, 2018	September 30, 2017
Total sales	\$ 23,710	\$ 22,751
Segment profit	\$ 6,860	\$ 5,407
Segment profit as a % of Construction BIM segment sales	28.9%	23.8%

Sales. Total sales in our Construction BIM segment increased by \$0.9 million, or 4.2%, to \$23.7 million for the three months ended September 30, 2018 from \$22.8 million in the prior year period, primarily due to increases in unit sales, average selling prices and service revenue.

Segment profit. Segment profit in our Construction BIM segment increased by \$1.5 million, or 26.9%, to \$6.9 million for the three months ended September 30, 2018 from \$5.4 million in the prior year period, primarily driven by an increase in sales and manufacturing efficiencies, partially offset by an increase in selling expense due to increased compensation expense resulting from an increase in headcount as part of our strategic initiatives to drive sales growth.

Emerging Verticals

(dollars in thousands)

	Three Months Ended	
	September 30, 2018	September 30, 2017
Total sales	\$ 11,813	\$ 8,970
Segment profit	\$ 1,225	\$ 989
Segment profit as a % of Emerging Verticals segment sales	10.4%	11.0%

Sales. Total sales in our Emerging Verticals segment increased by \$2.8 million, or 31.7%, to \$11.8 million for the three months ended September 30, 2018 from \$9.0 million in the prior year period, primarily due to higher units sold in our 3D Design vertical as we continue to strategically invest in new markets both organically and through acquisitions.

Segment profit. Segment profit in our Emerging Verticals segment was \$1.2 million for the three months ended September 30, 2018 compared to \$1.0 million in the prior year period. This increase of \$0.2 million was primarily due to segment profit contributions from the sales growth in our 3D Design vertical.

Nine Months Ended September 30, 2018 Compared to the Nine Months Ended September 30, 2017

Total sales by segment for the nine months ended September 30, 2018 and September 30, 2017 were as follows (in thousands):

	Nine Months Ended			
	September 30, 2018	% of Total	September 30, 2017	% of Total
3D Factory	\$ 190,584	65.5%	\$ 172,524	67.8%
Construction BIM	69,994	24.1%	60,550	23.8%
Emerging Verticals	\$ 30,205	10.4%	\$ 21,420	8.4%
Total sales	<u>\$ 290,783</u>		<u>\$ 254,494</u>	

3D Factory

(dollars in thousands)

	Nine Months Ended	
	September 30, 2018	September 30, 2017
Total sales	\$ 190,584	\$ 172,524
Segment profit	\$ 56,248	\$ 52,757
Segment profit as a % of 3D Factory segment sales	29.5%	30.6%

Sales. Total sales in our 3D Factory segment increased by \$18.1 million, or 10.5%, to \$190.6 million for the nine months ended September 30, 2018 from \$172.5 million in the prior year period. The increase was driven by higher average selling prices and growth in service revenue.

Segment profit. Segment profit in our 3D Factory segment increased by \$3.4 million, or 6.6%, to \$56.2 million for the nine months ended September 30, 2018 from \$52.8 million in the prior year period. This increase was primarily due to higher product revenue driven by increases in average selling prices and growth in service revenue, partially offset by higher selling and marketing expenses resulting from an increase in selling headcount as part of our strategic initiatives to drive sales growth and the increase in our inventory reserve in the third quarter of 2018.

Construction BIM

(dollars in thousands)

	Nine Months Ended	
	September 30, 2018	September 30, 2017
Total sales	\$ 69,994	\$ 60,550
Segment profit	\$ 19,287	\$ 13,799
Segment profit as a % of Construction BIM segment sales	27.6%	22.8%

Sales. Total sales in our Construction BIM segment increased by \$9.4 million, or 15.6%, to \$70.0 million for the nine months ended September 30, 2018 from \$60.6 million in the prior year period, primarily reflecting an increase in product unit sales and service revenue.

Segment profit. Segment profit in our Construction BIM segment increased by \$5.5 million, or 39.8%, to \$19.3 million for the nine months ended September 30, 2018 from \$13.8 million in the prior year period, primarily driven by an increase in product unit sales, partially offset by an increase in selling expense due to increased compensation expense resulting from an increase in headcount as part of our strategic initiatives to drive sales growth.

Emerging Verticals

(dollars in thousands)

	Nine Months Ended	
	September 30, 2018	September 30, 2017
Total sales	\$ 30,205	\$ 21,420
Segment profit	\$ 2,093	\$ 1,103
Segment profit as a % of Emerging Verticals segment sales	6.9%	5.1%

Sales. Total sales in our Emerging Verticals segment increased by \$8.8 million, or 41.0%, to \$30.2 million for the nine months ended September 30, 2018 from \$21.4 million in the prior year period, primarily due to higher product unit sales in our Public Safety Forensics and 3D Design verticals as we continue to strategically invest in new markets both organically and through acquisitions.

Segment profit. Segment profit in our Emerging Verticals segment was \$2.1 million for the nine months ended September 30, 2018 compared to \$1.1 million in the prior year period. This increase of \$1.0 million was primarily due to higher product sales in all verticals resulting from the increase in selling headcount as part of our strategic initiatives to staff these verticals with a dedicated sales force to drive sales growth.

Liquidity and Capital Resources

Cash and cash equivalents decreased by \$25.9 million to \$115.1 million at September 30, 2018 from \$141.0 million at December 31, 2017. The decrease was primarily driven by cash paid for acquisitions of \$27.6 million and for our \$1.8 million equity investment in Present4D, \$12.1 million of cash used in the purchase of inventory, property and equipment purchases of \$6.9 million, U.S. Treasury Bill purchases of \$9.0 million, and intangible purchases of \$1.7 million, partially offset by \$20.9 million in proceeds received from the exercise of options during the nine months ended September 30, 2018.

Cash provided by operations was \$4.9 million during the nine months ended September 30, 2018, compared to cash used in operations of \$0.8 million during the nine months ended September 30, 2017. The change was mainly due the decrease in our net loss during the nine months ended September 30, 2018 compared to the same period in the prior year, changes in working capital accounts, and the increase in our inventory reserve in the third quarter of 2018.

Cash used in investing activities during the nine months ended September 30, 2018 was \$47.0 million compared to \$19.1 million of cash provided by investing activities during the nine months ended September 30, 2017. The change was primarily due to the purchase of \$9.0 million of U.S. Treasury Bills, \$27.6 million in cash paid for the acquisition of businesses, property and equipment purchases of \$6.9 million, and the purchase of equity investments of \$1.8 million during the nine months ended September 30, 2018, compared to \$32.0 million in proceeds received from the sale of U.S. Treasury Bills, \$6.1 million in property and equipment purchases, \$5.5 million in cash paid for the acquisition of a business, and no equity investment purchase activity during the nine months ended September 30, 2017.

Cash provided by financing activities was \$20.2 million during the nine months ended September 30, 2018, compared to cash used in financing activities of \$0.1 million for the nine months ended September 30, 2017. The change was primarily due to \$20.9 million in cash received from the exercise of employee stock options during the nine months ended September 30, 2018 compared to \$0.4 million during the nine months ended September 30, 2017.

Of our cash and cash equivalents, \$71.4 million was held by foreign subsidiaries as of September 30, 2018. On December 22, 2017, the United States enacted the Tax Cuts Act, resulting in significant modifications to existing tax law, which includes a provision for repatriation through a one-time transition tax. We continue to gather and analyze information, including whether or not we will repatriate cash to the United States from our foreign subsidiaries.

On November 24, 2008, our Board of Directors approved a \$30.0 million share repurchase program. Acquisitions for the share repurchase program may be made from time to time at prevailing prices, as permitted by securities laws and other legal requirements, and subject to market conditions and other factors. The share repurchase program may be discontinued at any time. There is no expiration date or other restriction governing the period over which we can repurchase shares under the program. In October 2015, our Board of Directors authorized an increase to the existing share repurchase program from \$30.0 million to \$50.0 million. We made no stock repurchases during the nine month period ended September 30, 2018 under this program. As of September 30, 2018, we had authorization to repurchase \$18.3 million remaining under the repurchase program.

We believe that our working capital and anticipated cash flow from operations will be sufficient to fund our long-term liquidity operating requirements for at least the next 12 months.

We have no off balance sheet arrangements.

Contractual Obligations and Commercial Commitments

We enter into purchase commitments for products and services in the ordinary course of business. These purchases generally cover production requirements for 60 to 120 days as well as materials necessary to service customer units through the product lifecycle and for warranty commitments. As of September 30, 2018, we had \$72.0 million in purchase commitments that are expected to be delivered within the next 12 months. To ensure adequate component availability in preparation for new product introductions, as of September 30, 2018, we also had \$4.7 million in long-term commitments for purchases to be delivered after 12 months. Other than as described in the preceding sentences, there have been no material changes to the contractual obligations and commercial commitments table included in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2017.

Critical Accounting Policies

The preparation of our condensed consolidated financial statements requires our management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, as well as disclosure of contingent assets and liabilities. We base our estimates on historical experience, along with various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Some of these judgments can be subjective and complex and, consequently, actual results may differ from these estimates under different assumptions or conditions. A discussion of our critical accounting policies is included in Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission on February 21, 2018. As of September 30, 2018, our critical accounting policies have not changed from those described in our Annual Report on Form 10-K for the year ended December 31, 2017.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Foreign Exchange Exposure

We conduct a significant portion of our business outside the United States. As of and for the nine months ended September 30, 2018, 60% of our revenue was invoiced, and a significant portion of our operating expenses were paid, in foreign currencies, and 55% of our assets were denominated in foreign currencies. Fluctuations in exchange rates between the U.S. dollar and such foreign currencies may have a material effect on our results of operations and financial condition and could specifically result in foreign exchange gains and losses. The impact of future exchange rate fluctuations on the results of our operations cannot be accurately predicted due to our constantly changing exposure to various currencies, and the fact that all foreign currencies do not react in the same manner in relation to the U.S. dollar. Our most significant exposures are to the Euro, British pound sterling, Swiss franc, Japanese yen, Chinese yuan renminbi, Mexican peso, Indian rupee, and Brazilian real. To the extent that the percentage of our non-U.S. dollar revenues derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates may increase. We are aware of the availability of off-balance sheet financial instruments to hedge exposure to foreign currency exchange rates, including cross-currency swaps, forward contracts and foreign currency options. However, we have not used such instruments in the past, and none were utilized in 2017 or the nine months ended September 30, 2018.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We are responsible for establishing and maintaining disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that are designed to provide reasonable assurance that information required to be disclosed in our reports filed under the Exchange Act, such as this Quarterly Report on Form 10-Q, is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures that are designed to provide reasonable assurance 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 management, including our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of September 30, 2018. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2018 to provide reasonable assurance that information required to be disclosed in this Quarterly Report on Form 10-Q was recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

During the quarter ended September 30, 2018, there was no change in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are not involved in any legal proceedings, including routine litigation arising in the normal course of business, that we believe will have a material adverse effect on our business, financial condition or results of operations.

Item 1A. Risk Factors

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC, our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2018, as filed with the SEC, and in this Item 1A before deciding to invest in, or retain, shares of our common stock. These risks could materially and adversely affect our business, financial condition, and results of operations. The risks described in our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2018 are not the only risks we face. Our operations could also be affected by additional factors that are not presently known by us or by factors that we currently consider immaterial to our business. As of September 30, 2018, there have been no material changes in our risk factors from those set forth in our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2018.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Purchases of Equity Securities by the Issuer Under the Share Repurchase Plan

On November 24, 2008, our Board of Directors approved a \$30.0 million share repurchase program. Acquisitions for the share repurchase program may be made from time to time at prevailing prices, as permitted by securities laws and other legal requirements, and subject to market conditions and other factors. The share repurchase program may be discontinued at any time. There is no expiration date or other restriction governing the period over which we can repurchase shares under the program. In October 2015, our Board of Directors authorized an increase to the existing share repurchase program from \$30.0 million to \$50.0 million. We made no stock repurchases during the nine month period ended September 30, 2018 under this program. As of September 30, 2018, we had authorization to repurchase \$18.3 million remaining under the repurchase program.

Item 6. Exhibits

INDEX TO EXHIBITS

2.1	Quota Purchase Agreement, dated as of July 13, 2018, by and among FARO Technologies, Inc., Opto-Tech SRL, each of the shareholders of Opto-Tech SRL, and Mr. Gianfranco Chiapparini, in the capacity as the Seller Representative (Filed as Exhibit 2.1 to our Current Report on Form 8-K, filed July 19, 2018 and incorporated herein by reference).*
3.1	Amended and Restated Articles of Incorporation, as amended (Filed as Exhibit 3.1 to our Registration Statement on Form S-1/A filed September 10, 1997, No. 333-32983, and incorporated herein by reference).
3.2	Amended and Restated Bylaws (Filed as Exhibit 3.1 to our Current Report on Form 8-K, filed February 3, 2010 and incorporated herein by reference, SEC File No. 000-23081)
4.1	Specimen Stock Certificate (Filed as Exhibit 4.1 to our Registration Statement on Form S-1/A filed September 10, 1997, No. 333-32983, and incorporated herein by reference).
31-A	Certification of the President and Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31-B	Certification of the Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32-A	Certification of the President and Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32-B	Certification of the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Labels Linkbase Document
101.PRE	XBRL Taxonomy Presentation Linkbase Document

* Schedules and exhibits are omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company agrees to furnish supplementally a copy of any omitted schedules or exhibits to the Securities and Exchange Commission upon request.

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.

FARO Technologies, Inc.

(Registrant)

Date: October 31, 2018

By: /s/ Robert Seidel

Name: Robert Seidel

Title: Chief Financial Officer

(Duly Authorized Officer and Principal Financial Officer)

FARO Technologies, Inc.
Certification Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Simon Raab, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of FARO Technologies, 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(s) 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(s) 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: October 31, 2018

/s/ Simon Raab

Name: Simon Raab
Title: President and Chief Executive Officer
(Principal Executive Officer)

FARO Technologies, Inc.**Certification Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Robert Seidel, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of FARO Technologies, 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(s) 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(s) 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: October 31, 2018

/s/ Robert Seidel

Name: Robert Seidel
Title: Chief Financial Officer
(Principal Financial Officer)

FARO Technologies, Inc.
Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Solely for the purposes of complying with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, the undersigned President and Chief Executive Officer of FARO Technologies, Inc. (the Company), hereby certify that the Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 (the Report) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 31, 2018

/s/ Simon Raab

Name: Simon Raab
Title: President and Chief Executive Officer
(Principal Executive Officer)

FARO Technologies, Inc.

Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Solely for the purposes of complying with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, the undersigned Chief Financial Officer of FARO Technologies, Inc. (the Company), hereby certify that the Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 (the Report) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 31, 2018

/s/ Robert Seidel

Name: Robert Seidel
Title: Chief Financial Officer
(Principal Financial Officer)