

U.S. SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the fiscal year ended September 30, 2017.

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the transition period from _____ to _____

Commission file number: 001-35011

DYNASIL CORPORATION OF AMERICA

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	22-1734088 (I.R.S. Employer Identification No.)
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313 Washington Street, Suite 403, Newton, MA (Address of principal executive offices)	02458 (Zip Code)
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Registrant's telephone number, including area code: (617) 668-6855

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

Title of each class	Name of each exchange on which registered
Common Stock, \$0.0005 par value	The Nasdaq Stock Market LLC (Nasdaq Capital Market)

Securities registered pursuant to Section 12(g) of the Act: none

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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.

Large accelerated filer <input type="checkbox"/>	Accelerated filer <input type="checkbox"/>
Non-accelerated filer <input type="checkbox"/>	Smaller reporting company <input checked="" 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 Act.)
Yes [] No [x]

As of March 31, 2017, the aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately \$12,159,887.

As of December 8, 2017 there were 17,114,603 shares of common stock, par value \$0.0005 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the Annual Meeting of Stockholders scheduled to be held on February 22, 2018 are incorporated by reference into Part III of this report.

PART I

This annual report on Form 10-K contains or incorporates by reference not only historical information, but also forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created by those sections. We refer you to the information under the heading "Forward-Looking Statements."

As used in this annual report on Form 10-K, references to "Dynasil," the "Company," "we," "our" or "us," unless the context otherwise requires, refer to Dynasil Corporation of America and our subsidiaries.

All trademarks or trade names referred to in this report are the property of their respective owners.

ITEM 1. BUSINESS

General

Dynasil Corporation of America was founded as a New Jersey corporation in 1960 and incorporated in the state of Delaware through a migratory merger in March 2008. Our corporate headquarters are located at 313 Washington Street, Suite 403, Newton, MA 02458, and our corporate website is www.dynasil.com. You can access, free of charge, our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K and any other amendments to those reports, through a link at our website, or at the Commission's website at www.sec.gov.

We have the following three reporting segments based on our main operating activities:

- *Contract Research:* The Contract Research segment consists of the Radiation Monitoring Devices, Inc. ("RMD") business unit, which is among the largest small business participants in United States ("U.S.") government-funded research.
- *Optics:* The Optics segment encompasses four business units – Dynasil Fused Silica, Evaporated Metal Films, Hilger Crystals, and Optometrics – that manufacture commercial products, including optical crystals for sensing in the security and medical imaging markets, as well as optical components, optical coatings and optical materials for scientific instrumentation and other applications.
- *Biomedical:* The Biomedical segment consists of a single business unit, Dynasil Biomedical Corporation ("Dynasil Biomedical"), a medical technology incubator which owns rights to certain early stage medical technologies. In October 2013, Dynasil Biomedical formed Xcede Technologies, Inc. ("Xcede"), a joint venture with Mayo Clinic to spin out and separately fund the development of a tissue sealant technology. At September 30, 2017, Dynasil Biomedical owned approximately 61% of the outstanding common and preferred stock of Xcede, thus Xcede is included in our consolidated financial statements. Dynasil Biomedical currently has no operations other than relating to its equity ownership in Xcede.

The segment amounts included in MD&A are presented on a basis consistent with our internal management reporting and accounting principles generally accepted in the U.S. ("U.S. GAAP"). Segment information appearing

in Note 16 – Segment, Customer and Geographical Reporting of the Notes to Financial Statements is also presented on this basis.

Our business strategy is based on continued development and expansion of our funded research portfolio, investment in the commercialization of the technologies originating from our Contract Research segment, organic growth of existing Optics segment products, continuing development of the Xcede medical technologies using outside funding, and acquisitions that align with our core competencies.

Historical Growth by Acquisition

Through a series of acquisitions beginning in March 2005, Dynasil has evolved from a single product line optics company to one focused on multiple optical product lines and a significant contract research business focused on advanced materials used in radiation detection and other advanced instrumentation. Our revenue has increased from \$2 million in FY 2004 to \$37 million in FY 2017.

The acquisitions we completed during this period included:

- *Optometrics*: In March 2005, we acquired Optometrics LLC (“Optometrics”), a worldwide supplier of optical components and instruments, including diffraction gratings, interference filters, monochromators, laser optics and specialized optical systems.
- *Evaporated Metal Films*: In October 2006, we acquired Evaporated Metal Films Corporation (“EMF”), an optical thin-film coatings company with a broad range of application markets, including solar energy, display systems, dental photography, optical instruments, satellite communications and lighting.
- *RMD*: In July 2008, we acquired Radiation Monitoring Devices, Inc. (“RMD”), a contract research company, and RMD Instruments, LLC (“Dynasil Products”), a precision instruments company that manufactured and sold instruments in the medical imaging and industrial markets, including hand-held analyzers for lead paint and gamma medical probes for cancer surgery. The lead paint detector and gamma medical probe businesses were sold in fiscal 2014.
- *Hilger Crystals*: In July 2010, we acquired Hilger Crystals, Ltd., (“Hilger”) a manufacturer of synthetic crystals applicable to a wide range of industrial, medical, and homeland security applications with a long history of supplying high-quality synthetic crystals for infrared spectroscopy, X-ray and gamma ray detection.
- *Biomedical technologies*: In April 2011, we acquired the rights to six early stage biomedical technologies from Dr. Daniel Ericson, a former hematologist at the Mayo Clinic, which jointly owns rights to certain of the technologies acquired. The activity of our Biomedical segment is currently focused on the development of the tissue sealant technology that was part of this transaction in its Xcede subsidiary.
- *DichroTec Thin Films*: In June 2014, our EMF subsidiary acquired the assets of DichroTec Thin Films LLC, another optical thin-film coatings company with a broad range of applications, many of which are similar to EMF’s applications.

Contract Research – the Science Behind our Technology

Our Contract Research segment’s business unit, RMD, is among the largest small business participants in U.S. government-funded research, performing research and development activities for government agencies including Department of Energy, Department of Defense, Department of Homeland Security, Domestic Nuclear Detection Office, National Institutes of Health and NASA.

RMD develops advanced technology in materials, sensors and prototype instruments that detect or measure radiation, light, magnetism or sound for use in security, medical and industrial applications. RMD has research expertise in material science, radiation detection, digital imaging technology, magnetic imaging, laser optics and photonics. As of September 30, 2017, our Contract Research segment had a total of 71 employees, including 23 Ph.D. level scientists. RMD serves as an incubator to expand our patent portfolio enabling the opportunity to advance our technology from development to commercialization using government-funded research. As of September 30, 2017, RMD had a portfolio of 68 issued U.S. patents and 43 pending patent applications, compared with 68 issued patents and 42 pending patent applications at the same point in 2016.

For over thirty years, RMD has successfully conducted government research under the auspices of the Small Business Innovation Research ("SBIR") program. In recent years, RMD has augmented its SBIR research with larger, competitively bid government research and development contracts. To grow our research portfolio within the federal government, we are broadening our relationships within key federal funding agencies and the U.S. military. RMD also provides research for non-governmental entities in areas where it has the appropriate expertise. Such research is currently not a significant portion of RMD's revenue. Our research initiatives are aligned with our focus on the homeland security, medical and industrial markets. As of September 30, 2017, RMD had a contract backlog of approximately \$33.2 million, of which approximately 51% is SBIR contracts.

RMD competes for contract research work against a variety of small and large entities, including universities that submit research proposals based on specific government solicitations. We generate revenue under various types of contracts, which include Cost Reimbursement, Time & Materials (T&M), Fixed Price-Level of Effort and Firm Fixed Price (FFP) contracts. We believe that RMD's reputation for conducting state-of-the art research and development, as well as the quality of its proposals, are significant competitive advantages. In addition, RMD maintains strong working relationships with universities, government agencies, national laboratories, research hospitals and corporations. However, some of our competitors may have greater financial, technical and human resources than we have and may be better able to operate large, well-funded research and development programs.

We believe that research projects can provide an important source for new commercial products in areas such as medical imaging, industrial sensors, critical care and point of care diagnostics and homeland security. For example, Dynasil Products' lead paint analyzer and gamma medical probes businesses, which were sold in fiscal year 2014, emanated from the RMD portfolio. Most recently, our government-funded research work supported the development of our CLYC dual-mode radiation detection technology which we are currently selling commercially.

Our Optical Technology

We specialize in the production of optical materials, components and coatings for various applications in the medical, industrial, and homeland security/defense sectors.

Our Optics segment supplies synthetic crystals, optical materials, components, and coatings that are used in devices such as baggage scanners, medical imaging systems, optical instruments, lasers, analytical instruments, automotive components, semiconductor/electronic devices, spacecraft/aircraft components and advertising displays. These products are offered through four business units (Dynasil Fused Silica, Optometrics, Hilger and EMF).

We compete for business with fabricators of industrial optical materials, other optical components manufacturers, other optical crystal manufacturers and other optical coaters as well as other analytical instruments manufacturers and synthetic crystal manufacturers. We believe our proprietary processes, reputation, specialty product offering, products in development and the price at which we offer our products enable us to successfully compete in these markets. However, many of our competitors have greater financial, sales and marketing resources than we do, which may enable them to develop and market products that would compete against those developed by us.

Our products are distributed through a direct sales and marketing staff of ten people and through other channels, including manufacturer's representatives and distributors in various foreign countries for international sales and U.S. manufacturers' representatives for certain product lines. Marketing efforts include direct customer contact through sales visits, advertising in trade publications, attendance at trade shows and our newly designed e-commerce website.

Biomedical: Xcede and Our Development of a Tissue Sealant Technology

Xcede's first product currently under development is a hemostatic patch, designed to be fully biocompatible, to be used when conventional techniques are inadequate or impractical during general surgery on the kidneys, liver and spleen. Xcede's hemostatic patch ("Xcede Patch") is intended to be used during surgical procedures to stop bleeding (hemostasis). Preclinical testing to date indicates this product promotes hemostasis within 60 seconds, a time that is faster than currently approved hemostatic patches. As described above, in 2011, Dynasil Biomedical ("DBM") acquired rights to the underlying tissue sealant technology as part of a transaction with a former hematologist at the Mayo Clinic. Since that time, DBM has invested significant capital developing this tissue sealant technology, including costs to further the related intellectual property rights and to conduct animal studies.

Beginning at its inception and through November 2016, Xcede funded its research activities through the issuance of convertible notes bearing interest at 5% (“the Notes”) pursuant to a note purchase agreement dated October 2013 and amended. The Notes provided for the issuance of up to \$5.2 million in the aggregate principal amount and were sold to external investors and certain directors and officers of the Company and issued to DBM in exchange for certain services. The Notes were convertible into equity of Xcede.

In November 2016, Dynasil, through DBM, committed to invest \$1.2 million of cash into Xcede over the following 18 months, of which \$0.7 million has been invested as of September 30, 2017, in exchange for Series B convertible preferred stock of Xcede (“Series B Preferred”). In conjunction with DBM’s committed investment, all \$5.5 million in existing Notes and accrued interest were converted into 5,394,120 shares of Series A convertible preferred stock of Xcede (“Series A Preferred”) at a 20% discount to the price per share of the Series B Preferred, in accordance with the amended provisions of the Notes. Series A Preferred participants include both outside investors (accounted for as noncontrolling interest) and DBM. The outside investors converted \$3.1 million of Notes and accrued interest into 3,055,551 shares of Series A Preferred. DBM converted its \$2.4 million of Notes and accrued interest into 2,338,569 shares of Series A Preferred.

In addition to DBM, Xcede’s investors consist of Mayo Clinic Ventures, Southern Initiative Minnesota Foundation, Rochester Area Economic Development Inc., angel investors and certain members of Dynasil’s executive management team and board of directors.

As of September 30, 2017, DBM owned approximately 61% of Xcede’s outstanding Common Stock and Preferred Stock and, as a result, Xcede is included in the Company’s consolidated balance sheets, results of operations and cash flows. Due to the issuance of Preferred Stock, DBM’s ownership percentage in Xcede decreased to less than 80% and Xcede will no longer be included in the Dynasil consolidated federal tax return for the fiscal year ended September 30, 2017. As a result, the Company will no longer be able to offset taxable income or benefit from net operating losses and other tax attributes related to Xcede. (See Note 9 – Income Taxes.)

In January 2016, Xcede announced that it had signed three agreements with Cook Biotech Inc. of West Lafayette, Indiana (“Cook”), including a Development Agreement, a License Agreement and a Supply Agreement, in connection with the development, regulatory approval and production of Xcede’s hemostatic patch (“Xcede’s Patch”). In November 2016, Xcede entered into another Services Agreement, a Secured Promissory Note, a Loan Agreement, a Security Agreement and an Intellectual Property Security Agreement (collectively the “Note Agreement”) with Cook, in which Cook committed to fund the pre-clinical testing of, and subject to the receipt of applicable regulatory approvals, to initiate first in human clinical trials for, the Xcede Patch. Under the terms of the Note Agreement, in exchange for the services performed by Cook, Xcede has committed to a multiple draw credit facility in the aggregate amount not to exceed \$1.5 million. Three draws of principal will be available, each in the amount of \$500,000, upon satisfaction of conditions identified in the Note Agreement. The principal amounts outstanding bear interest at a fixed rate of 2% and are secured by all the rights of Xcede under the Development Agreement, Supply Agreement, and License Agreement, all the rights to the data and work product arising from the clinical trial being performed under the Services Agreement, all regulatory approvals for the Xcede Patch, all patent and patent applications owned or controlled by Xcede, and all trademark and service mark registrations and applications. The outstanding principal and unpaid interest are due and payable in full at the earlier of closing of an acquisition transaction or December 31, 2025.

Strategy to Commercialize our Technologies

Our business strategy focuses on combining our expertise in funded research, product development and technology innovation to commercialize detection and analysis equipment for the homeland security, industrial and medical markets. We are executing on this strategy by:

- developing and expanding our research portfolio;
- seeking to commercialize the technologies coming from our Contract Research segment;
- growing organically through investment in existing businesses; and
- identifying and investing in those technologies with the greatest revenue and growth potential in the market.

For example, our CLYC dual mode nuclear detection crystal technology was developed by RMD under a program for the Department of Homeland Security for use in locating nuclear bombs or nuclear materials at our nation’s major cities, ports and borders. This technology has the potential to be very important to our national security, as well as other radiation detection applications, such as nuclear power plant safety. Our dual mode detection crystals have been commercialized in a detector currently being offered by a large manufacturer of detection equipment. RMD continues to further enhance this technology.

Our CLYC dual mode detection crystals technology is designed to be a single detector that replaces two detector subsystems – the gamma radiation detector and also the helium-3 detectors for neutrons. Increasing our value proposition is the fact that the stockpile of the chemical element helium-3, a byproduct of nuclear weapons production, is in short supply. The stockpile of helium-3 has been drawn down during the past 10 years, as the federal government has increased its use in neutron detectors to help prevent nuclear and radiological material from being smuggled into the U.S.

Intellectual Property (IP)

From October 2016 through September 2017, we have been granted four new U.S. patents and have filed 24 new patent applications. Our current portfolio, company-wide, is 73 issued and 54 pending applications, the largest percentage of which are issued to RMD. We believe that intellectual property represents an important strategic advantage for us.

Customers

We have more than 600 customers, with approximately 50% of our business concentrated in our top 10 customers. Our four largest customers are agencies and agents of the Federal government and accounted for approximately 11%, 9%, 6% and 4%, respectively, of our revenues during fiscal year 2017. Our fifth largest customer is a customer of our Optics segment and also accounted for 4% of our overall revenue during fiscal year 2017. The loss of any of these top five customers would likely have a material adverse effect on our business, financial condition and results of operations. Generally, our customers provide purchase orders for a specific part and quantity or they provide a contract for research projects. Product orders are normally filled over a period ranging from one to six weeks. We also have blanket orders that call for monthly deliveries of predetermined amounts. Contract research projects generally run for a one to two year period.

Employees

As of September 30, 2017, we had a total of 204 employees, 191 of which are full-time. Of the total, 30 of our employees are engaged in administration, 10 are engaged in sales, 75 are engaged in research and/or engineering and 89 are engaged in manufacturing. The Company has a total of 27 Ph.D. level employees. Our operations are non-union except for a two-person union in one location.

Suppliers

Our largest supplier for materials and components is a supplier of the fused silica material that is fabricated and sold by our New Jersey facility. We believe that we have excellent relationships with our suppliers. If any of our suppliers should become unavailable to us for any reason, we believe that there are a number of potential replacements, although we might incur some delay in identifying such replacements.

Research and Development

Our RMD business unit primarily provides research and development (“R&D”) activities under government funded research contracts. The RMD business unit recognized revenue of \$18.0 million and \$19.8 million in fiscal years 2017 and 2016, respectively. The direct costs associated with the research revenue were \$10.7 million and \$12.2 million in 2017 and 2016, respectively. Substantially all the Contract Research segment’s cost of revenue relates to research performed by RMD which are in turn billed to the contracting party.

R&D for our other businesses, which totaled approximately \$0.9 million and \$1.0 million in fiscal years 2017 and 2016, respectively, was primarily new product development, changes to our manufacturing processes and the introduction of improved methods and equipment.

Government Regulation

The businesses that we operate are subject to various federal and state regulations.

Our Contract Research segment is subject to the rules and regulations applicable to government contracting, including: the Federal Acquisition Regulation (FAR) and supplements, which regulate the formation, administration and performance of U.S. Government contracts; the Truth in Negotiations Act, which requires certification and disclosure of cost and pricing data in connection with certain contract negotiations; the Procurement Integrity Act,

which regulates access to competitor bids and proposal information and government source selection information, and our ability to provide compensation to certain former government officials; the Civil False Claims Act, which provides for substantial civil penalties for violations, including for submission of a false or fraudulent claim to the U.S. Government for payment or approval; and the U.S. Government Cost Accounting Standards, which impose accounting requirements that govern our right to reimbursement under certain cost-based U.S. Government contracts.

The tissue sealant being developed by Xcede, our joint venture with Mayo Clinic, is subject to FDA regulations and approval in the United States and requires CE marking and other regulatory agency approval in other countries around the world.

Our use of radioactive materials in research and certain of our products (our dual-mode detector) subject us to laws regulating hazardous wastes under United States federal and certain state, environmental and atomic energy regulatory laws and similar laws in each jurisdiction in which our research and manufacturing facilities are located. Environmental compliance costs, which totaled \$33,000 for fiscal year 2017, have not historically had a material effect on our operating results.

With respect to our intellectual property rights, we rely on, and are subject to, the laws in the U.S. and abroad governing intellectual property protection.

Item 1A. RISK FACTORS

In your evaluation of our company and our businesses, you should carefully consider the risks and uncertainties described below, together with the information included elsewhere in this Annual Report on Form 10-K and the other documents we file with the Securities and Exchange Commission (“SEC”). The following factors describe the risks and uncertainties that we consider significant to the operation of our business, but should not be considered a complete listing of all potential risks and uncertainties that could adversely affect our operating results, financial position or liquidity. Additionally, our business is subject to the same general risks and uncertainties that affect many other companies, such as the overall United States (“U.S.”) and global economic conditions, international conflicts, geopolitical events, changes in laws or accounting rules, fluctuations in interest and exchange rates or other disruptions of expected economic and business conditions.

Risks Related To Our Business

The Company relies on its Contract Research segment for approximately half of its revenue. A decline in or temporary suspension of U.S. Government spending, changes in federal budgetary priorities, the timing of contract awards or a restructuring of the SBIR/STTR programs may adversely affect our future revenue and limit our growth prospects.

Our Contract Research business unit, RMD, is among the largest small business participants in U.S. government-funded research, performing research and development activities for government agencies including Department of Energy, Department of Defense, Department of Homeland Security, Domestic Nuclear Detection Office, National Institutes of Health, and National Aeronautics and Space Administration. Historically RMD has conducted its government research contracts through the SBIR (Small Business Innovation Research Program) and the STTR (Small Business Technology Transfer Program). Though RMD has augmented its SBIR contracts with larger competitively bid government contracts in recent years, a reduction in or elimination of the SBIR or the STTR programs could result in our inability to win contracts, as we may not have the resources to compete effectively against much larger, better-funded companies. Further, a significant decline in overall U.S. Government spending, including in the areas of national security, intelligence and homeland security, a significant shift in its spending priorities, the substantial reduction or elimination of particular defense-related programs or significant delays in contract or task order awards for large programs could adversely affect our future revenue and limit our growth prospects. While the October 2013 government shutdown did not have a significant impact on the Company, a future government shutdown could result in the suspension of work on contracts in progress or in payment delays which would adversely affect our future revenue and cash flow.

The Company relies on a small number of key customers for a substantial portion of its revenue.

Ten customers accounted for approximately 50% of the Company’s revenue in 2017. Four of those ten customers were agencies of the U.S. Government and accounted for 31% of revenue. Although we have had business relationships with these customers for many years, there can be no guarantee that we will be able to win contracts

with these agencies in the future. Accordingly our performance could be adversely affected by the loss of one or more of these key customers.

The U.S. Government may terminate, cancel, modify or curtail our contracts at any time prior to their completion and, if we do not replace them, we may be unable to achieve our expected future revenue and may suffer a decline in revenue.

As of September 30, 2017, our total backlog for Contract Research was approximately \$33.2 million. Backlog consists of the portion of existing contracts yet to be performed and awards of projects by agencies in favor of RMD. Many of the U.S. Government programs in which we participate as a contractor or subcontractor may extend for several years and include one or more base years and one or more option years. These programs are normally funded on an annual basis. Under our contracts, the U.S. Government generally has the right not to exercise options to extend or expand our contracts and may otherwise terminate, cancel, modify or curtail our contracts at its convenience. Any decisions by the U.S. Government not to exercise contract options or to terminate, cancel, modify or curtail our major programs or contracts would adversely affect our revenue, revenue growth and profitability.

The U.S. Government also has the right to terminate a contract for default, in which case, we may be exposed to liability, including for excess costs incurred by the customer in procuring undelivered services and products from another source. Depending on the nature and value of the contract, a performance issue or termination for default could cause our actual results to differ from those anticipated and could harm our reputation.

Our earnings and profitability may be adversely affected by our failure to accurately estimate and manage costs, time and resources.

We generate revenue under various types of contracts, which include cost reimbursement, Time & Materials (T&M), Fixed Price-Level of Effort and Firm Fixed Price contracts (FFP). Our earnings and profitability may vary materially depending on changes in the proportionate amount of revenue derived from each type of contract, the nature of services or products provided, as well as the achievement of performance objectives and the stage of performance at which the right to receive fees, particularly under incentive and award fee contracts, is finally determined. Cost reimbursement and T&M contracts generally have lower profitability than FFP contracts. Our operating results in any period may also be affected, positively or negatively, by variable purchasing patterns by our customers of our more profitable proprietary products. Our failure to accurately estimate costs or the resources and technology needed to perform our contracts or to effectively manage and control our costs during the performance of our work could result, and in some instances has resulted, in reduced profits or in losses. More generally, any increased or unexpected costs or unanticipated delays in connection with the performance of our contracts, including costs and delays caused by contractual disputes or other factors outside of our control, such as performance failures of our subcontractors, natural disasters or other force majeure events, could make our contracts less profitable than expected or unprofitable.

Goodwill and other intangible assets represent approximately 24% of our total assets and any impairment of these assets could negatively impact our results of operations.

Non-amortizing intangible assets, including goodwill, are tested for impairment annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Examples of events or changes in circumstances indicating that the carrying value of such intangible assets may not be recoverable could include a significant adverse change in legal factors or in the business climate, an adverse action or assessment by a regulator, unanticipated competition, loss of key personnel, or a more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of.

Any future impairment of goodwill or other intangible assets would have a negative impact on our profitability and financial results.

Our Contract Research business faces aggressive competition that can impact our ability to obtain contracts and therefore affect our future revenue and growth prospects.

RMD's competitors include other small high technology companies performing SBIR R&D, large firms such as Raytheon which performs related R&D, universities and national laboratories.

The markets in which we operate are characterized by rapid technology development and the needs of our customers change and evolve regularly. Accordingly, our success depends on our ability to develop services and products that address these changing needs and to provide people and technology needed to deliver these services

and products. To remain competitive, we must consistently provide superior service, technology and performance on a cost-effective basis to our customers. Our competitors may be able to provide our customers with different or greater capabilities or technologies or better contract terms than we can provide, including technical qualifications, past contract experience, geographic presence, price and the availability of qualified professional personnel. In addition, our competitors may consolidate or establish teaming or other relationships among themselves or with third parties to increase their ability to address customers' needs. Accordingly, larger or new competitors or alliances among competitors may emerge which may adversely affect our ability to compete.

Our business is subject to reviews, audits and cost adjustments by the U.S. Government, which, if resolved unfavorably to us, could adversely affect our profitability, cash position or growth prospects.

U.S. Government agencies, including the DCAA (Defense Contract Audit Agency), DCMA (Defense Contract Management Agency) and others, routinely audit and review a contractor's performance on government contracts, indirect rates and pricing practices, and compliance with applicable contracting and procurement laws, regulations and standards. They also review the adequacy of the contractor's compliance with government standards for its accounting and management internal control systems, including: control environment and overall accounting system, estimating system, purchasing system, property system and earned value management system. Both contractors and the U.S. Government agencies conducting these audits and reviews have come under increased scrutiny.

A finding of significant control deficiencies in our system audits or other reviews could result in decremented billing rates to our U.S. Government customers until the control deficiencies are corrected and our corrections are accepted by the auditing agency. Government audits and reviews may conclude that our practices are not consistent with applicable laws and regulations and result in adjustments to contract costs and mandatory customer refunds. Such adjustments can be applied retroactively, which could result in significant customer refunds. Our receipt of adverse audit findings or the failure to obtain an "approved" determination of our various accounting and management internal control systems, including our changes to indirect cost and direct labor estimating systems, from the responsible U.S. Government agency could significantly and adversely affect our business, including our ability to bid on new contracts and our competitive position in the bidding process. A determination of non-compliance with applicable contracting and procurement laws, regulations and standards could also result in the U.S. Government imposing penalties and sanctions against us, including withholding of payments, suspension of payments and increased government scrutiny that could delay or adversely affect our ability to invoice and receive timely payment on contracts, perform contracts or compete for contracts with the U.S. Government. We may suffer harm to our reputation if allegations of impropriety are made against us, which would impair our ability to win new contract awards or receive contract renewals.

Our indirect cost audits by the DCAA have been completed for fiscal 2013 while fiscal years 2014 through 2017 remain open pending DCAA audit. Although we have recorded contract revenue subsequent to fiscal 2013 based upon our estimate of costs that we believe will be approved upon final audit or review, we do not know the outcome of any ongoing or future audits or reviews and adjustments and, if future adjustments exceed our estimates, our profitability would be adversely affected.

Our failure to comply with a variety of complex procurement rules and regulations could result in our being liable for penalties, including termination of our U.S. Government contracts, disqualification from bidding on future U.S. Government contracts and suspension or debarment from U.S. Government contracting.

We must comply with laws and regulations relating to the formation, administration and performance of U.S. Government contracts, which affect how we do business with our customers and may impose added costs on our business. Some significant statutes and regulations that affect us include:

- the Federal Acquisition Regulation (FAR) and supplements, which regulate the formation, administration and performance of U.S. Government contracts;
- the Truth in Negotiations Act, which requires certification and disclosure of cost and pricing data in connection with certain contract negotiations;
- the Procurement Integrity Act, which regulates access to competitor bid and proposal information and government source selection information, and our ability to provide compensation to certain former government officials;
- the Civil False Claims Act, which provides for substantial civil penalties for violations, including for submission of a false or fraudulent claim to the U.S. Government for payment or approval; and
- the U.S. Government Cost Accounting Standards, which impose accounting requirements that govern our right to reimbursement under certain cost-based U.S. Government contracts.

Our failure to comply with any of these rules or regulations could result in loss of business or penalties that could have a material adverse effect on our financial condition or results of operations.

Our loan agreements impose restrictions on our ability to take certain corporate actions and raise additional capital, and include a material adverse change (“MAC”) clause.

Our loan agreements contain numerous customary restrictions that limit our ability to undertake certain activities without the express prior written approval of our lenders. These include, but are not limited to, restricting our ability to:

- incur additional indebtedness;
- pay or declare dividends;
- enter into a business substantially different from existing operations;
- issue or authorize any additional or new equity that will result in a change of control; and
- take any corporate action outside the ordinary course of the business, including without limitation, the sale of material assets or other strategic divestitures, without the prior written approval of our lender.

These restrictions could significantly hamper our ability to raise additional capital. Our ability to receive the necessary approvals is largely dependent upon our relationship with our lenders and our financial performance, and no assurances can be given that we will be able to obtain the necessary approvals in the future. Our inability to raise additional capital could lead to working capital deficits that could have a material adverse effect on our operations in future periods.

One of our loan agreements also includes a MAC clause which permits the bank to call the loan if any event, fact, circumstance, change in, or effect on the Company could reasonably be expected to be materially adverse to the business.

We may not be able to generate sufficient positive cash flow in the future to fund our operations.

In addition to our bank financing, we are dependent upon cash flow from our businesses to fund our operations. It is our expectation that we can continue to increase our cash flows; however, there can be no assurance that we will be able to continue to do so. If we are unable to fund our operations from future cash flows together with our available bank financing, we will need to seek additional debt and/or equity financing, which may not be available on attractive terms, if at all, in which case there could be a material adverse effect on our results of operations and financial condition.

Our Xcede joint venture requires further funding to support the development of its technology.

Xcede’s initiated financing efforts raised approximately \$2.9 million of funding through convertible notes from external investors (including officers and directors of the Company) through November, 2016. In November 2016, Xcede announced Cook Biotech Inc. committed to fund the pre-clinical testing of, and subject to the receipt of applicable regulatory approvals initiate clinical trials for, Xcede’s hemostatic patch designed to be fully biocompatible that is currently under development. In addition, in November 2016, the Company committed to invest an additional \$1.2 million of cash into Xcede over the following 18 months, and all \$5.5 million in existing notes and accrued interest from both external investors and the Company were converted into preferred stock. As of September 30, 2017, Dynasil owned approximately 61% of the outstanding equity in Xcede. We expect Xcede to continue to require periodic investor funding in amounts larger than what has been raised to date in order to fund additional pre-clinical development activities and any human clinical trials we may initiate. To the extent Xcede is successful in raising additional equity financing from outside sources, our equity interest in Xcede will decrease. There can be no assurance, however, that Xcede will be able to obtain future financing as needed or on terms which are attractive, in which case it might be required to close its operations and liquidate its assets in which case our investment would likely not be recovered.

Our failure to attract, train and retain skilled employees, including our management team, would adversely affect our ability to execute our strategy.

Portions of our business involve the development of tailored solutions for our customers, a process that relies heavily upon the expertise and services of our employees. Our continued success depends on our ability to recruit and retain highly trained and skilled engineering, technical and professional personnel. Competition for skilled personnel is intense and competitors aggressively recruit key employees. Particularly in highly specialized areas, it may become more difficult to retain employees and meet all of our needs for employees in a timely manner, which

may affect our growth in the current fiscal year and in future years. Although we intend to continue to devote significant resources to recruit, train and retain qualified employees, we may not be able to attract and retain these employees. Any failure to do so could impair our ability to perform our contractual obligations efficiently and timely meet our customers' needs and win new business, which could adversely affect our future results.

In addition to attracting and retaining qualified engineering, technical and professional personnel, we believe that our success will also depend on the continued employment of a highly qualified and experienced senior management team and its ability to retain existing business and generate new business. Our senior management team is important to our business because personal reputations and individual business relationships are a critical element of retaining and obtaining customer contracts in our industry, particularly with agencies performing classified operations. Our inability to hire and retain appropriately qualified and experienced senior executives could cause us to lose customers or new business opportunities.

Misconduct of employees, subcontractors, agents and business partners could cause us to lose existing contracts or customers and adversely affect our ability to obtain new contracts and customers and could have a significant adverse impact on our business and reputation.

Misconduct, should it occur, could include fraud or other improper activities such as falsifying time or other records and violations of laws, including the Anti-Kickback Act. Other examples could include the failure to comply with our policies and procedures or with federal, state or local government procurement regulations, regulations regarding the use and safeguarding of classified or other protected information, legislation regarding the pricing of labor and other costs in government contracts, laws and regulations relating to environmental, health or safety matters, bribery of foreign government officials, import-export control, lobbying or similar activities, and any other applicable laws or regulations. Intentional or unintentional violation of the Export Control Act or International Traffic in Arms Regulations could result in severe fines which could adversely affect our profitability. Any data loss or information security lapses resulting in the compromise of personal information or the improper use or disclosure of sensitive or classified information could result in claims, remediation costs, regulatory sanctions against us, loss of current and future contracts and serious harm to our reputation. Although we have implemented policies, procedures and controls to prevent and detect these activities, these precautions may not prevent all misconduct, and as a result, we could face unknown risks or losses. Our failure to comply with applicable laws or regulations or misconduct by any of our employees, subcontractors, agents or business partners could damage our reputation and subject us to fines and penalties, restitution or other damages, loss of security clearance, loss of current and future customer contracts and suspension or debarment from contracting with federal, state or local government agencies, any of which would adversely affect our business and our future results.

Quality problems with our processes, goods, and services could harm our reputation for producing high-quality products and erode our competitive advantage, sales and market share.

Quality is extremely important to us and our customers due to the serious and costly consequences of product failure. Our quality certifications are critical to the marketing success of our goods and services. If we fail to meet these standards, our reputation could be damaged, we could lose customers, and our revenue and results of operations could decline. Aside from specific customer standards, our success depends generally on our ability to manufacture to exact tolerances precision-engineered components, subassemblies, and finished devices from multiple materials. If our components fail to meet these standards or fail to adapt to evolving standards, our reputation as a manufacturer of high-quality components will be harmed, our competitive advantage could be damaged, and we could lose customers and market share.

From time to time we may make acquisitions. The failure to successfully integrate future acquisitions could harm our business, financial condition and operating results.

One component of our growth strategy is to selectively pursue strategic acquisitions. These transactions require significant investment of time and resources and may disrupt our business and distract our management from other responsibilities. Even if successful, these transactions could reduce earnings for a number of reasons, including the amortization of intangible assets, impairment charges, acquired operations that are not yet profitable or the payment of additional consideration under earn-out arrangements if an acquisition performs better than expected. Acquisitions, investments and joint ventures pose many other risks that could adversely affect our reputation, operations or financial results, including:

- we may not be able to identify, compete effectively for or complete suitable acquisitions and investments at prices we consider attractive;

- we may not be able to accurately estimate the financial effect of acquisitions and investments on our business and we may not realize anticipated synergies or acquisitions may not result in improved operating performance;
- we may encounter performance problems with acquired technologies, capabilities and products, particularly with respect to those that are still in development when acquired;
- we may have trouble retaining key employees and customers of an acquired business or otherwise integrating such businesses, such as incompatible accounting, information management, or other control systems, which could result in unforeseen difficulties;
- we may assume material liabilities that were not identified as part of our due diligence or for which we are unable to receive a purchase price adjustment or reimbursement through indemnification;
- we may assume legal or regulatory risks, particularly with respect to smaller businesses that have immature business processes and compliance programs;
- acquired entities or joint ventures may not operate profitably, which could adversely affect our operating income or operating margins and we may be unable to recover investments in any such acquisitions;
- acquisitions, investments and joint ventures may require us to spend a significant amount of cash or to issue capital stock, resulting in dilution of ownership; and
- we may not be able to effectively influence the operations of our joint ventures or we may be exposed to certain liabilities if our joint venture partners do not fulfill their obligations.

If our acquisitions fail, perform poorly or their value is otherwise impaired for any reason, including contractions in credit markets and global economic conditions, our business and financial results could be adversely affected.

In addition, we periodically divest businesses, including businesses that are no longer a part of our ongoing strategic plan. These divestitures similarly require significant investment of time and resources, may disrupt our business, distract management from other responsibilities and may result in losses on disposal or continued financial involvement in the divested business, including through indemnification, guarantee or other financial arrangements, for a period of time following the transaction, which would adversely affect our financial results.

Our financial results may vary significantly from period-to-period.

Our financial results may fluctuate as a result of a number of factors, many of which are outside of our control. For these reasons, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our financial results may be negatively affected by any of the risk factors listed in this “Risk Factors” section and other matters described elsewhere in this Annual Report on Form 10-K and the other documents we file with the SEC.

Changes in tax laws or exposure to additional income tax liabilities could have a material impact on our financial condition and results of operations.

We are subject to income taxes as well as non-income based taxes, in both the U.S. and United Kingdom (U.K.) We are subject to tax audits in various jurisdictions. Tax authorities may disagree with certain positions we have taken and assess additional taxes. We regularly assess the likely outcomes of these audits in order to determine the appropriateness of our tax provision. However, there can be no assurance that we will accurately predict the outcomes of these audits, and the actual outcomes of these audits could have a material impact on our consolidated earnings and financial condition. Additionally, changes in tax laws or tax rulings could materially impact our effective tax rate.

We face risks associated with our international business.

In 2017 and 2016, we generated approximately 22% and 25% of our sales outside the U.S., respectively. Our international business operations may be subject to additional and different risks than our U.S. business. Our ability to achieve and maintain profitable growth in international markets is subject to risks related to the differing legal, political, social and regulatory requirements and economic conditions of many countries. As a result of our expansion outside the U.S., we are subject to certain inherent risks, including political and economic uncertainty, inflation rates, exchange rates, trade protection measures, local labor conditions and laws, restrictions on foreign investments and repatriation of earnings, and weak intellectual property protection. If we are unable to manage these risks it would have a material adverse effect on our results of operations and financial condition.

Political and economic uncertainty arising from the outcome of the referendum on the membership of the United Kingdom in the European Union could adversely impact our financial results.

In June 2016, a majority of voters in the U.K. elected to withdraw from the European Union (E.U.) in a national referendum (also referred to as "Brexit"). Our Hilger Crystals Ltd. business unit is located in the U.K. The announcement of Brexit caused significant volatility in global stock markets and currency exchange rate fluctuations that resulted in the strengthening of the U.S. dollar against foreign currencies in which we conduct business, including the British pound. We translate revenue denominated in foreign currency (including the British pound) into U.S. dollars for our financial statements. During periods of a strengthening dollar, our reported international revenue is reduced because foreign currencies translate into fewer U.S. dollars.

As a result of the referendum being passed into law, a negotiation process to determine the future terms of the U.K.'s relationship with the E.U. is ongoing, including the terms of trade between the U.K. and the E.U. The effects of Brexit will depend on any agreements the U.K. makes to retain access to E.U. markets either during a transitional period or more permanently. The measures could potentially disrupt the markets we serve and may cause us to lose customers, suppliers and employees. Additionally, disruptions and uncertainty caused by Brexit may cause our customers to closely monitor their costs and reduce their spending budget on our products and services. Brexit may also lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which E.U. laws to replace or replicate. Any of these effects of Brexit, among others, could adversely affect our business, financial condition or future results.

Increases in prices and declines in the availability of raw materials could negatively impact our financial results.

Our financial results are significantly affected by the cost of raw materials and energy. Most of the raw materials and energy used in production are purchased from outside sources, and the Company has made, and plans to continue to make, supply arrangements to meet the planned operating requirements for the future. Supply of critical raw materials and energy is managed by establishing contracts, multiple sources, and identifying alternative materials or technology whenever possible. An inability to obtain critical raw materials would adversely impact our ability to produce products. Increases in the cost of raw materials and energy may have an adverse effect on our earnings or cash flow in the event we are unable to mitigate these higher costs in a timely manner.

Our business and operations expose us to numerous legal and regulatory requirements and any violation of these requirements could harm our business.

We are subject to numerous federal, state and foreign legal requirements on matters as diverse as data privacy and protection, employment and labor relations, immigration, taxation, anticorruption, import/export controls, trade restrictions, internal and disclosure control obligations, securities regulation, environmental and anti-competition. We are also focused on expanding our business in certain identified growth areas, such as homeland security and biomedical technologies, which are highly regulated and may expose us to increased compliance risk. Compliance with diverse and changing legal requirements is costly, time-consuming and requires significant resources. Violations of one or more of these requirements in the conduct of our business could result in significant fines and other damages, criminal sanctions against us or our officers, prohibitions on doing business and damage to our reputation. Violations of these regulations or contractual obligations related to regulatory compliance in connection with the performance of customer contracts could also result in liability for significant monetary damages, fines and/or criminal prosecution, unfavorable publicity and other reputational damage, restrictions on our ability to compete for certain work and allegations by our customers that we have not performed our contractual obligations.

Moreover, we use controlled hazardous and radioactive materials in our business and generate wastes that are regulated as hazardous wastes under United States federal and certain state, environmental and atomic energy regulatory laws and similar laws in each jurisdiction in which our facilities are located. Our use of these substances and materials is subject to stringent, and periodically changing, regulation that can impose costly compliance obligations on us and have the potential to adversely affect our manufacturing activities. The risk of accidental contamination or injury from these materials cannot be completely eliminated. If an accident with these substances occurs, we could be held liable for any damages that result, in addition to incurring clean-up costs and liabilities, which can be substantial. Additionally, an accident could damage our research and manufacturing facilities resulting in delays and increased costs.

Our insurance may be insufficient to protect us from product and other liability claims or losses.

We maintain insurance coverage with third-party insurers as part of our overall risk management strategy and because some of our contracts require us to maintain specific insurance coverage limits. However, not every risk or liability is or can be protected by insurance, and, for those risks we insure, the limits of coverage we purchase or that are reasonably obtainable in the market may not be sufficient to cover all actual losses or liabilities incurred. If any of our third-party insurers fail, cancel our coverage or otherwise are unable to provide us with adequate insurance coverage, then our overall risk exposure and our operational expenses would increase and the management of our business operations would be disrupted. Our insurance may be insufficient to protect us from significant product and other liability claims or losses. Moreover, there is a risk that commercially available liability insurance will not continue to be available to us at a reasonable cost, if at all. If liability claims or losses exceed our current or available insurance coverage, our business and prospects may be harmed. Regardless of the adequacy of our liability insurance coverage, any significant claim may have an adverse effect on our industry and market reputation, leading to a substantial decrease in demand for our products and services and reduced revenue.

Our business and financial results could be negatively affected by cyber or other security threats.

As a U.S. Government contractor operating in multiple regulated industries and geographies, we handle sensitive information. Therefore, we are continuously exposed to cyber and other security threats, including computer viruses, attacks by hackers or physical break-ins. Any electronic or physical break-in or other security breach or compromise may jeopardize security of information stored or transmitted through our information technology systems and networks. This could lead to disruptions in mission critical systems, unauthorized release of confidential or otherwise protected information and corruption of data. Although we have implemented policies, procedures and controls to protect against, detect and mitigate these threats, attempts by others to gain unauthorized access to our information technology systems are becoming more sophisticated. These attempts include covertly introducing malware to our computers and networks and impersonating authorized users, among others, and may be perpetrated by well-funded organized crime or state sponsored efforts. We seek to detect and investigate all security incidents and to prevent their occurrence or recurrence. We continue to improve our threat protection, detection and mitigation policies, procedures and controls. In addition, we work with other companies in the industry and government participants on increased awareness and enhanced protections against cyber security threats. However, because of the evolving nature of these security threats, there can be no assurance that our policies, procedures and controls have or will detect or prevent any of these threats and we cannot predict the full impact of any such incident. We may experience similar security threats to the information technology systems that we develop, install or maintain under customer contracts. Although we work cooperatively with our customers and other business partners to seek to minimize the impacts of cyber and other security threats, we must rely on the safeguards put in place by those entities. Any remedial costs or other liabilities related to cyber or other security threats may not be fully insured or indemnified by other means. Occurrence of any of these security threats could adversely affect our reputation, ability to work on sensitive U.S. Government contracts, business operations and financial results.

Risks Relating To Dynasil's Stock

Xcede, our joint venture, is a pre-clinical stage business with no approved products, which makes it difficult to assess the business's future viability.

In October 2013, Dynasil Biomedical formed Xcede, a joint venture with Mayo Clinic, to focus on and separately fund the development of its tissue sealant technology. Xcede has not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biomedical area. For example, to execute its business plan, Xcede will need to successfully:

- raise the funds necessary to execute its product development plan;
- manage its spending as costs and expenses increase during the clinical trial and regulatory approval processes;
- obtain required regulatory approvals for the development and commercialization of the tissue sealant product applications;
- maintain and expand the tissue sealant intellectual property portfolio;
- build and maintain robust sales, distribution and marketing capabilities, either on its own or in collaboration with strategic partners; and
- gain market acceptance for its products.

If Xcede is unsuccessful in accomplishing these objectives, it may not be able to develop its tissue sealant product, raise capital, expand its business or continue its operations, which may have a material adverse effect on our stock price.

The market price for our common stock is particularly volatile given our status as a relatively unknown company with a small and thinly traded public float, which could lead to wide fluctuations in our share price.

The market for our common stock is characterized by significant price volatility when compared to the shares of larger, more established companies that have large public floats, and we expect that our share price will continue to be more volatile than the shares of such larger, more established companies for the indefinite future. The volatility in our share price is attributable to a number of factors. First, as noted above, our common stock is, compared to the shares of such larger, more established companies, sporadically and thinly traded. As a consequence of this limited liquidity, the trading of relatively small quantities of shares by our stockholders may disproportionately influence the price of those shares in either direction. The price for our shares could, for example, decline precipitously in the event that a large number of our common stock is sold on the market without commensurate demand. As a consequence of this enhanced risk, more risk-averse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a larger, more established company that has a large public float. Many of these factors are beyond our control and may decrease the market price of our common stock, regardless of our operating performance. We cannot make any predictions or projections as to what the prevailing market price for our common stock will be at any time, including as to whether our common stock will sustain its current market price, or as to what effect that the sale of shares or the availability of common stock for sale at any time will have on the prevailing market price.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future and the success of an investment in shares of our common stock will depend upon any future appreciation in its value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

If our internal control over financial reporting is found not to be effective or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls, investors could lose confidence in our financial reports, and our stock price may be adversely affected.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include an internal control report with our Annual Report on Form 10-K. That report must include management's assessment of the effectiveness of our internal control over financial reporting as of the end of the fiscal year. We evaluate our existing internal control over financial reporting based on the integrated framework issued in 2013 by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. During the course of our ongoing evaluation of the internal controls, we may identify areas requiring improvement, and may have to design enhanced processes and controls to address issues identified through this review. Additionally, due to the implementation of new accounting standards, our existing controls will have to be adapted and we cannot be certain that new deficiencies will not arise. Remedying any deficiencies, significant deficiencies or material weaknesses that we identify may require us to incur significant costs and expend significant time and management resources. We cannot assure you that any of the measures we implement to remedy any such deficiencies will effectively mitigate or remedy such deficiencies. Investors could lose confidence in our financial reports, and our stock price may be adversely affected, if our internal controls over financial reporting are found not to be effective by management or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We own a manufacturing and office facility consisting of a one-story, masonry and steel building containing approximately 15,760 square feet in West Berlin, NJ. We lease a 10,000 square foot manufacturing and office building in Ayer, MA with a lease that expires in May 2025. We lease 7,200 square feet of manufacturing office space in a building in Littleton, MA with a lease that expires in November 2019. We lease a 52,880 square foot manufacturing and office building in Rochester, NY with a lease that expires in March 2019. We own a two-story, 44,000 square foot manufacturing and office facility in Ithaca, NY. We own a two-story, 17,000 square foot manufacturing and office facility in Margate, Kent, in the U.K. All of the foregoing owned and leased properties are used by our Optics segment. We lease a 40,000 square foot manufacturing, research, and office building in Watertown, MA for our RMD business from a related party with a month-to-month lease that continues until terminated by the landlord with not less than three years' prior written notice or by the Company with not less than six months' prior written notice. We lease 2,368 square feet of office space in Newton, MA for our Dynasil Corporation of America office with a lease that expires in December 2020. We believe that the properties are in satisfactory condition and suitable for our purposes. The New Jersey, New York, and U.K. properties are collateral against notes payable to banks.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Since September 30, 2013, the Company's Common Stock has been listed on the Nasdaq Capital Market under the symbol "DYSL". From December 20, 2010 until September 30, 2013, the Company's Common Stock was listed on the Nasdaq Global Market. Prior to December 20, 2010, the Company's Common Stock was quoted on the NASD-OTC Bulletin Board under the symbol "DYSL.OB".

The following table reflects the range of high and low common stock sales prices for the four quarters of fiscal 2017 and fiscal 2016 as reported by the NASDAQ Capital Market.

	High & Low Sale Prices			
	Years ended September 30,			
	2017		2016	
	High	Low	High	Low
First quarter	\$ 1.43	\$ 0.89	\$ 2.04	\$ 1.45
Second quarter	1.50	1.12	2.01	1.36
Third quarter	1.48	1.09	1.78	1.27
Fourth quarter	1.35	1.13	1.56	0.91

As of December 1, 2017, there were 17,114,603 shares of the Company's common stock outstanding held by approximately 221 holders of record.

The Company has paid no cash dividends on its common stock since its inception. The Company intends to retain any future earnings for use in its business and does not intend to pay cash dividends on its common stock in the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management's discussion and analysis should be read in conjunction with our financial statements and the notes thereto appearing elsewhere in this Annual Report on Form 10-K.

Overview

Reportable Segments

We have three reporting segments based on our main operating activities. Below is a summary of these segments:

- *Optics*: The Optics segment encompasses four business units – our original optics business, doing business as Dynasil Fused Silica, Optometrics, Hilger, and Evaporated Metal Films (“EMF”) – that manufacture commercial products, including optical crystals for sensing in the security and medical imaging markets, as well as optical components, optical coatings and optical materials for scientific instrumentation and other applications.
- *Contract Research*: The Contract Research segment consists of the Radiation Monitoring Devices, Inc. (“RMD”) business unit.
- *Biomedical*: The Biomedical segment consists of a single business unit, Dynasil Biomedical Corporation, a medical technology incubator which owns rights to certain early stage medical technologies. In October 2013, Dynasil Biomedical formed Xcede Technologies, Inc., a joint venture with the Mayo Clinic to spin out and separately fund the development of a tissue sealant technology. Dynasil Biomedical currently has no operations other than relating to its equity ownership in Xcede.

The segment amounts included in management's discussion and analysis are presented on a basis consistent with our internal management reporting and accounting principles generally accepted in the U.S. (“U.S. GAAP”). Segment information appearing in Note 16 – Segment, Customer and Geographical Reporting of the Notes to Financial Statements included in this Report are also presented on this basis. A description of our strategy is included in Item 1 of this Annual Report on Form 10-K.

Our markets are characterized by rapidly changing technology and the needs of our customers, which change and evolve regularly. Accordingly, our success depends on our ability to develop services and products that address these changing needs and to provide the people and technology needed to deliver these services and products. To remain competitive, we must consistently provide superior service, technology and performance on a cost-effective basis to our customers. Our business performance is also influenced by a variety of other factors including, but not limited to, economic conditions, U.S. Government spending on research and development programs, competition, regulatory requirements and insurance costs. Further information on certain risks to our Company is included in Item 1A of this Annual Report on Form 10-K.

Fiscal 2017 Financial Overview

Our revenue in 2017 was \$37.3 million, as compared to \$43.4 million in 2016. This 14% decrease in revenue resulted from a \$4.4 million, or 19%, decrease in revenue in our Optics segment and a \$1.7 million, or 9%, decrease in revenue in our Contract Research segment.

In fiscal year 2017, we had net income of \$1.9 million compared to net income of \$0.3 million in 2016. Our net income included losses of approximately \$1.4 million and \$2.1 million in 2017 and 2016, respectively, associated with research and start-up costs of Xcede, a joint venture with Mayo. As of September 30, 2017, we owned 61% of Xcede's stock and, as a result, Xcede is included in the Company's consolidated balance sheets, results of operations and cash flows. The 61% ownership includes preferred stock with a liquidation preference, and as a result, for reporting purposes only, common stock ownership is used in the allocation of noncontrolling interest. Dynasil's common stock ownership is 83% and the remaining 17% of Xcede's common stock is owned by others and accounted for under the rules applicable to non-controlling interest. The non-controlling amount related to the common stock owned by others was \$0.3 million and \$0.4 million, respectively, in the fiscal years ended September 30, 2017 and 2016, and was not included in the Company's net income attributable to common stockholders of \$2.2 million and \$0.7 million, respectively.

In 2017, Xcede was funded through \$0.7 million in cash from Dynasil, committed in November 2016, and \$0.5

million in R&D services from Cook Biotech as it worked on developing the first in human clinical trial for Xcede's hemostatic tissue sealant product under a note agreement. Funding in 2016 was from the issuance of approximately \$0.8 million of Xcede Convertible Notes to external investors (including certain officers and directors of Dynasil).

Results of Operations

Results of Operations for the Fiscal Year Ended September 30,				
2017				
	Optics	Contract Research	Biomedical	Total
Revenue	\$ 19,282,000	\$ 18,002,000	\$ -	\$ 37,284,000
Gross profit	6,562,000	7,336,000	-	13,898,000
GM %	34%	41%	-	37%
Operating expenses	6,183,000	6,856,000	1,381,000	14,420,000
(Gain) loss on sale of assets	-	-	60,000	60,000
Operating income (loss)	379,000	480,000	(1,441,000)	(582,000)
Depreciation and amortization	970,000	257,000	11,000	1,238,000
Capital expenditures	575,000	338,000	69,000	982,000
Intangibles, net	467,000	196,000	324,000	987,000
Goodwill	1,001,000	4,939,000	-	5,940,000
Total assets	\$ 20,445,000	\$ 8,078,000	\$ 574,000	\$ 29,097,000
Results of Operations for the Fiscal Year Ended September 30,				
2016				
	Optics	Contract Research	Biomedical	Total
Revenue	\$ 23,686,000	\$ 19,756,000	\$ -	\$ 43,442,000
Gross profit	8,010,000	7,593,000	-	15,603,000
GM %	34%	38%	-	36%
Operating expenses	6,239,000	6,619,000	2,070,000	14,928,000
(Gain) loss on sale of assets	(4,000)	-	-	(4,000)
Operating income (loss)	1,775,000	974,000	(2,070,000)	679,000
Depreciation and amortization	949,000	249,000	69,000	1,267,000
Capital expenditures	1,503,000	432,000	109,000	2,044,000
Intangibles, net	517,000	230,000	320,000	1,067,000
Goodwill	959,000	4,939,000	-	5,898,000
Total assets	\$ 17,397,000	\$ 8,325,000	\$ 647,000	\$ 26,369,000

Revenue

Revenue for the fiscal year ended September 30, 2017 was \$37.3 million, a decrease of \$6.1 million or 14% from the \$43.4 million of revenue recorded in 2016.

Revenue in our Optics segment for the 12 months ended September 30, 2017 decreased 19% to \$19.3 million from \$23.7 million in 2016 due to a reduction of orders resulting from production adjustments by two of our largest customers in our Optics segment. We anticipate both of these customers to increase their orders in fiscal year 2018.

Contract Research segment revenue decreased 9% to \$18.0 million in the year ended September 30, 2017, from \$19.8 million in the same period in 2016, largely resulting from the presidential administration transition during the year. Both contract awards and funding were significantly delayed during this transitional time, although we believe these delays will not continue in 2018. The contract revenue backlog increased to \$33.2 million at September 30, 2017, up from the September 30, 2016 level of \$30 million. The current backlog is comprised of approximately 51% SBIR contracts, which is slightly higher than the 48% SBIR contracts in the backlog at September 30, 2016. The

Contract Research segment continues to seek to limit reliance on the SBIR program and the limited number of government agencies that currently contract for its research, as well as to diversify its contracting sources including contracting with commercial businesses. During the twelve months ended September 30, 2017 and 2016, the contract research segment generated \$1.8 million and \$0.6 million, respectively, in commercial revenue.

The Biomedical segment is engaged in development of a tissue sealant product through its Xcede joint venture and currently has no revenue.

Gross Profit

Gross profit for the year ended September 30, 2017 decreased \$1.7 million, or 11%, to \$13.9 million from the prior year amount of \$15.6 million. Gross profit as a percentage of revenue increased to 37% in 2017 from 36% in 2016.

The Optics segment's gross profit as a percentage of revenue in fiscal year 2017 remained constant with fiscal year 2016 at 34%. The gross profit in fiscal year 2017 was \$6.6 million, a reduction of \$1.4 million, or 18%, as a result of the lower revenue during the 12 months ended September 30, 2017.

Gross profit as a percent of revenue for the Contract Research segment improved to 41% in fiscal year 2017, compared to 38% in fiscal year 2016 as a result of an increase in the sales of commercial products during fiscal year 2017, which carry a stronger profit margin. Gross profit dollars in this segment decreased slightly to \$7.3 million during fiscal year 2017 from \$7.6 million in the same period in 2016 due to the lower revenue in fiscal 2017.

Operating Expenses

Operating expenses were reduced in fiscal year 2017 to \$14.5 million, or 39% of revenue, a decrease of \$0.4 million from \$14.9 million in fiscal year 2016.

Operating expenses within the Optics segment remained at \$6.2 million in fiscal year 2017, approximately the same as in fiscal year 2016, through a conscious effort by the business units to control expenses within the segment, in response to the segment's decreased revenue in 2017. The percent of SG&A to revenue increased to 32% in the 12 months ended September 30, 2017, up from 26% of revenue in 2016. The percentage increase was due to the lower revenue in 2017.

Operating expenses within the Contract Research segment increased to \$6.9 million, or 38% of revenue, in fiscal year 2017 from \$6.6 million, or 34% of revenue, in the prior year. The increase in SG&A expenses in fiscal year 2017 can be attributed to both increased corporate costs and facility costs in 2017.

Operating expenses in the Biomedical segment in fiscal year 2017 were approximately \$1.4 million as compared to \$2.1 million in fiscal year 2016. The \$0.7 million decrease in expenses year over year was primarily the result of overall cost savings in 2017 as compared to 2016. This decrease was partially offset by increased expenses incurred as a result of the Cook development agreement, as well as higher accounting and audit fees related to Xcede.

Net Interest Expense

Net interest expense decreased 28% to \$0.2 million in fiscal year 2017 from \$0.3 million in fiscal year 2016, primarily as a result of the conversion of the Xcede notes into common stock in the first quarter of 2017.

Income Tax Expense (Benefit)

Total income tax expense was a benefit of \$2,741,000 in fiscal 2017 as compared to an expense of \$51,000 in fiscal 2016. As a result of the conversion of the Xcede convertible notes and accrued interest to preferred stock in November 2016, the Company's ownership percentage in Xcede decreased to less than 80%. Based on this ownership percentage, beginning in fiscal year 2017, Xcede is no longer included in the Company's consolidated federal tax return and the Company can no longer offset taxable income or share net operating losses with Xcede. Upon review of relevant criteria for the new Dynasil federal consolidated group, it was determined that it is more likely than not that the federal, deferred tax assets of the new Dynasil federal consolidated group will be realized based upon positive earnings history and expected future profits of the group. As a result, the federal deferred tax asset valuation allowance associated with the Dynasil federal consolidated group has been reversed resulting in an income tax benefit in the amount of \$2.7 million recorded during the quarter ending December 31, 2016. Based upon Xcede's recent losses and uncertainty of future profits, the Company has determined that the uncertainty regarding

the realization of the Company's consolidated state and separate Xcede deferred tax assets is sufficient to warrant the continued need for a full valuation allowance against these deferred tax assets.

Net Income

As a result of the items mentioned previously, our net income for the year ended September 30, 2017 was \$1.9 million, compared to a net income of \$0.3 million in the prior year.

Our net income includes losses of approximately \$1.4 million and \$2.1 million in the years ended September 30, 2017 and 2016, respectively, from our Biomedical segment.

Liquidity and Capital Resources

Liquidity Overview

Our net cash as of September 30, 2017 was \$2.4 million, which was a decrease of \$0.2 million, as compared to \$2.6 million at September 30, 2016. The cash reduction was primarily the result of payments to reduce debt.

We believe our cash on hand and borrowing capacity under our revolving line of credit will be sufficient to fund our current debt obligations, estimated capital expenditures and working capital needs for the next twelve months.

Net Cash Provided by Operating Activities

Net cash provided by operating activities was \$1.5 million for fiscal year 2017 versus \$2.1 million for fiscal year 2016.

In fiscal year 2017, the principal differences between the net income of \$1.9 million and net cash provided of \$1.5 million was due to noncash expenses related to the reduction of deferred income taxes as a result of the Xcede federal tax deconsolidation, partially offset by depreciation, stock compensation and Xcede's R&D service expenses. Additionally, cash was used to increase our inventory balance after a slowdown in shipments to a key customer and to allow for immediate shipment of our new e-commerce website products. These were offset by increases in accounts payable due to material and equipment purchases and advances for subcontractor payments.

In fiscal year 2016, the principal differences between the net income of \$0.3 million and net cash provided of \$2.1 million were the stock compensation expense of \$0.7 million, depreciation and amortization of \$1.3 million and inventory increase of \$1.1 million while changes to the short term asset and liability accounts in our balance sheet provided \$0.9 million.

Cash Flows from Investing Activities

Cash flows from investing activities resulted in a use of \$1.0 million for fiscal 2017 compared with a use of \$1.6 million for fiscal 2016. In both fiscal 2017 and 2016, these funds were primarily used to purchase property, plant and equipment, as we continue to invest in our future operations. We currently plan on capital expenditures of approximately \$2.0 million during fiscal year 2018 for expansion into new customer markets within our existing segments.

Cash Flows from Financing Activities

Cash flows from financing activities used \$0.7 million of net cash in fiscal 2017, primarily through the payments of our loans and capital leases. Cash flows from financing activities generated \$0.9 million of net cash in fiscal 2016, primarily through our Xcede joint venture which raised \$0.8 million in convertible notes in 2016. We have the full \$4.0 million available under our line of credit with Middlesex Savings Bank at September 30, 2017.

Terms of Outstanding Indebtedness

As of September 30, 2017, Dynasil is in compliance with the terms of all of its outstanding indebtedness. As of such date, we had total indebtedness consisting of:

- \$1.4 million senior debt term loan with Middlesex Saving Bank, subject to the terms and conditions of the Middlesex Savings Bank Loan Agreement;
- approximately \$0.9 million of subordinated debt owed to Massachusetts Capital Resource Company;

- approximately \$0.5 million of Xcede Notes Payable to Cook Biotech Inc.;
- approximately \$0.1 million of equipment loan financing;
- approximately \$0.2 million of Notes Payable to two government agencies; and
- approximately \$0.5 million of the November 2016 \$1.2 million commitment made to Xcede which is still outstanding and will be funded over the next six months.

The following is a summary of the terms of the existing loan agreement in place with our senior lender, Middlesex Savings Bank, the terms of subordinated debt owed to Massachusetts Capital Resources Company and the terms of subordinated debt owed by Xcede to Cook Biotech Inc.

Middlesex Savings Bank Loan Agreement

On May 1, 2014, Dynasil entered into a loan and security agreement (the “Bank Loan Agreement”) and line of credit note (the “Note”) with Middlesex Savings Bank pursuant to which Middlesex agreed to provide up to \$4 million, subject to the availability restrictions described below, under a revolving line of credit loan to Dynasil for general corporate purposes. The Bank Loan Agreement provided that the loan expired on May 1, 2017, at which time all outstanding principal and unpaid interest was to become due and payable.

On May 16, 2017, the Company and Middlesex Savings Bank entered in an agreement to extend the terms of the existing line of credit and term loan from May 2017 to May 2020 at which time all outstanding principal and unpaid interest will be due and payable. Additionally, the Company and Middlesex Savings Bank entered into an annual \$1.0 million equipment line of credit agreement in which the outstanding balance will be converted into a five year term note on the one year anniversary. As of September 30, 2017, no amounts were outstanding under either the revolving or equipment lines of credit with Middlesex Bank.

The Bank Loan Agreement and the Note are secured by (i) a security interest in substantially all of the Company's personal property and (ii) sixty-five percent (65%) of the Company's equity interests in its U.K. subsidiary, Hilger Crystals, Ltd. Under the note, the borrowing base is determined monthly based on eligible billed and unbilled accounts receivable and eligible inventory. The interest rate under the Note is equal to the Prime Rate, but in no event less than 3.25%.

The Bank Loan Agreement also contains other terms, conditions and provisions that are customary for commercial lending transactions of this sort. The Bank Loan Agreement requires Dynasil, at the close of each fiscal quarter, to maintain a Debt Service Coverage ratio, as defined, of at least 1.20 to 1.00 and a Maximum Leverage Ratio, as defined, of less than 3.00 to 1.00, both on a trailing four quarter basis.

The Bank Loan Agreement was amended on September 29, 2015 to allow the Company to repay up to \$3 million of the subordinated debt owed Massachusetts Capital Resources Company (“MCRC”) and also provide for the Company, if it meets certain conditions, to convert up to \$2 million of the advances under the line of credit to a fixed rate note with the principal amortizing monthly over a five year term. On February 1, 2016, the Company converted \$2 million of its outstanding advances under the line of credit note to a fixed rate, five-year term note bearing at an annual interest rate of 4.5%. As of September 30, 2017 approximately \$1.4 million was outstanding.

The Bank Loan Agreement provides for events of default customary for credit facilities of this type, including but not limited to non-payment, defaults on other debt, misrepresentation, breach of covenants, representations and warranties, insolvency and bankruptcy, change of management, as defined and the occurrence of a material adverse change, as defined. As a result of the material adverse change clause, all Middlesex Savings Bank outstanding debt has been classified as a current liability.

Note Purchase Agreement – Massachusetts Capital Resource Company

On July 31, 2012, the Company entered into a Note Purchase Agreement (the “Agreement”) with MCRC. Pursuant to the terms of the Agreement, the Company issued and sold to MCRC a \$3.0 million subordinated note (the “Subordinated Note”) for proceeds of \$3.0 million. The Subordinated Note initially matured on July 31, 2017, unless accelerated pursuant to an event of default, as described below. The Subordinated Note initially provided for interest at the rate of ten percent (10%) per annum, with interest to be payable monthly on the last day of each calendar month in each year, the first such payment to be due and payable on August 31, 2012. Under the original terms of

the Agreement, beginning on and with September 30, 2015, and on the last day of each calendar month thereafter through and including July 31, 2017, the Company would redeem, without premium, \$130,000 in principal amount of the Subordinated Note together with all accrued and unpaid interest then due on the amount redeemed.

Effective October 1, 2015, in connection with the prepayment of \$2 million of the Subordinated Note, MCRC agreed to adjust the interest rate to 6% and to amend the principal repayment terms such that beginning on September 30, 2016, the Company will redeem monthly, without premium, \$43,478 in principal amount of the Subordinated Note together with all accrued and unpaid interest then due on the amount redeemed.

On December 15, 2016, the Company amended the Note Purchase Agreement with Massachusetts Capital Resource Company (MCRC) to reinstate the interest only payment requirements of the loan and defer principal repayment requirements to November 30, 2017. Such amendment also extended the maturity date from July 31, 2018 to July 31, 2019. The Company is seeking to amend and reinstate the interest only payment requirements as well as extend the note until July 31, 2020 to allow it to use the cash to invest in capital equipment in fiscal 2018.

Under the terms of the Agreement and a Subordination Agreement dated July 31, 2012, MCRC and any successor holder of the Subordinated Note have agreed that the payment of the principal of and interest on the Subordinated Note is subordinated in right of payment, to the prior payment in full of all indebtedness of the Company for money borrowed from banks or other institutional lenders at any time outstanding.

The Agreement contains customary representations, warranties and covenants, including covenants by the Company limiting additional indebtedness, liens, guaranties, mergers and consolidations, substantial asset sales, investments and loans, sale and leasebacks, transactions with affiliates and fundamental changes. In addition, the Agreement contains financial covenants by the Company (as further defined in the Agreement) that (i) impose a Consolidated Maximum Leverage Ratio (consolidated total funded debt to consolidated EBITDA) equal to or less than 4.5 to 1.0 for each rolling four quarter period ending on or after March 31, 2013, and (ii) require a Consolidated Fixed Charge Coverage Ratio (consolidated EBITDA to consolidated fixed charges) of not less than 0.95 to 1.00 for each rolling four quarter period ending on or after September 30, 2013.

The Agreement also provides for events of default customary for agreements of this type, including, but not limited to, non-payment, breach of covenants, insolvency and defaults on other debt. Upon an event of default, MCRC may elect to declare all obligations (including principal, interest and all others amounts payable) immediately due and payable, which will occur automatically if the Company becomes insolvent.

Note Purchase Agreement – Cook Biotech, Inc. and Xcede

In November 2016, Xcede entered into an additional Services Agreement, a Secured Promissory Note, a Loan Agreement, a Security Agreement and an Intellectual Property Security Agreement (collectively the "Note Agreement") with Cook Biotech, Inc. (Cook), in which Cook committed to fund the pre-clinical testing of, and subject to the receipt of applicable regulatory approvals to initiate first in human clinical trials for, the Xcede Patch. Under the terms of the Note Agreement, in exchange for the services performed by Cook, Xcede has committed to a multiple draw credit facility in the aggregate amount not to exceed \$1.5 million. Three draws of principal will be available, each in the amount of \$500,000, upon satisfaction of conditions identified in the Note Agreement. The principal amounts outstanding bear interest at a fixed rate of 2% and are secured by all the rights of Xcede under the Development Agreement, Supply Agreement, and License Agreement, all the rights to the data and work product arising from the clinical trial being performed under the Services Agreement, all regulatory approvals for the Xcede Patch, all patent and patent applications owned or controlled by Xcede, and all trademark and service mark registrations and applications. The outstanding principal and unpaid interest are due and payable in full at the earlier of closing of an acquisition transaction or December 31, 2025. As of September 30, 2017, Xcede had \$0.5 million of outstanding indebtedness owed to Cook.

"Off Balance Sheet" Arrangements

Dynasil has no "Off Balance Sheet" arrangements.

NEW ACCOUNTING PRONOUNCEMENTS

See Note 2, "Summary of Significant Accounting Policies" in the Notes to Consolidated Financial Statements for a full description of recent accounting pronouncements, including the respective dates of adoption or expected adoption and effects on our consolidated financial position, results of operations and cash flows.

CRITICAL ACCOUNTING POLICIES

Our discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America and pursuant to the rules and regulations of the SEC. The preparation of these 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 revenue and expenses during the reporting period. We have identified the following as the items that require the most significant judgment and often involve complex estimation: revenue recognition, valuation of long-lived assets, intangible assets and goodwill, estimating allowances for doubtful accounts receivable, stock-based compensation, valuation of inventory, and accounting for income taxes.

Revenue Recognition

Revenue from sales of products is recognized at the time title and the risks and rewards of ownership pass. Revenue is recognized when the products are shipped per customers' instructions, the contract has been executed, the contract or sales price is fixed or determinable, delivery of services or products has occurred and our ability to collect the contract price is considered reasonably assured.

Revenue from research and development activities is derived generally from the following types of contracts: reimbursement of costs plus fees, fixed price or time and material type contracts. Government funded services revenue from cost plus contracts are recognized as costs are incurred on the basis of direct costs plus allowable indirect costs and an allocable portion of the contracts' fixed fees. Revenue from fixed-type contracts is recognized under the percentage of completion method with estimated costs and profits included in contract revenue as work is performed. Revenue from time and materials contracts are recognized as costs are incurred at amounts generally commensurate with billing amounts. Recognition of losses on projects is taken as soon as the loss is reasonably determinable.

The majority of our contract research revenue is derived from the United States government and government related contracts. Such contracts have certain risks which include dependence on future appropriations and administrative allotment of funds and changes in government policies. Costs incurred under United States government contracts are subject to audit. We believe the results of such audits will not have a material adverse effect on our financial position or results of operations.

Goodwill

Goodwill and intangible assets which have indefinite lives are subject to annual impairment tests. Goodwill is tested by reviewing the carrying value compared to the fair value at the reporting unit level. Fair value for the reporting unit is derived using the income approach. Under the income approach, fair value is calculated based on the present value of estimated future cash flows. Assumptions by management are necessary to evaluate the impact of operating and economic changes and to estimate future cash flows. Management's evaluation includes assumptions on future growth rates and cost of capital that are consistent with internal projections and operating plans.

We generally perform our annual impairment testing of goodwill during the fourth quarter of the fiscal year, or more frequently if events or changes in circumstances indicate that the assets might be impaired. We test impairment at the reporting unit level using the two-step process. Our primary reporting units tested for impairment are RMD, which comprises our Contract Research segment, and Hilger, which is a component of the Optics segment.

Step one of the impairment testing compares the carrying value of a reporting unit to its fair value. The carrying value represents the net book value of the net assets of the reporting unit or simply the equity of the reporting unit if the reporting unit is the entire entity. If the fair value of the reporting unit is greater than its carrying value, no impairment has been incurred and no further testing or analysis is necessary. We estimate fair value using a discounted cash flow methodology which calculates fair value based on the present value of estimated future cash flows. Estimating future cash flows requires significant judgment and includes making assumptions about projected growth rates, industry-specific factors, working capital requirements, weighted average cost of capital, and current and anticipated operating conditions. Assumptions by management are necessary to evaluate the impact of operating and economic changes. Our evaluation includes assumptions on future growth rates and cost of capital that are consistent with internal projections and operating plans. The use of different assumptions or estimates for future cash flows could produce different results. We regularly assess the estimates based on the actual performance of each reporting unit.

If the carrying value of a reporting unit is greater than its fair value, step two of the impairment testing process is performed to determine the amount of impairment to be recognized. Step two requires us to estimate an implied fair value of the reporting unit's goodwill by allocating the fair value of the reporting unit to all of the assets and liabilities other than goodwill. An impairment then exists if the carrying value of the goodwill is greater than the goodwill's implied fair value. With respect to our annual goodwill impairment testing performed during the fourth quarter of fiscal year 2017, step one of the testing determined the estimated fair value of RMD and Hilger exceeded their carrying values. Accordingly, we concluded that no impairment had occurred and no further testing was necessary.

Impairment of Long-Lived Assets

Our long-lived assets include property, plant and equipment and intangible assets subject to amortization. We evaluate long-lived assets for recoverability whenever events or changes in circumstances indicate that an asset may have been impaired. In evaluating an asset for recoverability, we estimate the future cash flow expected to result from the use of the asset and eventual disposition. If the expected future undiscounted cash flow is less than the carrying amount of the asset, an impairment loss, equal to the excess of the carrying amount over the fair value of the asset, is recognized.

There was no impairment charge during the years ended September 30, 2017 and 2016.

Intangible Assets

Our intangible assets consist of acquired customer relationships and trade names of Hilger Crystals, Ltd., acquired know-how of Radiation Monitoring Devices, Inc. and provisionally patented technologies within Dynasil Biomedical Corp.

We estimate the fair value of indefinite-lived intangible assets using an income approach, and recognize an impairment loss when the estimated fair value of the indefinite-lived intangible assets is less than the carrying value. During the fourth quarter of fiscal year 2017, we conducted our annual impairment review of indefinite-lived intangible assets and concluded the fair value exceeded the carrying value.

We review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. Recoverability of these intangible assets is assessed based on the undiscounted future cash flows expected to result from the use of the asset. If the undiscounted future cash flows are less than the carrying value, the intangible assets with finite lives are considered to be impaired. The amount of the impairment loss, if any, is measured as the difference between the carrying amount of these assets and the fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values.

We amortize our intangible assets with definitive lives over their useful lives, which range from 5 to 15 years, based on the time period we expect to receive the economic benefit from these assets.

Allowance for Doubtful Accounts Receivable

We perform ongoing credit evaluations of our customers and adjust credit limits based upon payment history and the customer's current credit worthiness, as determined by a review of their current credit information. We continuously monitor collections and payments from our customers and maintain a provision for estimated credit losses based upon historical experience and any specific customer collection issues that have been identified. While such credit losses have historically been minimal, within our expectations and the provisions established, we cannot guarantee that we will continue to experience the same credit loss rates as in the past. A significant change in the liquidity or financial position of any of our significant customers could have a material adverse effect on the collectability of our accounts receivable and future operating results.

Stock-Based Compensation

We account for stock-based compensation using fair value. Compensation costs are recognized for stock options granted to employees and directors. Options and warrants granted to employees and non-employees are recorded as an expense over the requisite service period based on the grant date estimated fair value of the grant, determined using the Black-Scholes option pricing model.

Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets. We regularly evaluate our ability to recover the reported amount of our deferred income taxes considering several factors, including our estimate of the likelihood of our generating sufficient taxable income in future years during the period over which temporary differences reverse. As a result of the conversion of the Xcede convertible notes in November 2016, our ownership percentage in Xcede decreased to less than 80%. Based on this ownership percentage, beginning with the year ended September 30, 2017, Xcede is no longer included in the consolidated federal tax return and the Company can no longer offset taxable income or share net operating losses with Xcede. The tax accounting impact, including the assessment on the valuation allowance against the U.S. federal and state net deferred tax assets, will continue to be evaluated in subsequent periods. The valuation allowance will be addressed independently for the Company and Xcede, instead of on a consolidated basis.

Inventories

Inventories are stated at the lower of average cost or market. Cost is determined using the first-in, first-out (FIFO) method and includes material, labor and overhead. Inventories consist primarily of raw materials, work-in-process and finished goods.

A significant decrease in demand for the Company's products could result in a short-term increase in the cost of inventory purchases and an increase of excess inventory quantities on hand. In addition, as technologies change or new products are developed, product obsolescence could result in an increase in the amount of obsolete inventory quantities on hand. The Company records, as a charge to cost of revenue, any amounts required to reduce the carrying value to net realizable value.

Forward-Looking Statements

The statements contained in this Annual Report on Form 10-K which are not historical facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements regarding future events and our future results are based on current expectations, estimates, forecasts, and projections and the beliefs and assumptions of our management, including, without limitation, our expectations regarding results of operations, our compliance with the financial covenants under our loan agreements with Middlesex Savings Bank and Massachusetts Capital Resource Company, our expectations regarding results of operations, the commercialization of our technology, including the Xcede patch and our dual mode detectors, the success of efforts to fund Xcede, results of our pre-clinical and planned clinical trials, regulatory approvals, our development of new technologies including at Dynasil Biomedical, the adequacy of our current financing sources to fund our current operations, our growth initiatives, our capital expenditures and the strength of our intellectual property portfolio. These forward-looking statements may be identified by the use of words such as "plans," "intends," "may," "could," "expect," "estimate," "anticipate," "continue," or similar terms, though not all forward-looking statements contain such words. The actual results of the future events described in such forward-looking statements could differ materially from those stated in such forward-looking statements due to a number of important factors. These factors that could cause actual results to differ from those anticipated or predicted include, without limitation, our ability to develop and commercialize our products, including obtaining regulatory approvals, the size and growth of the potential markets for our products and our ability to serve those markets, the rate and degree of market acceptance of any of our products, general economic conditions, costs and availability of raw materials and management information systems, our ability to obtain and maintain intellectual property protection for our products, Xcede's ability to produce preclinical data sufficient to enable it to initiate clinical studies of hemostatic patch, clinical results of Xcede's programs which may not support further development, competition, the loss of key management and technical personnel, our ability to obtain timely payment of our invoices to governmental customers, litigation, the effect of governmental regulatory developments, the availability of financing sources, our ability to deleverage our balance sheet, our ability to identify and execute on acquisition opportunities and integrate such acquisitions into our business, and seasonality, as well as the uncertainties set forth in this Annual Report on Form 10-K, including the risk factors contained in Item 1A, and from time to time in the Company's other filings with the Securities and Exchange Commission. The Company disclaims any intention or obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial Statements

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Dynasil Corporation of America and Subsidiaries
Newton, Massachusetts

We have audited the accompanying consolidated balance sheets of Dynasil Corporation of America and Subsidiaries (the Company) as of September 30, 2017 and 2016 and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Dynasil Corporation of America and Subsidiaries as of September 30, 2017 and 2016, and the results of their operations and their cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ RSM US LLP

Boston, Massachusetts
December 20, 2017

DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
SEPTEMBER 30, 2017 and 2016

ASSETS		
	September 30,	September 30,
	2017	2016
Current Assets		
Cash and cash equivalents	\$ 2,415,000	\$ 2,607,000
Accounts receivable, net of allowances of \$200,000 and \$171,000 at September 30, 2017 and 2016, respectively	3,407,000	3,502,000
Costs in excess of billings and unbilled receivables	1,317,000	1,208,000
Inventories, net of reserves	4,326,000	3,726,000
Prepaid expenses and other current assets	973,000	1,078,000
Total current assets	12,438,000	12,121,000
Property, Plant and Equipment, net	7,032,000	7,223,000
Other Assets		
Intangibles, net	987,000	1,067,000
Deferred tax asset, net	2,642,000	-
Goodwill	5,940,000	5,898,000
Security and other deposits	58,000	60,000
Total other assets	9,627,000	7,025,000
Total Assets	\$ 29,097,000	\$ 26,369,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Current portion of long-term debt	\$ 2,007,000	\$ 2,477,000
Capital lease obligations, current portion	91,000	105,000
Convertible notes	-	3,085,000
Accounts payable	2,380,000	1,627,000
Deferred revenue	129,000	238,000
Accrued expenses and other liabilities	2,667,000	2,955,000
Total current liabilities	7,274,000	10,487,000
Long-term Liabilities		
Long-term debt, net of current portion	1,045,000	736,000
Capital lease obligations, net of current portion	81,000	173,000
Deferred tax liability, net	234,000	263,000
Other long-term liabilities	38,000	43,000
Total long-term liabilities	1,398,000	1,215,000

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

DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
SEPTEMBER 30, 2017 and 2016 (Continued)

LIABILITIES AND STOCKHOLDERS' EQUITY (Continued)		
	September 30,	September 30,
	2017	2016
Stockholders' Equity		
Common Stock, \$0.0005 par value, 40,000,000 shares authorized, 17,893,763 and 17,677,284 shares issued, 17,083,603 and 16,867,124 shares outstanding at September 30, 2017 and 2016, respectively	9,000	9,000
Additional paid in capital	21,406,000	20,128,000
Accumulated other comprehensive income (loss)	(539,000)	(699,000)
Accumulated deficit	(919,000)	(3,479,000)
Less 810,160 shares of treasury stock - at cost	(986,000)	(986,000)
Total Dynasil stockholders' equity	18,971,000	14,973,000
Noncontrolling interest	1,454,000	(306,000)
Total stockholders' equity	20,425,000	14,667,000
Total Liabilities and Stockholders' Equity	\$ 29,097,000	\$ 26,369,000

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

DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
FOR THE YEARS ENDED SEPTEMBER 30, 2017 and 2016

	2017	2016
Net revenue	\$ 37,284,000	\$ 43,442,000
Cost of revenue	23,386,000	27,839,000
Gross profit	13,898,000	15,603,000
Operating expenses:		
Sales and marketing	1,152,000	1,153,000
Research and development	903,000	998,000
General and administrative	12,365,000	12,777,000
(Gain) loss on sale of assets	60,000	(4,000)
Total operating expenses	14,480,000	14,924,000
Income (loss) from operations	(582,000)	679,000
Interest expense, net	212,000	294,000
Income (loss) before taxes	(794,000)	385,000
Income tax (benefit)	(2,741,000)	51,000
Net income (loss)	1,947,000	334,000
Less: Net loss attributable to noncontrolling interest	(246,000)	(354,000)
Net income (loss) attributable to common stockholders	<u>\$ 2,193,000</u>	<u>\$ 688,000</u>
Net income (loss)	\$ 1,947,000	\$ 334,000
Other comprehensive income (loss):		
Foreign currency translation	160,000	(809,000)
Total comprehensive income (loss)	2,107,000	(475,000)
Less: comprehensive income (loss) attributable to noncontrolling interest	(246,000)	(354,000)
Total comprehensive income (loss) attributable to common stockholders	<u>\$ 2,353,000</u>	<u>\$ (121,000)</u>
Basic net income (loss) per common share	\$ 0.13	\$ 0.04
Diluted net income (loss) per common share	\$ 0.13	\$ 0.04
Weighted average shares outstanding		
Basic	16,909,412	16,657,563
Diluted	16,911,504	16,693,501

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

DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED SEPTEMBER 30, 2017 and 2016

	Common Shares	Common Amount	Additional Paid-in Capital	Other Comprehensive Income (Loss)	Accumulated Deficit	Treasury Stock Shares	Treasury Stock Amount	Noncontrolling Interest	Total Stockholders' Equity
Balance, September 30, 2015	17,368,738	\$ 9,000	\$ 19,650,000	\$ 110,000	\$ (4,167,000)	810,160	\$ (986,000)	\$ (188,000)	\$ 14,428,000
Issuance of shares of common stock under employee stock purchase plan	13,742	-	16,000	-	-	-	-	-	16,000
Stock-based compensation costs	294,804	-	462,000	-	-	-	-	236,000	698,000
Foreign currency translation adjustment	-	-	-	(809,000)	-	-	-	-	(809,000)
Net loss	-	-	-	-	688,000	-	-	(354,000)	334,000
Balance, September 30, 2016	17,677,284	\$ 9,000	\$ 20,128,000	\$ (699,000)	\$ (3,479,000)	810,160	\$ (986,000)	\$ (306,000)	\$ 14,667,000
Issuance of shares of common stock under employee stock purchase plan	16,058	-	17,000	-	-	-	-	-	17,000
Stock-based compensation costs	200,421	-	424,000	-	-	-	-	32,000	456,000
Stock options issued to settle liabilities	-	-	75,000	-	-	-	-	-	75,000
Recapitalization of Xcede	-	-	762,000	-	367,000	-	-	1,974,000	3,103,000
Foreign currency translation adjustment	-	-	-	160,000	-	-	-	-	160,000
Net income	-	-	-	-	2,193,000	-	-	(246,000)	1,947,000
Balance, September 30, 2017	17,893,763	\$ 9,000	\$ 21,406,000	\$ (539,000)	\$ (919,000)	810,160	\$ (986,000)	\$ 1,454,000	\$ 20,425,000

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

DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED SEPTEMBER 30, 2017 and 2016

	2017	2016
Cash flows from operating activities:		
Net income (loss)	\$ 1,947,000	\$ 334,000
Adjustments to reconcile net income (loss) to net cash:		
Stock compensation expense	456,000	698,000
Foreign exchange loss (gain)	(19,000)	143,000
Depreciation and amortization	1,238,000	1,267,000
Deferred income taxes	(2,677,000)	57,000
Disposal loss (gain)	60,000	(4,000)
Non-cash R&D services	306,000	-
Other	142,000	326,000
Other changes in assets and liabilities:		
Accounts receivable, net	91,000	(271,000)
Inventories	(610,000)	(1,080,000)
Costs in excess of billings and unbilled receivables	(109,000)	310,000
Prepaid expenses and other assets	243,000	8,000
Accounts payable	748,000	(176,000)
Accrued expenses and other liabilities	(218,000)	368,000
Deferred revenue	(110,000)	129,000
Net cash from operating activities	1,488,000	2,109,000
Cash flows from investing activities:		
Proceeds from sale of property, plant and equipment	3,000	4,000
Purchases of property, plant and equipment	(913,000)	(1,514,000)
Purchases of intangibles	(69,000)	(102,000)
Net cash from investing activities	(979,000)	(1,612,000)
Cash flows from financing activities:		
Proceeds from issuance of common stock	17,000	16,000
Net proceeds from issuance of convertible notes	-	840,000
Principal payments on capital leases	(106,000)	(118,000)
Proceeds from (payments of) line of credit, net	-	545,000
Payments on long-term debt	(621,000)	(349,000)
Net cash from financing activities	(710,000)	934,000
Effect of exchange rates on cash and cash equivalents	9,000	(119,000)
Net change in cash and cash equivalents	(192,000)	1,312,000
Cash and cash equivalents, beginning	\$ 2,607,000	\$ 1,295,000
Cash and cash equivalents, ending	<u>\$ 2,415,000</u>	<u>\$ 2,607,000</u>

Supplemental Disclosure of Cash Flow Information – Note 15

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

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 1 – Nature of Operations

Nature of Operations

Dynasil Corporation of America (“Dynasil” or the “Company”) is primarily engaged in the development, marketing and manufacturing of detection, sensing and analysis technology and optical components as well as contract research. The Company’s products and services are used in a broad range of application markets including the homeland security, industrial and medical markets sectors. The products and services are sold throughout the United States (“U.S.”) and internationally.

Note 2 – Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts of assets and liabilities and the disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Dynasil Corporation of America and its wholly-owned subsidiaries: Optometrics Corporation (“Optometrics”), Evaporated Metal Films Corporation (“EMF”), Radiation Monitoring Devices, Inc. (“RMD”), Hilger Crystals, Ltd (“Hilger”) and Dynasil Biomedical Corp (“Dynasil Biomedical”). Xcede Technologies, Inc. (“Xcede”) is a joint venture between Dynasil Biomedical and Mayo Clinic to spin out and separately fund the development of a tissue sealant technology. As of September 30, 2017, Dynasil Biomedical owned 61% of Xcede’s stock and, as a result, Xcede is included in the Company’s consolidated balance sheets, results of operations and cash flows. The 61% ownership includes preferred stock with a liquidation preference, and as a result, for reporting purposes only, common stock ownership is used in the allocation of noncontrolling interest. Dynasil’s common stock ownership is 83% and the remaining 17% of Xcede’s common stock is owned by others and accounted for under the rules applicable to non-controlling interest. All significant intercompany transactions and balances have been eliminated.

Revenue Recognition

Revenue from sales of products is recognized at the time title and the risks and rewards of ownership pass. Revenue is recognized when the products are shipped per customers’ instructions, the contract has been executed, the contract or sales price is fixed or determinable, delivery of services or products has occurred and the Company’s ability to collect the contract price is considered reasonably assured.

Revenue from research and development activities is derived generally from the following types of contracts: reimbursement of costs plus fees, fixed price or time and material type contracts. Government funded services revenue from cost plus contracts are recognized as costs are incurred on the basis of direct costs plus allowable indirect costs and an allocable portion of the contracts’ fixed fees. Revenue from fixed-type contracts is recognized under the percentage of completion method with estimated costs and profits included in contract revenue as work is performed. Revenue from time and materials contracts are recognized as costs are incurred at amounts represented by agreed billing amounts. Recognition of losses on projects is taken as soon as the loss is reasonably determinable. The Company has an accrual for contract losses in the amount of \$110,000 as of September 30, 2017 and 2016.

The majority of the Company’s contract research revenue is derived from the United States government and government related contracts. Such contracts have certain risks which include dependence on future appropriations and administrative allotment of funds and changes in government policies. Costs incurred under United States government contracts are subject to audit. The Company believes that the results of such audits will not have a material adverse effect on its financial position or its results of operations.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Allowance for Doubtful Accounts Receivable

The Company performs ongoing credit evaluations of its customers and adjusts credit limits based upon payment history and the customer's current credit worthiness, as determined by a review of their current credit information. The Company continuously monitors collections and payments from its customers and maintains a provision for estimated credit losses based upon historical experience and any specific customer collection issues that have been identified. While such credit losses have historically been minimal, within expectations and the provisions established, the Company cannot guarantee that it will continue to experience the same credit loss rates as in the past. A significant change in the liquidity or financial position of any significant customers could have a material adverse effect on the collectability of accounts receivable and future operating results. When all collection efforts have failed and it is deemed probable that a customer account is uncollectible, that balance is written off against the existing allowance.

Shipping and Handling Costs

Shipping and handling costs are included in the cost of sales. The amounts billed for shipping and included in net revenue were approximately \$45,000 and \$49,000 for the years ended September 30, 2017 and 2016, respectively.

Research and Development

The Company expenses research and development costs as incurred. Research and development costs include salaries, employee benefit costs, direct project costs, supplies and other related costs. Substantially all the Contract Research segment's cost of revenue relates to research contracts performed by RMD which are in turn billed to the contracting party. Amounts of research and development included within cost of revenue for the years ended September 30, 2017 and 2016 were \$10.7 million and \$12.2 million, respectively. Research and development for our other businesses totaled \$0.9 million and \$1.0 million in fiscal years 2017 and 2016, respectively.

Costs in Excess of Billings and Unbilled Receivables

Costs in excess of billings and unbilled receivables relate to research and development contracts and consists of actual costs incurred plus fees in excess of billings at contractual rates.

Patent Costs

Costs incurred in filing, prosecuting and maintaining patents (principally legal fees) are expensed as incurred and recorded within operating expenses on the consolidated statements of operations. Such costs aggregated approximately \$0.3 and \$0.2 million for the years ended September 30, 2017 and 2016, respectively. Xcede capitalizes patent costs, which equaled \$0.1 million for the years ended September 30, 2017 and 2016.

Inventories

Inventories are stated at the lower of average cost or market. Cost is determined using the first-in, first-out (FIFO) method and includes material, labor and overhead. Inventories consist primarily of raw materials, work-in-process and finished goods.

A significant decrease in demand for the Company's products could result in a short-term increase in the cost of inventory purchases and an increase of excess inventory quantities on hand. In addition, as technologies change or new products are developed, product obsolescence could result in an increase in the amount of obsolete inventory quantities on hand. The Company records, as a charge to cost of revenue, any amounts required to reduce the carrying value to net realizable value.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Property, Plant and Equipment

Property, plant and equipment are recorded at cost or at fair market value for assets acquired in a business combination. Depreciation is provided using the straight-line method over the estimated useful lives of the respective assets. The estimated useful lives of assets for financial reporting purposes are as follows: building and improvements, 8 to 25 years; machinery and equipment, 5 to 20 years; office furniture and fixtures, 5 to 10 years; transportation equipment, 5 years. Maintenance and repairs are charged to expense as incurred; major renewals and betterments are capitalized. When items of property, plant and equipment are sold or retired, the related costs and accumulated depreciation are removed from the accounts and any gain or loss is included in income.

Goodwill

The Company annually assesses goodwill impairment at the end of the fourth quarter of the fiscal year by applying a fair value test. In the first step of testing for goodwill impairment, the Company estimates the fair value of each reporting unit. The reporting units with goodwill have been determined to be RMD, which is the Contract Research reportable segment, and Hilger, which is a component of the Optics reportable segment. The Company compares the fair value with the carrying value of the net assets assigned to each reporting unit. If the fair value is less than its carrying value, then the Company performs a second step and determines the fair value of the goodwill. In this second step, the fair value of goodwill is determined by deducting the fair value of a reporting unit's identifiable assets and liabilities from the fair value of the reporting unit as a whole, as if that reporting unit had just been acquired and the purchase price were being initially allocated. If the fair value of the goodwill is less than its carrying value for a reporting unit, an impairment charge is recorded to earnings.

To determine the fair value of each of the reporting units as a whole, the Company uses a discounted cash flow analysis, which requires significant assumptions and estimates about the future operations of each reporting unit. Significant judgments inherent in this analysis include the determination of appropriate discount rates, the amount and timing of expected future cash flows and growth rates. The cash flows employed in the discounted cash flow analyses are based on financial forecasts developed internally by management. The discount rate assumptions are based on an assessment of the Company's risk adjusted discount rate applicable for each reporting unit. In assessing the reasonableness of the determined fair values of the reporting units, the Company evaluates its results against its current market capitalization.

In addition, the Company evaluates a reporting unit for impairment if events or circumstances change between annual tests indicating a possible impairment. Examples of such events or circumstances include the following:

- a significant adverse change in legal status or in the business climate,
- an adverse action or assessment by a regulator,
- a more likely than not expectation that a segment or a significant portion thereof will be sold, or
- the testing for recoverability of a significant asset group within the segment.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Intangible Assets

The Company's intangible assets consist of acquired customer relationships, trade names, acquired backlog, know-how and provisionally patented technologies. The Company amortizes its intangible assets with definitive lives over their useful lives, which range from 5 to 15 years, based on the time period the Company expects to receive the economic benefit from these assets.

The Company has a trade name related to its subsidiary located in the United Kingdom (“U.K.”) that has been determined to have an indefinite life and is therefore not subject to amortization and is reviewed at least annually for potential impairment. The fair value of the Company's trade name is estimated and compared to its carrying value to determine if impairment exists. The Company estimates the fair value of this intangible asset based on an income approach using the relief-from-royalty method. This methodology assumes that, in lieu of ownership, a third party would be willing to pay a royalty in order to exploit the related benefits of this asset. This approach is dependent on a number of factors, including estimates of future sales, royalty rates in the category of intellectual property, discount rates and other variables. Significant differences between these estimates and actual results could materially affect the Company's future financial results.

Recovery of Long-Lived Assets

The Company continually assesses whether events or changes in circumstances have occurred that may warrant revision of the estimated useful lives of its long-lived assets (other than goodwill and any indefinite lived assets) or whether the remaining balances of those assets should be evaluated for possible impairment. Long-lived assets include, for example, customer relationships, trade names, backlog, know-how and provisionally patented technologies. Events or changes in circumstances that may indicate that an asset may be impaired include the following:

- a significant decrease in the market price of an asset or asset group,
- a significant adverse change in the extent or manner in which an asset or asset group is being used or in its physical condition,
- a significant adverse change in legal factors or in the business climate that could affect the value of an asset or asset group, including an adverse action or assessment by a regulator,
- an accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset,
- a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset or asset group,
- a current expectation that, more likely than not, a long-lived asset or asset group will be sold or otherwise disposed of significantly before the end of its previously estimated useful life, or
- an impairment of goodwill at a reporting unit.

If an impairment indicator occurs, the Company performs a test of recoverability by comparing the carrying value of the asset or asset group to its undiscounted expected future cash flows, including proceeds from the disposition of the asset. The Company groups its long-lived assets for this purpose at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets or asset groups. If the carrying values are in excess of undiscounted expected future cash flows, the Company measures any impairment by comparing the fair value of the asset or asset group to its carrying value.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Recovery of Long-Lived Assets (continued)

To determine fair value the Company uses discounted cash flow analyses and estimates about the future cash flows of the asset or asset group. This analysis includes a determination of an appropriate discount rate, the amount and timing of expected future cash flows and growth rates. The cash flows employed in the discounted cash flow analyses are typically based on financial forecasts developed internally by management. The discount rate used is commensurate with the risks involved. The Company may also rely on third party valuations and or information available regarding the market value for similar assets.

If the fair value of an asset or asset group is determined to be less than the carrying amount of the asset or asset group, impairment in the amount of the difference is recorded in the period that the impairment occurs. Estimating future cash flows requires significant judgment and projections may vary from the cash flows eventually realized.

Advertising

The Company expenses all advertising costs as incurred. Advertising expense for the years ended September 30, 2017 and 2016 was approximately \$117,000 and \$105,000, respectively.

Retirement Plans

The Company has retirement savings plans available to substantially all full time employees which are intended to qualify as deferred compensation plans under Section 401(k) of the Internal Revenue Code and similar laws in the United Kingdom. Pursuant to these plans, employees contribute amounts as required or allowed by the plans or by law. The Company also makes matching contributions in accordance with the terms of the plans.

Income Taxes

The Company uses the asset and liability approach to account for deferred income taxes. Under this approach, deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and net operating loss and tax credit carry-forwards. The amount of deferred taxes on these temporary differences is determined using the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, as applicable, based on tax rates, and tax laws, in the respective tax jurisdiction then in effect.

Dynasil Corporation of America and its wholly owned U.S. subsidiaries file a consolidated federal income tax return and various state returns. The Company's U.K. subsidiary files tax returns in the U.K. Prior to November 18, 2016, the Company's subsidiary, Xcede was included in the federal and state tax returns filed by Dynasil. On November 18, 2016, Dynasil's ownership in Xcede was reduced to less than 80%. As a result, Xcede is no longer included in Dynasil's federal consolidated tax return and will file a separate federal return. Xcede will continue to be included in the Dynasil consolidated state tax filings pursuant to the respective state tax requirements.

In assessing the ability to realize the net deferred tax assets, management considers various factors including taxable income in carryback years, future reversals of existing taxable temporary differences, tax planning strategies and projections of future taxable income, to determine whether it is more likely than not that some portion or all of the net deferred tax assets will not be realized. As a result of Xcede's de-consolidation from the Company's federal tax returns, the Company will no longer be able to offset taxable income with Xcede's current or cumulative net operating losses. Upon review of relevant criteria for the new Dynasil federal consolidated group, it was determined that it is more likely than not that the federal, deferred tax assets of the new Dynasil federal consolidated group will be realized based upon positive earnings history and expected future profits of the group. As a result, the federal deferred tax asset valuation allowance associated with the Dynasil federal consolidated group has been reversed resulting in

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Income Taxes (continued)

an income tax benefit in the amount of \$2.7 million during the year ended September 30, 2017. Going forward, as the Company records income, it will be able to utilize the NOLs (net operating losses) within its deferred tax assets. Based Xcede's recent losses and uncertainty of future profits, the Company has determined that the uncertainty regarding the realization of the Company's state and separate Xcede deferred tax assets is sufficient to warrant the continued need for a valuation allowance against these deferred tax assets.

The Company applies the authoritative provisions related to accounting for uncertainty in income taxes. As required by these provisions, the Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more-likely-than-not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being reached upon ultimate settlement with the relevant tax authority. As of September 30, 2017 and 2016, the Company has no unrecorded liabilities for uncertain tax positions. Interest and penalty charges, if any, related to uncertain tax positions would be classified as income tax expense in the accompanying consolidated statement of operations. As of September 30, 2017 and 2016, the Company had no accrued interest or penalties related to uncertain tax positions.

Earnings Per Common Share

Basic earnings (loss) per common share is computed by dividing the net income or loss attributable to common shares by the weighted average number of common shares outstanding during each period. Diluted earnings per common share adjusts basic earnings per share for the effects of common stock options, common stock warrants, convertible preferred stock and other potential dilutive common shares outstanding during the periods.

For purposes of computing diluted earnings per share for the years ended September 30, 2017 and 2016, no common stock options were included in the calculation of dilutive shares as all of the 196,769 and 123,147 common stock options outstanding, respectively, had exercise prices above the current quarterly average market price per share and their inclusion would be anti-dilutive.

The computations of the weighted shares outstanding for the years ended September 30 are as follows:

	2017	2016
Weighted average shares outstanding		
Basic	16,909,412	16,657,563
Effect of dilutive securities		
Stock Options	-	-
Restricted Stock	2,092	35,938
Dilutive Average Shares Outstanding	<u>16,911,504</u>	<u>16,693,501</u>

Stock Based Compensation

Stock-based compensation cost is measured using the fair value recognition provisions of the FASB authoritative guidance, which requires the measurement and recognition of compensation expense for all stock-based awards made to employees and directors, including employee stock options, based on estimated fair values. Stock-based compensation cost is measured at the grant date based on the value of the award and is recognized over the requisite service period of the award.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Foreign Currency Translation

The operations of Hilger, the Company's foreign subsidiary, use their local currency as its functional currency. Assets and liabilities of the Company's foreign operations, denominated in their local currency, Great Britain Pounds (GBP), are translated at the rate of exchange at the balance sheet date. Revenue and expense accounts are translated at the average exchange rates during the period. Adjustments resulting from translating foreign functional currency financial statements into U.S. dollars are included in the foreign currency translation adjustment, a component of accumulated other comprehensive income in stockholders' equity. Gains and losses generated by transactions denominated in foreign currencies are recorded in the accompanying statement of operations in the period in which they occur.

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Accumulated comprehensive income (loss) represents cumulative translation adjustments related to Hilger, the Company's foreign subsidiary. The Company presents comprehensive income and losses in the consolidated statements of operations and comprehensive income (loss).

Financial Instruments

The carrying amount reported in the balance sheets for cash and cash equivalents, accounts receivable and accounts payable approximates fair value because of the immediate or short-term maturity of these financial instruments. The carrying amounts for fixed rate long-term debt and variable rate long-term debt approximate fair value because the underlying instruments are primarily at current market rates available to the Company for similar borrowings.

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of accounts receivable. In the normal course of business, the Company extends credit to certain customers. Management performs initial and ongoing credit evaluations of their customers and generally does not require collateral.

Concentration of Credit Risk

The Company maintains allowances for potential credit losses and has not experienced any significant losses related to the collection of its accounts receivable. As of September 30, 2017 and 2016, approximately \$863,000 and \$1,159,000 or 25% and 32% of the Company's accounts receivable are due from foreign sales.

The Company maintains cash and cash equivalents at various financial institutions in New Jersey, Massachusetts and New York. Accounts at each institution are insured by the Federal Deposit Insurance Corporation up to \$250,000. Hilger also maintains cash and cash equivalents at a financial institution in the U.K. Accounts at this institution are insured by the Financial Services Compensation Scheme, the U.K.'s deposit guarantee scheme, up to £75,000. At September 30, 2017 and 2016, the Company's uninsured bank balances totaled approximately \$1,930,000 and \$2,031,000, respectively. The Company has not experienced any significant losses on its cash and cash equivalents.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Recent Accounting Pronouncements

Preparation of Financial Statements – Going Concern (Subtopic 205-40), Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern. In August 2014, the FASB issued ASU No. 2014-15 which states that under GAAP, continuation of a reporting entity as a going concern is presumed as the basis for preparing financial statements unless and until the entity’s liquidation becomes imminent. If and when an entity’s liquidation becomes imminent, financial statements should be prepared under the liquidation basis of accounting. Even when an entity’s liquidation is not imminent, there may be conditions or events that raise substantial doubt about the entity’s ability to continue as a going concern. In those situations, financial statements should continue to be prepared under the going concern basis of accounting, but the amendments in this ASU should be followed to determine whether to disclose information about the relevant conditions and events. The Company adopted this ASU in the fourth quarter of fiscal 2017 and it did not have an impact on the Company’s consolidated financial position, results of operations or cash flows.

Inventory (Topic 330), Simplifying the Measurement of Inventory. In July 2015, the FASB issued ASU No. 2015-11, which requires that an entity should measure inventory within the scope of this ASU at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Substantial and unusual losses that result from subsequent measurement of inventory should be disclosed in the financial statements. This new guidance is effective for the Company beginning in fiscal 2018. The Company adopted this ASU in fiscal 2017 and it did not have an impact on the Company’s consolidated financial position, results of operations or cash flows.

Improvements to Employee Share-Based Payment Accounting. In March 2016, the FASB issued ASU No. 2016-09, which intends to simplify several aspects of accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, a choice to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. This amendment will be effective for the Company in the fiscal year beginning October 1, 2017. The Company has elected to adopt this change on a prospective basis. Upon adoption, the cumulative impact of this policy change to retained earnings will not be material to the consolidated balance sheet. Once adopted, the consolidated statements of cash flows will present any excess tax benefits as a cash flow from operating activities. The adoption of the standard is not expected to have a material impact on income tax expense.

Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control. In October 2016, the FASB issued ASU 2016-17, Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control, which amends the consolidation guidance on how a reporting entity that is the single decision maker of a VIE should treat indirect interests in the entity held through related parties that are under common control with the reporting entity when determining whether it is the primary beneficiary of that VIE. This new guidance is effective for the Company beginning in fiscal 2018, with early adoption permitted. The Company is currently in the process of assessing the impact of this ASU on its consolidated financial statements.

Revenue from Contracts with Customers (Topic 606) Section A—Summary and Amendments That Create Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs—Contracts with Customers (Subtopic 340-40). In May 2014, the FASB issued ASU 2014-09 which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The standard is based on the principle that an entity should recognize revenue 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. ASU 2014-09 also requires additional disclosure about 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 fulfill a contract. Entities have the option of using either a full retrospective or a modified retrospective

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 2 – Summary of Significant Accounting Policies (continued)

Recent Accounting Pronouncements (continued)

approach for the adoption of the new standard. The ASU becomes effective for the Company at the beginning of its 2019 fiscal year. In 2016 and 2017, the FASB issued several ASU's related to ASU 2014-09, which simplify and provide additional guidance to companies for implementation of the standard. The Company is evaluating the recently issued guidance on practical expedients in order to select a transition method. At this time, the Company plans to adopt this standard through the modified retrospective approach. The Company is also assessing the impact that ASU 2014-09 will have on its consolidated financial statements and disclosures. This evaluation includes completing an inventory of revenue streams by like contracts to allow for ease of implementation, monitoring developments for the manufacturing industry, and evaluating potential changes to our business processes, systems, and controls to support the recognition and disclosure under the new standard.

Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting. In May 2017, the FASB issued ASU No. 2017-09 which was issued to clarify and reduce both (i) diversity in practice and (ii) cost and complexity when applying the guidance in Topic 718, "Compensation – Stock Compensation" to changes in the terms and conditions of a share-based payment award. This update is required beginning with the Company's 2019 fiscal year and should be applied prospectively to award modifications after the effective date. The Company is currently in the process of assessing the impact of this ASU on its consolidated financial statements.

Business Combinations (Topic 805): Clarifying the Definition of a Business. In January 2017, the FASB issued ASU 2017-01 which clarifies the definition of a business for determining whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance is effective for the Company beginning October 1, 2018. The Company is currently in the process of assessing the impact of this ASU on its consolidated financial statements.

Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. In October 2016, the FASB issued ASU 2016-16 which eliminates the exception, other than for inventory transfers, under current U.S. GAAP under which the tax effects of intra-entity asset transfers (intercompany sales) are deferred until the transferred asset is sold to a third party or otherwise recovered through use. Upon adoption of ASU 2016-16, the Company will recognize the tax expense from the sale of that asset in the seller's tax jurisdiction when the transfer occurs, even though the pre-tax effects of that transaction are eliminated in consolidation. Any deferred tax asset that arises in the buyer's jurisdiction would also be recognized at the time of the transfer. This new guidance is effective for the Company beginning in fiscal 2019, with early adoption permitted. Modified retrospective adoption is required with any cumulative-effect adjustment recorded to retained earnings as of the beginning of the period of adoption. The cumulative-effect adjustment, if any, would consist of the net impact from (1) the write-off of any unamortized tax expense previously deferred and (2) recognition of any previously unrecognized deferred tax assets, net of any necessary valuation allowances. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

Service Concession Arrangements (Topic 853): Determining the Customer of the Operation Services. In May 2017, the FASB issued ASU 2017-10 which provides guidance for operating entities when they enter into a service concession arrangement with a public-sector grantor. The ASU becomes effective for the Company at the beginning of its 2019 fiscal year, at the time the Company adopts Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (Topic 606). The Company is currently in the process of assessing the impact of this ASU on its consolidated financial statements.

Leases (Topic 842). In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842), which requires lessees to put most leases on their balance sheets by recognizing a lessee's rights and obligations, while expenses will continue to be recognized in a similar manner to today's legacy lease accounting guidance. This ASU could also significantly affect the financial ratios used for external reporting and other purposes, such as debt covenant compliance. This new guidance is effective for the Company beginning

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Note 2 – Summary of Significant Accounting Policies (continued)

Recent Accounting Pronouncements (continued)

in fiscal 2020, with early adoption permitted. The Company is currently in the process of assessing the impact of this ASU on its consolidated financial statements with the intention to adopt this ASU in fiscal year 2018.

Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment: In January 2017, the FASB issued ASU 2017-04 which simplifies the test for goodwill impairment. This new guidance is effective for the Company beginning in fiscal year 2021. The Company is currently in the process of assessing the impact of this ASU on its consolidated financial statements.

Cash and Cash Equivalents

The Company generally considers all highly liquid investments with original maturities of three months or less to be cash equivalents.

Reclassifications

Certain prior year balances have been reclassified to conform to the current year presentation. These reclassifications did not affect previously reported net income or stockholders' deficit.

Note 3 – Xcede Technologies, Inc. Joint Venture

In October 2013, the Company, through its subsidiary Dynasil Biomedical ("DBM"), formed Xcede, a joint venture with Mayo Clinic, in order to spin out and separately fund the development of its hemostatic tissue sealant technology, which formerly comprised the majority of its expense within the biomedical segment.

Beginning at its inception and through November 2016, Xcede funded its pre-clinical research activities through the issuance of convertible notes bearing interest at 5% ("the Notes") pursuant to a note purchase agreement dated October 2013 and most recently amended in November 2016 that provided for the issuance of up to \$5.2 million in the aggregate principal amount of the Notes from external investors and certain directors and officers of the Company. The Notes were convertible into equity of Xcede.

In November 2016, Dynasil committed to invest \$1.2 million of cash into Xcede over the following 18 months, of which \$0.6 million has been invested as of September 30, 2017 in exchange for Series B convertible preferred stock of Xcede ("Series B Preferred"). The value of the Series B Preferred, as it is wholly owned by DBM, was eliminated in consolidation. In conjunction with Dynasil's committed investment, all \$5.5 million in existing Notes and accrued interest were converted into 5,394,120 shares of Series A convertible preferred stock of Xcede ("Series A Preferred") at a 20% discount to the price per share of the Series B Preferred, in accordance with the amended provisions of the Notes. The original conversion terms of the Notes were amended to require conversion into Series A Preferred rather than the class of stock issued in conjunction with the financing (Series B Preferred). Because the original conversion terms of the Notes were amended and as a result of assessing the impact of the rights and features of the Note amendment and their effect on the value to the issuer and holders, the transaction is recorded at fair value with a resulting gain on extinguishment of debt. Fair value was determined by management based on an independent valuation using a market and income approach and an option pricing model to allocate value to the respective shares. The fair value of the Series A Preferred was approximately \$3.6 million on the date of issuance, as compared to the carrying value of the convertible principal and accrued interest of \$5.5 million, resulting in a gain of approximately \$1.9 million. Due to the related party nature of the transaction, this gain was recorded within the equity of Xcede. Of that \$1.9 million, approximately \$1.6 million was attributed to DBM and eliminated in consolidation, and approximately \$0.3 million was attributed to noncontrolling interest.

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Note 3 – Xcede Technologies, Inc. Joint Venture (continued)

Series A Preferred participants include both outside investors (accounted for as noncontrolling interest) and DBM. The outside investors converted \$3.1 million of Notes and accrued interest into 3,055,551 shares of Series A Preferred. DBM converted the remaining \$2.4 million of Notes and accrued interest into 2,338,569 shares of Series A Preferred, the value of which is eliminated in consolidation.

Each share of Series A Preferred and Series B Preferred (together “the Preferred Stock”) shall be convertible, at the option of the holder, into such number of fully paid and non-assessable shares of Xcede common stock (“Common Stock”) as determined by dividing the original issue price, as defined, by the conversion price in effect on the date of conversion, which is 1:1. Each holder of the Preferred Stock shall have one vote for each share of Common Stock that the holder of the Preferred Stock would be entitled to receive upon the conversion of the holder’s Preferred Stock into Common Stock. Upon any liquidation event, which includes certain change of control events, following payment of pre-equity distributions, the remaining proceeds or net assets of Xcede would be distributed in the following amounts and order of priority: (1) to satisfy the liquidation preference payment due to each holder of Series B Preferred, (2) to satisfy the liquidation preference payment due to each holder of Series A Preferred, (3) payment in full of any acquisition transaction payment, and (4) the remaining assets available to be distributed ratably among the holders of the Common Stock. If a liquidation event were to occur, the Series A Preferred’s liquidation value would be \$1.016 per share and Series B Preferred’s liquidation value would be \$1.27 per share. As of September 30, 2017, the liquidation value of the Series B Preferred would be approximately \$0.8 million and the Series A Preferred would be approximately \$5.5 million, of which \$2.4 million is DBM’s portion and \$3.1 million would be attributed to noncontrolling shareholders.

As of September 30, 2017, DBM owned approximately 61% of Xcede’s outstanding Common Stock and Preferred Stock and, as a result, Xcede is included in the Company’s consolidated balance sheets, results of operations and cash flows. Due to the Series A Preferred having a liquidation preference and therefore not representing a residual interest, cumulative net losses of Xcede are attributed only to common stockholders in accordance with common stock ownership. Noncontrolling interest represents the value of the Series A Preferred and common stock not owned by DBM plus 17% of cumulative losses of Xcede based on the 17% common stock ownership held by noncontrolling interests.

Due to the issuance of Preferred Stock, DBM’s ownership percentage in Xcede decreased to less than 80%. Based on this ownership percentage, beginning in fiscal year 2017, Xcede is no longer included in the Dynasil consolidated federal tax return and the Company is no longer able to offset taxable income or benefit from net operating losses and other tax attributes related to Xcede.

As previously disclosed, in January 2016, Xcede announced that it had signed three agreements with Cook Biotech Inc. of West Lafayette, Indiana (“Cook”), including a Development Agreement, a License Agreement and a Supply Agreement, in connection with the development, regulatory approval and production of the Xcede Patch. In November 2016, Xcede entered into another Services Agreement, a Secured Promissory Note, a Loan Agreement, a Security Agreement and an Intellectual Property Security Agreement (collectively the “Note Agreement”) with Cook, in which Cook committed to fund the pre-clinical testing of, and subject to the receipt of applicable regulatory approvals to initiate first in human clinical trials for, the Xcede Patch. Under the terms of the Note Agreement, in exchange for the services performed by Cook, Xcede has committed to a multiple draw credit facility in the aggregate amount not to exceed \$1.5 million. Three draws of principal will be available, each in the amount of \$500,000, upon satisfaction of conditions identified in the Note Agreement. The principal amounts outstanding bear interest at a fixed rate of 2% and are secured by all the rights of Xcede under the Development Agreement, Supply Agreement, and License Agreement, all the rights to the data and work product arising from the clinical trial being performed under the Services Agreement, all regulatory approvals for the Xcede Patch, all patent and patent applications owned or controlled by Xcede, and all trademark and service mark registrations and applications. The note is recorded at fair value net of unamortized discount based on an imputed interest rate of 5.4%. The outstanding principal and unpaid interest are due and payable in full at the earlier of closing of an acquisition transaction or December 31, 2025. Xcede will recognize research and development expense as the related services are performed by Cook. There was approximately \$306,000 of research and development expense recognized during the twelve months ended September 30, 2017.

DYNASIL CORPORATION OF AMERICA
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Note 4 – Inventories

Inventories, net of reserves, at September 30, 2017 and 2016, consisted of the following:

	2017	2016
Raw Materials	\$ 2,540,000	\$ 1,938,000
Work-in-Process	798,000	834,000
Finished Goods	988,000	954,000
	<u>\$ 4,326,000</u>	<u>\$ 3,726,000</u>

Note 5 - Property, Plant and Equipment

Property, plant and equipment, at September 30, 2017 and 2016, consist of the following:

	2017	2016
Land	\$ 161,000	\$ 157,000
Building and improvements	3,474,000	3,429,000
Machinery and equipment	12,318,000	11,530,000
Office furniture and fixtures	987,000	832,000
Transportation equipment	53,000	53,000
	16,993,000	16,001,000
Less accumulated depreciation	(9,961,000)	(8,778,000)
	<u>\$ 7,032,000</u>	<u>\$ 7,223,000</u>

Depreciation expense for the years ended September 30, 2017 and 2016 was \$1,134,000 and \$1,097,000, respectively.

DYNASIL CORPORATION OF AMERICA
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Note 6 – Intangible Assets

Intangible assets, at September 30, 2017 and 2016, consist of the following:

	Useful	Gross	Accumulated	
September 30, 2017	Life (years)	Amount	Amortization	Net
Acquired Customer Base	5 to 15	\$ 737,000	\$ 551,000	\$ 186,000
Know How	15	512,000	316,000	196,000
Trade Name	Indefinite	281,000	-	281,000
Patents	15	333,000	9,000	324,000
Biomedical Technologies	5	260,000	260,000	-
		<u>\$ 2,123,000</u>	<u>\$ 1,136,000</u>	<u>\$ 987,000</u>
September 30, 2016	Useful	Gross	Accumulated	Net
	Life (years)	Amount	Amortization	
Acquired Customer Base	5 to 15	\$ 718,000	\$ 473,000	\$ 245,000
Know How	15	512,000	282,000	230,000
Trade Name	Indefinite	272,000	-	272,000
Patents	15	326,000	6,000	320,000
Biomedical Technologies	5	260,000	260,000	-
		<u>\$ 2,088,000</u>	<u>\$ 1,021,000</u>	<u>\$ 1,067,000</u>

Amortization expense for both the years ended September 30, 2017 and 2016 was \$104,000 and \$170,000, respectively.

Estimated amortization expense for each of the next five fiscal years is as follows:

	2018	2019	2020	2021	2022	Thereafter	Total
Acquired Customer Base	\$ 80,000	\$ 80,000	\$ 26,000	\$ -	\$ -	\$ -	\$ 186,000
Know How	34,000	34,000	34,000	34,000	34,000	26,000	196,000
Patents	11,000	11,000	11,000	11,000	11,000	162,000	217,000
	<u>\$ 125,000</u>	<u>\$ 125,000</u>	<u>\$ 71,000</u>	<u>\$ 45,000</u>	<u>\$ 45,000</u>	<u>\$ 188,000</u>	<u>\$ 599,000</u>

As of September 30, 2017, Xcede has \$107,000 in capitalized patent costs related to patents that have not been granted, therefore, the amortization related to these patents is not included in the five-year amortization table above.

DYNASIL CORPORATION OF AMERICA
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SEPTEMBER 30, 2017 and 2016

Note 7 – Goodwill

The changes to goodwill during the years ended September 30, 2017 and 2016 are summarized as follows:

	Contract		
	Research	Optics	Total
Goodwill at September 30, 2015	\$ 4,939,000	\$ 1,192,000	\$ 6,131,000
Currency translation on Hilger Crystals	-	(233,000)	(233,000)
Goodwill at September 30, 2016	\$ 4,939,000	\$ 959,000	\$ 5,898,000
Currency translation on Hilger Crystals	-	42,000	42,000
Goodwill at September 30, 2017	<u>\$ 4,939,000</u>	<u>\$ 1,001,000</u>	<u>\$ 5,940,000</u>

With respect to the Company's annual goodwill impairment testing performed during the fourth quarter of fiscal year 2017, step one of the testing determined the estimated fair value of RMD (included in the Contract Research segment) and Hilger (included in the Optics segment) reporting units exceeded their carrying value by more than 20%. Accordingly, the Company concluded that no impairment had occurred and no further testing was necessary.

The step one test for the RMD reporting unit and the resulting calculation of the indicated fair value was performed as described above based on certain specific assumptions. The Company relied on a weighted average cost of capital of approximately 15% for this reporting unit which takes into consideration certain industry and specific premiums. The Company utilized a long term growth rate of approximately 1.5% for this reporting unit which considers industry research and management's expectations as to the prospects for long term growth in this industry.

The step one test for the Hilger reporting unit and the resulting calculation of the indicated fair value was performed as described above based on certain specific assumptions. The Company relied on a weighted average cost of capital of 16% for this reporting unit which takes into consideration certain industry and specific premiums. The Company utilized a long term growth rate of approximately 3% for this reporting unit which considers industry research and management's expectations as to the prospects for long term growth in this industry.

Determining the fair value using a discounted cash flow method requires significant estimates and assumptions, including market conditions, discount rates, and long-term projections of cash flows. The Company's estimates are based upon historical experience, current market trends, projected future volumes and other information. The Company believes that the estimates and assumptions underlying the valuation methodology are reasonable; however, different estimates and assumptions could result in a different estimate of fair value. In estimating future cash flows, the Company relies on internally generated projections for a defined time period for revenue and operating profits, including capital expenditures, changes in net working capital, and adjustments for non-cash items to arrive at the free cash flow available to invested capital. A terminal value utilizing a constant growth rate of cash flows is used to calculate a terminal value after the explicit projection period. The future projected cash flows for the discrete projection period and the terminal value are discounted at a risk adjusted discount rate to determine the fair value of the reporting unit.

DYNASIL CORPORATION OF AMERICA
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Note 8 – Debt

As of September 30, 2017, the Company is in compliance with the financial covenants included in its outstanding indebtedness.

Senior Debt

On May 1, 2014, the Company entered into a loan and security agreement (the “Bank Loan Agreement”) and line of credit note (the “Note”) with Middlesex Savings Bank, pursuant to which it agreed to provide up to \$4.0 million, subject to the availability restrictions described below, under a revolving line of credit loan to the Company for general corporate purposes. The original Bank Loan Agreement provided that the loan expired in May of 2017.

On May 16, 2017, the Company and Middlesex Savings Bank entered in an agreement to extend the Company’s existing line of credit and term loan through May 2020. Additionally, on May 16, 2017, the Company and Middlesex Savings Bank entered into an annual \$1.0 million equipment line of credit agreement with a one year draw period in which the outstanding balance will be converted into a five year term note on the one year anniversary. The existing loan agreement was also amended on December 2, 2016 to permit the Company to invest up to \$1.2 million in its Xcede Technologies subsidiary during the period from the quarter ended December 31, 2016 through the quarter ending September 30, 2018.

The Bank Loan Agreement provides for events of default customary for credit facilities of this type, including but not limited to non-payment, defaults on other debt, misrepresentation, breach of covenants, representations and warranties, insolvency and bankruptcy, change of management, as defined, and the occurrence of a material adverse change, as defined.

The Bank Loan Agreement was amended on September 29, 2015 to permit the Company to repay up to \$3 million of the subordinated debt owed Massachusetts Capital Resources Company (“MCRC”) and also provided the Company, if it met certain conditions, to convert up to \$2.0 million of the advances under the line of credit to a fixed rate note with the principal amortizing monthly over a five year term.

On February 1, 2016, the Company entered into a \$2.0 million Term Note with Middlesex Savings Bank (“Term Note”). The Company converted \$2.0 million of outstanding advances under the Company’s Middlesex Bank Line of Credit Note to a new five-year term note bearing interest at the fixed annual rate of 4.5%. As of September 30, 2017, the outstanding principal balance of the Term Note is \$1.4 million.

The Bank Loan Agreement, the Note and the Term Note are secured by (i) a security interest in substantially all of the Company’s personal property and (ii) sixty-five percent (65%) of Dynasil’s equity interests in its U.K. subsidiary, Hilger Crystals, Ltd. Under the Note, the borrowing base is determined monthly based on eligible billed and unbilled accounts receivable and eligible inventory. The interest rate under the Note is equal to the Prime Rate, but in no event less than 3.25%. As of September 30, 2017, there were no outstanding borrowings and the total availability under the Company’s line of credit was \$4.0 million.

The Bank Loan Agreement also contains other terms, conditions and provisions that are customary for commercial lending transactions of this sort. The Bank Loan Agreement requires Dynasil, at the close of each fiscal quarter, to maintain a Debt Service Coverage ratio, as defined, of at least 1.20 to 1.00 on a trailing four quarter basis. As a result of a material adverse clause in the Middlesex Term Note Agreement, all Middlesex outstanding debt is classified as short-term.

Subordinated Debt

On July 31, 2012, the Company entered into a Note Purchase Agreement (the “Agreement”) with Massachusetts Capital Resource Company (“MCRC”). Pursuant to the terms of the Agreement, the Company issued and sold to MCRC a \$3.0 million subordinated note (the “Subordinated Note”) for a purchase price of \$3.0 million.

DYNASIL CORPORATION OF AMERICA
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Note 8 – Debt (continued)

Subordinated Debt (continued)

The Subordinated Note initially matured on July 31, 2017, unless accelerated pursuant to an event of default. The Subordinated Note provided for interest at the rate of ten percent (10%) per annum, with interest to be payable monthly on the last day of each calendar month and principal payments of \$130,000 beginning on September 30, 2015, and on the last day of each calendar month thereafter through and including July 31, 2017.

Effective October 1, 2015, in connection with a prepayment of \$2.0 million of the Subordinated Note, MCRC agreed to adjust the interest rate to 6% per annum and to amend the principal repayment terms such that beginning on September 30, 2016, the Company would redeem monthly, without premium, \$43,478 in principal amount of Subordinated Note together with all accrued and unpaid interest then due on the amount redeemed through and including July 31, 2018.

On December 15, 2016, the Company amended the Note Purchase Agreement with Massachusetts Capital Resource Company to reinstate the interest only payment requirements of the loan and defer principal repayment requirements to November 30, 2017. Such amendment also extended the maturity date from July 31, 2018 to July 31, 2019.

Other Debt

The Company's RMD and Optometrics subsidiaries entered into equipment financing notes payable in connection with the purchase of certain equipment. Optometrics entered into equipment financing notes payable with two government agencies for up to \$0.5 million. The notes bear interest at 5% to 5.25% and are repayable in monthly installments over a five year period. RMD entered into equipment financing notes payable with a private equipment funding source. The notes bear interest at 8.7% to 14.59% and are repayable in monthly installments through July 2019.

Since its inception in October of 2013, the Company's Xcede joint venture raised \$2.9 million through the issuance of convertible notes to external investors, including certain officers and directors of the Company, which bear interest at 5%, due on demand after June 30, 2017. In November 2016, the notes and accrued interest were converted into 5,394,120 shares of preferred stock of Xcede at a 20% discount to the price per share of the investments the Company has committed to make in Xcede, in accordance with the provisions of the notes. See Note 3 – Xcede Technologies, Inc. Joint Venture.

In November 2016, Xcede entered into an additional Services Agreement, a Secured Promissory Note, a Loan Agreement, a Security Agreement and an Intellectual Property Security Agreement (collectively the "Note Agreement") with Cook Biotech, Inc. (Cook), in which Cook committed to fund the pre-clinical testing of, and subject to the receipt of applicable regulatory approvals to initiate first in human clinical trials for, the Xcede Patch. Under the terms of the Note Agreement, in exchange for the services performed by Cook, Xcede has committed to a multiple draw credit facility in the aggregate amount not to exceed \$1.5 million. Three draws of principal will be available, each in the amount of \$500,000, upon satisfaction of conditions identified in the Note Agreement. The principal amounts outstanding bear interest at a fixed rate of 2% and are secured by all the rights of Xcede under the Development Agreement, Supply Agreement, and License Agreement, all the rights to the data and work product arising from the clinical trial being performed under the Services Agreement, all regulatory approvals for the Xcede Patch, all patent and patent applications owned or controlled by Xcede, and all trademark and service mark registrations and applications. The outstanding principal and unpaid interest are due and payable in full at the earlier of closing of an acquisition transaction or December 31, 2025. As of September 30, 2017, Xcede had \$0.5 million of outstanding indebtedness owed to Cook. The note was recorded at fair value at issuance net of unamortized discount based on an imputed interest rate of 5.4%.

DYNASIL CORPORATION OF AMERICA
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Note 8 – Debt (continued)

Debt at September 30, 2017 and 2016 is summarized as follows:

	2017	2016
Term note payable to Middlesex Savings Bank. The note payable to Middlesex is due in monthly installments of \$37,000 for principal and interest through February 2021. The interest rate is 4.52% and the note is secured by an interest in substantially all of the Company's personal property and sixty-five percent of the Company's equity interests in its UK subsidiary, Hilger Crystals, Ltd.	\$ 1,415,000	\$ 1,790,000
Note payable to Town of Ayer Industrial Development Finance Authority (Ayer) for an equipment line of credit made with Dynasil subsidiary Optometrics. The note payable to Ayer is due in monthly installments totaling \$17,000 per year and will be amortized over ten years with a balloon payment at five years from the date of the note. The interest rate is 5.00%. The note is secured by an interest in the equipment purchased with the line.	141,000	158,000
Note payable to Massachusetts Development Finance Agency (MDFA) for promissory note made with Dynasil subsidiary Optometrics. The note payable to MDFA is due in monthly installments of \$6,000 for principal and interest through March, 2019. The interest rate is 5.25%. The note is secured by an interest in substantially all of Optometric's personal property.	107,000	168,000
Convertible notes issued by Xcede, a 61% owned subsidiary, payable on demand after June 30, 2017. The interest rate was 5.00%. The notes and accrued interest were converted into equity in Xcede in November 2016 (See Note 3 - Xcede Technologies, Inc. Joint Venture).	-	3,085,000
Subordinated note payable to Massachusetts Capital Resource Company in monthly installments through October 2017 for interest only, during which Dynasil also made three principal payments. The interest rate is fixed at 6.00%. The note is due on July 31, 2019.	870,000	957,000
Note payable to Leaf Capital Funding, LLC (Leaf) for equipment financing with Dynasil subsidiary RMD. The note payable to Leaf is due in monthly installments of \$7,000 for principal and interest through February 2018. The interest rate is 14.59%. The note is secured by an interest in the financed equipment.	32,000	100,000
Note payable to Leaf Capital Funding, LLC (Leaf) for equipment financing with Dynasil subsidiary RMD. The note payable to Leaf is due in monthly installments of \$1,000 for principal and interest through July 2019. The interest rate is 8.70%. The note is secured by an interest in the financed equipment.	29,000	43,000
Xcede Note agreement with Cook Biotech Inc. to fund pre-clinical testing for Xcede. Credit draw not to exceed \$1.5 million, in three draws of \$500,000 upon satisfaction of conditions in Note Agreement. Note bears interest at a rate of 2% and is secured by all the rights of Xcede under the Development Agreement, Supply Agreement, and License Agreement. The note was recorded at inception at fair value net of unamortized discount based on an imputed interest rate of 5.4%.	458,000	-
Total Debt	\$ 3,052,000	\$ 6,301,000
Less current portion	(2,007,000)	(2,477,000)
Less convertible notes	-	(3,085,000)
Long term portion	1,045,000	739,000
Less unamortized debt issuance costs	-	(3,000)
Long term portion less unamortized debt issuance costs	\$ 1,045,000	\$ 736,000

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 8 – Debt (continued)

The aggregate maturities of debt based on the payment terms of the agreement are as follows:

For the years ending on September 30:		
2018	\$	983,000
2019		997,000
2020		429,000
2021		185,000
2022		-
Thereafter		458,000
	\$	<u>3,052,000</u>

Unamortized debt issuance costs of \$64,000 and \$64,000 are net of accumulated amortization of \$64,000 and \$61,000 at September 30, 2017 and 2016, respectively. Amortization expense for the years ended September 30, 2017 and 2016 was \$3,000 and \$9,000, respectively, and included in interest expense.

Note 9 – Income Taxes

Income (loss) before the provision (benefit) for income taxes consists of the following:

	2017	2016
US	\$ (626,000)	\$ (503,000)
Foreign	(168,000)	888,000
Total	<u>\$ (794,000)</u>	<u>\$ 385,000</u>

The provision (benefit) for income taxes in the accompanying consolidated financial statements consists of the following:

		2017	2016
Current			
	Federal	\$ 6,000	\$ -
	State	13,000	3,000
	Foreign	(83,000)	(9,000)
		<u>\$ (64,000)</u>	<u>\$ (6,000)</u>
Deferred			
	Federal	\$ (2,642,000)	\$ -
	State	-	-
	Foreign	(35,000)	57,000
		<u>(2,677,000)</u>	<u>57,000</u>
Income tax expense (benefit)		<u><u>\$ (2,741,000)</u></u>	<u><u>\$ 51,000</u></u>

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 9 – Income Taxes (continued)

A reconciliation of the federal statutory rate to the Company's effective tax rate is as follows:

	2017	2016
Tax due at statutory rate	34.00%	34.00%
State tax provision, net of federal	-3.49%	9.13%
Valuation allowance	-78.87%	93.66%
Valuation allowance release	380.61%	0.00%
Foreign tax credits	29.34%	-77.28%
Foreign rate differential and other	-16.54%	-46.39%
Total	345.05%	13.12%

Net deferred tax assets (liabilities) consisted of the following at September 30, 2017:

	Domestic	Foreign	Worldwide
Credits	\$ 1,456,000	\$ -	\$ 1,456,000
NOLs	3,750,000	26,000	3,776,000
Stock compensation	205,000	-	205,000
Accruals	352,000	-	352,000
Intangibles	5,000	-	5,000
Other	140,000	-	140,000
Gross deferred tax assets	5,908,000	26,000	5,934,000
Valuation allowance	(2,342,000)	-	(2,342,000)
Deferred tax assets, net	3,566,000	26,000	3,592,000
Depreciation	(902,000)	(181,000)	(1,083,000)
Intangibles	(22,000)	(79,000)	(101,000)
Gross deferred tax liabilities	(924,000)	(260,000)	(1,184,000)
Net deferred tax asset (liability)	<u>\$ 2,642,000</u>	<u>\$ (234,000)</u>	<u>\$ 2,408,000</u>

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 9 – Income Taxes (continued)

Net deferred tax assets (liabilities) consisted of the following at September 30, 2016:

	Domestic	Foreign	Worldwide
Credits	\$ 1,466,000	\$ -	\$ 1,466,000
NOLs	3,303,000	25,000	3,328,000
Stock compensation	143,000	-	143,000
Accruals	385,000	-	385,000
Other	150,000	-	150,000
Gross deferred tax assets	5,447,000	25,000	5,472,000
Valuation allowance	(4,739,000)	-	(4,739,000)
Deferred tax assets, net	708,000	25,000	733,000
Depreciation	(696,000)	(200,000)	(896,000)
Intangibles	(12,000)	(88,000)	(100,000)
Gross deferred tax liabilities	(708,000)	(288,000)	(996,000)
Net deferred tax asset (liability)	\$ -	\$ (263,000)	\$ (263,000)

In assessing the ability to realize the net deferred tax assets, management considers various factors including taxable income in carryback years, future reversals of existing taxable temporary differences, tax planning strategies and projections of future taxable income, to determine whether it is more likely than not that some portion or all of the net deferred tax assets will not be realized.

As a result of the conversion of the Xcede convertible notes and accrued interest to preferred stock in November 2016 (see Note 3), the Company's ownership percentage in Xcede decreased to less than 80%. Xcede, therefore, will no longer be included in Dynasil's federal consolidated tax return and will file a separate federal return. Xcede will continue to be included in the Dynasil consolidated state tax filings pursuant to the respective state tax requirements.

As a result of Xcede's de-consolidation from the Company's federal tax returns, the Company will no longer be able to offset taxable income with Xcede's current or cumulative net operating losses. Upon review of relevant criteria for the new Dynasil federal consolidated group, it was determined that it is more likely than not that the federal, deferred tax assets of the new Dynasil federal consolidated group will be realized based upon positive earnings history and expected future profits of the group. As a result, the federal deferred tax asset valuation allowance associated with the Dynasil federal consolidated group has been reversed resulting in an income tax benefit in the amount of \$2.7 million during the twelve months ended September 30, 2017. Going forward, as the Company records income, it will be able to utilize the NOLs (net operating losses) within its deferred tax assets. Based upon the Xcede's recent losses and uncertainty of future profits, the Company has determined that the uncertainty regarding the realization of the Company's state and separate Xcede deferred tax assets is sufficient to warrant the continued need for a valuation allowance against these deferred tax assets.

The tax accounting impact, including the assessment on the valuation allowance against the U.S. federal and state net deferred tax assets, will be evaluated in subsequent periods. The valuation allowance will continue to be addressed independently for the Company and Xcede, instead of on a consolidated basis. The net change in the valuation allowances for the years ending September 30, 2017 and 2016 was (\$2.4) million and \$0.4 million, respectively.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 9 – Income Taxes (continued)

As of September 30, 2017 and 2016, the Company has federal net operating losses of \$8.1 and \$7.1 million, respectively. As of September 30, 2017 and 2016, the Company has state net operating losses of \$16.9 million and \$15.2 million, respectively. The federal and state net operating losses begin expiring in 2025 and 2029, respectively. At September 30, 2017 and 2016, the Company has foreign net operating loss carryforwards of approximately \$151,000 and \$146,000, respectively which can be carried forward indefinitely.

As of September 30, 2017 and 2016, the Company has federal research credits of \$1.4 million and \$1.5 million, respectively. The federal credits begin expiring in fiscal year 2026. As of September 30, 2017 and 2016, the Company has state research credits of \$70,000 and \$93,000, respectively. The state credits begin expiring in fiscal year 2027.

As of September 30, 2017 and 2016, the Company has no unrecorded liabilities for uncertain tax positions. Interest and penalty charges, if any, related to uncertain tax positions would be classified as income tax expense in the accompanying consolidated statement of operations. As of September 30, 2017 and 2016, the Company has no accrued interest or penalties related to uncertain tax positions.

The Company is subject to taxation in the United States, various states, and the United Kingdom. At September 30, 2017, domestic tax years from fiscal 2011 through fiscal 2017 remain open to examination by the taxing authorities and tax years 2014 through 2017 remain open in the United Kingdom.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 10 – Stockholders’ Equity

Stock Based Compensation

The Company adopted Stock Incentive Plans in 1996, 1999 and 2010 (the “Plans”) which provide for, among other incentives, the granting to officers, directors, employees and consultants options to purchase shares of the Company’s common stock. The Plans also allow eligible persons to be issued shares of the Company’s common stock either through the purchase of such shares or as a bonus for services rendered to the Company. Shares are generally issued at the fair market value on the date of issuance. The maximum number of shares of common stock which may be issued under the 2010 Stock Incentive Plan is 6,000,000, of which 3,372,881 and 3,646,924 shares of common stock are available for future purchases under the plan, at September 30, 2017 and 2016, respectively. Options are generally exercisable at the fair market value or higher on the date of grant over a three to five year period currently expiring through 2020.

The fair value of the stock options granted is estimated at the date of grant using the Black-Scholes option pricing model. The expected volatility was determined with reference to the historical volatility of the Company’s stock. The Company uses historical data to estimate option exercises and employee terminations within the valuation model. The expected term of options granted represents the period of time that the options granted are expected to be outstanding. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. Treasury rate in effect at the time of grant. The dividend yield is expected to be 0.0% because historically the Company has not paid dividends on common stock.

The Company’s Xcede joint venture adopted an Equity Incentive Plan in 2013 which provides for, among other incentives, the granting to officers, directors, employees and consultants options to purchase shares in Xcede’s common stock. The options granted generally vest over a 3 year period. The fair value of the stock options granted is estimated at the date of grant using the Black-Scholes option pricing model using assumptions generally consistent with those used for Company stock options. Because Xcede is not publicly traded, the expected volatility is estimated with reference to the average historical volatility of a group of publicly traded companies that are believed to have similar characteristics to Xcede. As of September 30, 2017, 1,624,044 options remained in this plan.

Stock compensation expense is recorded in general and administrative operating expenses and is presented below for the years ended September 30, 2017 and 2016:

	2017	2016
Stock Grants	\$ 241,000	\$ 322,000
Restricted Stock Grants	52,000	45,000
Option Grants	50,000	42,000
Employee Stock Purchase Plan	3,000	3,000
Subsidiary Stock Grants	-	210,000
Subsidiary Option Grants	110,000	76,000
Total	<u>\$ 456,000</u>	<u>\$ 698,000</u>

At September 30, 2017 there was approximately \$100,000 in unrecognized stock compensation cost for Dynasil, which is expected to be recognized over a weighted average period of eight months. At September

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 10 – Stockholders’ Equity (continued)

Stock Compensation (continued)

30, 2017, the Company’s Xcede joint venture had \$153,000 of unrecognized stock compensation expense associated with stock options expected to be recognized over a weighted average period of ten months.

Restricted Stock Grants

A summary of restricted stock activity for the year ended September 30, 2017 and 2016 is presented below:

Restricted Stock Activity for the Year ended September 30, 2017	Shares	Weighted-Average Grant-Date Fair Value
Nonvested at September 30, 2016	100,000	\$ 1.73
Granted	-	-
Vested	(30,000)	\$ 1.73
Cancelled	-	-
Nonvested and expected to vest at September 30, 2017	<u>70,000</u>	\$ 1.73
Restricted Stock Activity for the Year ended September 30, 2016	Shares	Weighted-Average Grant-Date Fair Value
Nonvested at September 30, 2015	27,000	\$ 1.04
Granted	100,000	\$ 1.73
Vested	(27,000)	\$ 1.04
Cancelled	-	-
Nonvested and expected to vest at September 30, 2016	<u>100,000</u>	\$ 1.73

Stock Option Grants

A summary of stock option activity for the years ended September 30, 2017 and 2016 is presented below:

	Options Outstanding	Weighted Average Exercise Price per Share (\$)	Weighted Average Remaining Contractual Term (in Years)
Balance at September 30, 2015	58,212	2.28	1.96
Outstanding and exercisable at September 30, 2015	58,212	2.28	1.96
Granted	64,935	2.33	
Exercised	-	-	
Cancelled	-	-	
Balance at September 30, 2016	123,147	2.30	1.69
Outstanding and exercisable at September 30, 2016	123,147	2.30	1.69
Granted	95,602	1.80	
Exercised	-	-	
Cancelled	(21,980)	3.03	
Balance at September 30, 2017	196,769	1.98	1.64
Outstanding and exercisable at September 30, 2017	<u>196,769</u>	1.98	1.64

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 10 – Stockholders’ Equity (continued)

Stock Option Grants (continued)

Stock options outstanding at September 30, 2017 are described as follows:

Outstanding Stock Options at September 30, 2017					
Range of Exercise Prices	Options Outstanding	Weighted Average Contractual Life (years)	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price
\$ 1.80 - 1.99	131,834	1.79	\$ 1.81	131,834	\$ 1.81
2.00 - 2.33	64,935	1.34	2.33	64,935	2.33
\$ 1.80 - 2.33	196,769	1.64	\$ 1.98	196,769	\$ 1.98

During the year ended September 30, 2017 95,602 stock options were granted with a grant date fair value of \$1.35 and an exercise price of \$1.80. During the year ended September 30, 2016, 64,935 stock options were granted with a grant date fair value of \$1.75 and an exercise price of \$2.33. All options vested on the grant dates and no stock options were exercised.

Subsidiary Stock Option Grants

A summary of Xcede stock option activity for the years ended September 30, 2017 and 2016 is presented below:

	Options Outstanding	Weighted Average Exercise Price per Share (\$)	Weighted Average Remaining Contractual Term (in Years)
Balance, expected to vest, at September 30, 2015	780,258	1.00	8.85
Outstanding and exercisable at September 30, 2015	180,293	1.00	8.50
Granted	148,419	1.00	
Exercised	-	-	
Cancelled	(315,024)	1.00	
Balance, expected to vest, at September 30, 2016	613,653	1.00	8.35
Outstanding and exercisable at September 30, 2016	320,586	1.00	8.01
Granted	810,500	1.00	
Exercised	-	-	
Cancelled	(48,197)	1.00	
Balance, expected to vest, at September 30, 2017	1,375,956	1.00	8.70
Outstanding and exercisable at September 30, 2017	923,617	1.00	8.30

Employee Stock Purchase Plan

On September 28, 2010, the Company adopted an Amended and Restated Employee Stock Purchase Plan. The existing plan was amended to extend the termination date to September 28, 2020. The Employee Stock Purchase Plan permits substantially all employees to purchase common stock at a purchase price of 85% of the fair market value of the shares. Under the Plan, a total of 450,000 shares have been reserved for issuance of which 334,855 and 318,797 shares have been issued as of September 30, 2017 and 2016, respectively.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 10 – Stockholders’ Equity (continued)

Employee Stock Purchase Plan (continued)

On December 16, 2011, the Company amended the Amended and Restated Employee Stock Purchase Plan to change the maximum dollar amount of stock able to be purchased through the Plan by any employee per calendar year from \$5,000 to \$20,000 per calendar year. During the years ended September 30, 2017 and 2016, 16,058 shares and 13,742 shares of common stock were issued under the Plan for aggregate purchase prices of \$17,118 and \$15,676, respectively.

Note 11– Retirement Plans

Defined Contribution Plans

The Company has retirement savings plans available to substantially all full time employees which are intended to qualify as deferred compensation plans under Section 401(k) of the Internal Revenue Code (the “401k Plans”) or similar laws in the United Kingdom. The Company made contributions to these plans during both the years ended September 30, 2017 and 2016 of approximately \$187,000 and \$179,000, respectively.

Note 12 – Lease Agreements

Capital Leases

The Company has entered into long-term capital lease agreements for purchases of various computer and telephone equipment at a weighted average interest rate of 7.7%. At September 30, 2017 and 2016, the remaining principal payments due under all capital leases were \$172,000 and \$278,000, respectively. Aggregate minimum annual principal obligations at September 30, 2017, under non-cancelable leases are as follows:

	2018	2019	2020	2021	2022	Total
Capital Lease Obligations	\$ 92,000	\$ 36,000	\$ 28,000	\$ 16,000	\$ -	\$ 172,000

Property Leases

The Company has non-cancelable operating lease agreements, primarily for property, that expire through 2025. One of the Company’s facilities is leased from a company controlled by the former owner of RMD, who is also a former director of the Company and the former President of the RMD subsidiary. This building is leased as a month-to-month tenancy and will continue until terminated by either the Company with not less than six months’ prior written notice or the facility’s owner with not less than three years’ prior written notice (see Note 13). Rent expense for both the years ended September 30, 2017 and 2016 amounted to \$1.6 million. Future non-cancelable minimum lease payments under property leases as of September 30, 2017 are as follows:

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 12 – Lease Agreements (continued)

Property Leases (continued)

Years ending September 30,

2018	\$	998,000
2019		298,000
2020		171,000
2021		115,000
2022		97,000
thereafter		246,000
Total	\$	1,925,000

Note 13 - Related Party Transactions

During the years ended September 30, 2017 and 2016, building lease payments of \$1,040,000 and \$1,000,000, respectively were paid to Charles River Realty, dba Bachrach, Inc., which is owned by Gerald Entine and family. Dr. Entine is a former director and employee of the Company, as well as a greater than 5% beneficial owner of the Company's stock.

In October 2013, the Company's subsidiary, Dynasil Biomedical, formed Xcede Technologies, Inc., a joint venture with Mayo Clinic, to spin out and separately fund the development of its tissue sealant technology. Xcede issued \$5.1 million of convertible promissory notes in order to fund its operations, including \$2.2 million to the Company, which were eliminated in the consolidated financial statements. Peter Sulick (Dynasil President, CEO and Director) and family members invested \$1,065,000, Mr. Lawrence Fox (Dynasil Director) invested, \$150,000, Dr. Zuckerman (Xcede CEO) and family invested \$125,000, Dr. Hagan (Dynasil Director) invested \$25,000, Kanai Shah (RMD President) invested \$25,000 and Dr. Entine's Family Trust invested \$100,000 in Xcede and were issued convertible promissory notes in those original principal amounts. In November 2016, the Company converted these promissory notes into preferred stock.

As of September 30, 2017, Mr. Sulick and family own the equivalent of 12.0% of Xcede's outstanding common stock, Mr. Fox owns the equivalent of 1.7% of Xcede's outstanding common stock, Dr. Zuckerman and family own the equivalent of 1.4% of Xcede's outstanding common stock, Dr. Hagan owns the equivalent of 0.3% of Xcede's outstanding common stock, Dr. Shah owns the equivalent of 0.3% of Xcede's outstanding common stock and Dr. Entine owns the equivalent of 1.2% of Xcede's outstanding common stock.

Note 14 - Vendor Concentration

The Company purchased \$1.4 million and \$2.2 million respectively, of its raw materials from one supplier during the years ended September 30, 2017 and 2016. As of September 30, 2017 and 2016, amounts due to these suppliers included in accounts payable were \$160,000 and \$93,000, respectively.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 15 – Supplemental Disclosure of Cash Flow Information

	2017	2016
Cash Paid during the year for:		
Interest	\$ 174,000	\$ 189,000
Income taxes (refunds)	\$ (10,000)	\$ (83,000)
Non cash activities:		
Assets purchased under capital leases and equipment financing	\$ -	\$ 427,000
Conversion of outstanding line of credit balance to term note	\$ -	\$ 2,000,000
Recapitalization of Xcede - conversion of non controlling notes payable to preferred stock	\$ (3,103,000)	\$ -
Subsidiary stock options issued to settle liabilities	75,000	-
Subsidiary debt issued to fund research activities	500,000	-

Note 16 – Segment, Customer and Geographical Reporting

Segment Financial Information

Operating segments are based upon Dynasil’s internal organizational structure, the manner in which the operations are managed, the criteria used by the Chief Operating Decision Makers (CODM) to evaluate segment performance and the availability of separate financial information. Dynasil reports three reportable segments: contract research (“Contract Research”), optics (“Optics”) and biomedical (“Biomedical”). Within these segments, there is a segregation of operating segments based upon the organizational structure used to evaluate performance and make decisions on resource allocation, as well as availability and materiality of separate financial results consistent with that structure. Dynasil’s Contract Research segment is one of the largest small business participants in U.S. government-funded research. The Optics segment aggregates four operating segments – Dynasil Fused Silica, Optometrics, Hilger Crystals, and Evaporated Metal Films – that manufacture commercial products, including optical crystals for sensing in the security and medical imaging markets, as well as optical components, optical coatings and optical materials for scientific instrumentation and other applications. The Biomedical segment consists of a single operating segment, Dynasil Biomedical Corporation (“Dynasil Biomedical”), a medical technology incubator which owns rights to certain early stage medical technologies. Dynasil Biomedical holds the Company’s stock of the Xcede joint venture which is developing a tissue sealant technology and currently has no other operations.

DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016

Note 16 – Segment, Customer and Geographical Reporting (continued)

The Company's segment information is summarized below:

Results of Operations for the Fiscal Year Ended September 30,				
2017				
	Optics	Contract Research	Biomedical	Total
Revenue	\$ 19,282,000	\$ 18,002,000	\$ -	\$ 37,284,000
Gross profit	6,562,000	7,336,000	-	13,898,000
GM %	34%	41%	-	37%
Operating expenses	6,183,000	6,856,000	1,381,000	14,420,000
(Gain) loss on sale of assets	-	-	60,000	60,000
Operating income (loss)	379,000	480,000	(1,441,000)	(582,000)
Depreciation and amortization	970,000	257,000	11,000	1,238,000
Capital expenditures	575,000	338,000	69,000	982,000
Intangibles, net	467,000	196,000	324,000	987,000
Goodwill	1,001,000	4,939,000	-	5,940,000
Total assets	\$ 20,445,000	\$ 8,078,000	\$ 574,000	\$ 29,097,000
Results of Operations for the Fiscal Year Ended September 30,				
2016				
	Optics	Contract Research	Biomedical	Total
Revenue	\$ 23,686,000	\$ 19,756,000	\$ -	\$ 43,442,000
Gross profit	8,010,000	7,593,000	-	15,603,000
GM %	34%	38%	-	36%
Operating expenses	6,239,000	6,619,000	2,070,000	14,928,000
(Gain) loss on sale of assets	(4,000)	-	-	(4,000)
Operating income (loss)	1,775,000	974,000	(2,070,000)	679,000
Depreciation and amortization	949,000	249,000	69,000	1,267,000
Capital expenditures	1,503,000	432,000	109,000	2,044,000
Intangibles, net	517,000	230,000	320,000	1,067,000
Goodwill	959,000	4,939,000	-	5,898,000
Total assets	\$ 17,397,000	\$ 8,325,000	\$ 647,000	\$ 26,369,000

**DYNASIL CORPORATION OF AMERICA
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 and 2016**

Note 16 – Segment, Customer and Geographical Reporting (continued)

Customer Financial Information

For the years ended September 30, 2017 and 2016, the top three customers for the Contract Research segment were each various agencies of the U.S. Government. For the years ended September 30, 2017 and 2016, these customers made up 55% and 56%, respectively, of Contract Research revenue.

For the year ended September 30, 2017, there was no customer that represented more than 10% of the total Optics segment revenue. For the year ended September 30, 2016, there was one customer whose revenue represented 22% of the total Optics segment revenue.

The Biomedical segment did not have any revenue in the years ending September 30, 2017 and 2016.

Geographic Financial Information

Revenue by geographic location in total and as a percentage of total revenue, for the years ended September 30, 2017 and 2016 are as follows:

Geographic Location	2017		2016	
	Revenue	% of Total	Revenue	% of Total
United States	\$ 29,154,000	78%	\$ 32,622,000	75%
Europe	4,397,000	12%	7,888,000	18%
Other	3,733,000	10%	2,932,000	7%
	<u>\$ 37,284,000</u>	<u>100%</u>	<u>\$ 43,442,000</u>	<u>100%</u>

Note 17 – Subsequent Events

The Company has evaluated subsequent events through the date the financial statements were released.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

There were no disputes or disagreements of any nature between the Company or its management and its public auditors with respect to any aspect of accounting or financial disclosure.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures.

Our management, with the participation and supervision of our Chief Executive Officer and Chief Financial Officer, is responsible for our disclosure controls and procedures pursuant to Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified under the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to our principal executive officer and our principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, including the Chief Executive Officer and the Chief Financial Officer, carried out an evaluation of the effectiveness of our disclosure controls and procedures as of September 30, 2017. Based on this evaluation, our management concluded that as of September 30, 2017, these disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, the Company's principal executive and principal financial officers, or persons performing similar functions, and effected by the Company's board of directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of inherent limitations, no matter how well designed and operated, internal control over financial reporting may not prevent or detect misstatements and can only provide reasonable assurance of achieving the desired control objectives. In addition, the design of internal control over financial reporting must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Our management performed the evaluation of our internal control over financial reporting under the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework* (2013).

Based on its assessment of the effectiveness in internal control over financial reporting as of September 30, 2017, our management concluded that our internal controls over financial reporting were effective.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Our report was not subject to attestation by our registered public accounting firm pursuant to the rules of the SEC that permit us to provide only management's report in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting occurred during the fiscal quarter ended September 30, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

We have adopted a Code of Conduct that applies to all employees including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The text of our Code of Conduct is posted in the "Investor Information—Corporate Governance" section of our website, www.dynasil.com.

We intend to disclose on our website any amendments to, or waivers from, our Code of Business Conduct and Ethics that are required to be disclosed pursuant to the disclosure requirements of Item 5.05 of Form 8-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) The financial statements are included under Part II, Item 8 of this Report.

(2) Schedules are omitted because they are not applicable, or are not required, or because the information is included in the consolidated financial statements and the notes thereto.

(3) EXHIBITS –

The exhibits are listed below under Part IV, Item 15(b) of this Report.

(b) EXHIBITS

3.01 [Certificate of Incorporation of the Company](#), filed as Exhibit A to the Definitive Proxy Statement filed on January 4, 2008 and incorporated herein by reference.

3.02 [Certificate of Merger of Foreign Corporation into a Domestic Corporation](#), dated February 29, 2008, filed as Exhibit 3.02 to Form 8-A filed on December 16, 2010 and incorporated herein by reference.

3.03 [Certificate of Amendment of Certificate of Incorporation](#), dated March 6, 2008, filed as Exhibit 3.03 to Form 8-A filed on December 16, 2010 and incorporated herein by reference.

3.04 [Certificate of Amendment of Certificate of Incorporation](#), dated February 26, 2009, filed as Exhibit 3.1 to Form 10-Q filed on May 15, 2009 and incorporated herein by reference.

3.05 [Certificate of Designation of Preferred Stock of Dynasil Corporation of America](#), dated March 27, 2009, filed as Exhibit 3.05 to Form 8-A filed on December 16, 2010 and incorporated herein by reference.

3.06 [Bylaws of the Company](#), filed as Exhibit B to the Definitive Proxy Statement filed on January 4, 2008 and incorporated herein by reference.

10.01* [2010 Stock Incentive Plan](#), filed as Exhibit 99 to the Definitive Proxy Statement filed on January 5, 2010 and incorporated herein by reference.

10.02 [Loan and Security Agreement by and between Middlesex Savings Bank, as Lender, and the Company, as Borrower](#), dated as of May 1, 2014, filed as Exhibit 10.1 to Form 8-K filed on May 2, 2014 and incorporated herein by reference.

10.03 [Revolving Line of Credit by and between Middlesex Savings Bank, as Lender, and the Company, as Borrower](#), dated as of May 1, 2014, filed as Exhibit 10.2 to Form 8-K filed on May 2, 2014 and incorporated herein by reference.

10.04 [Loan Document Modification Agreement between the Company and Middlesex Savings Bank](#), dated September 29, 2015, filed as Exhibit 10.04 to Form 10-K filed on December 17, 2015 and incorporated herein by reference.

10.05 [Note Purchase Agreement between the Company and Massachusetts Capital Resource Company](#), dated July 31, 2012, filed as Exhibit 10.1 to Form 8-K filed on August 6, 2012 and incorporated herein by reference.

10.06 [Amendment No. 1 to Note Purchase Agreement between the Company and Massachusetts Capital Resource Company](#), dated September 26, 2013, filed as Exhibit 10.19 to Form 10-K filed on December 20, 2013 and incorporated herein by reference.

10.07 [Amendment to Note Purchase Agreement between the Company and Massachusetts Capital Resource Company](#), dated October 1, 2015, filed as Exhibit 10.07 to Form 10-K filed on December 17, 2015 and incorporated herein by reference.

10.08 [Lease Agreement between RMD Instruments, Inc. and Charles River Realty](#), dated July 1, 2008, filed as Exhibit 10.5 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.

10.09 [Lease Agreement between Radiation Monitoring Devices, Inc. and Charles River Realty](#), dated July 1, 2008, filed as Exhibit 10.6 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.

10.14* [Amended and Restated Employee Stock Purchase Plan](#), dated December 16, 2011, filed as Appendix A to Definitive Proxy Statement filed January 11, 2012 and incorporated herein by reference.

10.15 [Omnibus Amendment to Leases](#), dated December 6, 2012, filed as Exhibit 10.1 to Form 8-K filed on December 12, 2012 and incorporated herein by reference.

10.16* [Employment Letter dated November 13, 2015 between the Company and Robert J. Bowdring](#), filed as Exhibit 10.1 to Form 8-K filed on November 13, 2015 and incorporated herein by reference.

10.18 [Term Note Agreement between the Company and Middlesex Savings Bank](#), dated February 1, 2016, filed as Exhibit 10.1 to Form 10-Q filed on February 11, 2016 and incorporated herein by reference.

10.19 [Third Amendment to the Loan and Security Agreement between the Company and Middlesex Savings Bank](#), dated May 16, 2017, filed as Exhibit 10.01 to Form 10-Q filed on August 14, 2017 and incorporated herein by reference.

10.20 [Line of Credit by and between Middlesex Savings Bank, as Lender, and the Company, as Borrower](#), dated as of May 16, 2017, filed as Exhibit 10.02 to Form 10-Q filed on August 14, 2017 and incorporated herein by reference.

21.1 Subsidiaries of the Company, filed herewith.

23.1 Consent of RSM US LLP, filed herewith.

31.1(a) Rule 13a-14(a)/15d-14(a) Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.

31.1(b) Rule 13a-14(a)/15d-14(a) Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.

32.1 Section 1350 Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished but not filed for purposes of the Securities Exchange Act of 1934) furnished herewith.

99.1 Press release, dated December 20, 2017 issued by Dynasil Corporation of America announcing the filing of its Annual Report on Form 10-K, filed herewith.

101** The following materials from the Company's Annual Report on Form 10-K for the year ended September 30, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of September 30, 2017 and September 30, 2016, (ii) Consolidated Statements of Operations and Comprehensive Income and Loss for the years ended September 30, 2017 and 2016, (iii) Consolidated Statements of Changes in Stockholders' Equity for the years ended September 30, 2017 and 2016; (iv) Consolidated Statements of Cash Flows for the years ended September 30, 2017 and 2016, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text.

* Management contract or compensatory plan or arrangement.

SIGNATURES

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

Dynasil Corporation of America

BY: /s/ Peter Sulick

Peter Sulick, President and CEO (Principal Executive Officer)

DATED: December 20, 2017

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
BY: <u>/s/ Robert J. Bowdring</u> Robert J. Bowdring	Chief Financial Officer (Principal Financial and Accounting Officer)	<u>December 20, 2017</u>
BY: <u>/s/ Peter Sulick</u> Peter Sulick	Chairman of the Board of Directors, President, Chief Executive Officer (Principal Executive Officer)	<u>December 20, 2017</u>
BY: <u>/s/ Craig Dunham</u> Craig Dunham	Director	<u>December 20, 2017</u>
BY: <u>/s/ Lawrence Fox</u> Lawrence Fox	Director	<u>December 20, 2017</u>
BY: <u>/s/ William K. Hagan</u> William K. Hagan	Director	<u>December 20, 2017</u>
BY: <u>/s/ David Kronfeld</u> David Kronfeld	Director	<u>December 20, 2017</u>
BY: <u>/s/ Thomas Leonard</u> Thomas Leonard	Director	<u>December 20, 2017</u>
BY: <u>/s/ Alan Levine</u> Alan Levine	Director	<u>December 20, 2017</u>

**EXHIBIT 21.1 Subsidiaries of the Company
Subsidiaries of Dynasil Corporation of America**

	Jurisdiction of Incorporation
Hibshman Corporation (Inactive)	New Jersey
Optometrics Corporation	Delaware
Evaporated Metal Films Corporation	New York
Radiation Monitoring Devices, Inc.	Delaware
RMD Instruments Corporation	Delaware
Hilger Crystals, Ltd.	United Kingdom
Dynasil Biomedical Corporation	Delaware
Xcede Technologies, Inc.	Delaware

**EXHIBIT 23.1
Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in Registration Statements on Form S-8 (No. 333-169623, 333-165651, 333-46068) of Dynasil Corporation of America and Subsidiaries (the Company) of our report dated December 20, 2017, relating to our audits of the consolidated financial statements as of and for the years ended September 30, 2017 and 2016, which appears in this Annual Report on Form 10-K of Dynasil Corporation of America for the year ended September 30, 2017.

/s/ RSM US LLP

Boston, Massachusetts
December 20, 2017

EXHIBIT 31.1 (a)
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) and
SECTION 302 OF THE SARBANES-OXLEY ACT

I, Peter Sulick, certify that:

1. I have reviewed this Form 10-K of Dynasil Corporation of America;
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: December 20, 2017

/s/ Peter Sulick
Peter Sulick
President and
Chief Executive Officer

EXHIBIT 31.1 (b)
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) and
SECTION 302 OF THE SARBANES-OXLEY ACT

I, Robert J. Bowdring, certify that:

1. I have reviewed this Form 10-K of Dynasil Corporation of America;
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: December 20, 2017

/s/ Robert J. Bowdring
Robert J. Bowdring
Chief Financial Officer

EXHIBIT 32.1

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

In connection with this Annual Report of DYNASIL CORPORATION OF AMERICA (the "Company") on Form 10-K for the period ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Peter Sulick, President and Chief Executive Officer of the Company, and Robert J. Bowdring, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Peter Sulick
Peter Sulick
President and
Chief Executive Officer

/s/ Robert J. Bowdring
Robert J. Bowdring
Chief Financial Officer

December 20, 2017