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

FORM 10-K

☒ Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the fiscal year ended September 30, 2019.

☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from ______________ to _______________.

Commission File Number 0-16106

CLEARFIELD, INC.

(Exact Name of Registrant as Specified in its Charter)

Minnesota	**41-1347235**
(State of incorporation)	*(I.R.S. Employer Identification No.)*
7050 Winnetka Avenue North **Suite 100** **Brooklyn Park, Minnesota 55428**	**(763) 476-6866**
(Address of principal executive office)	(Registrant's telephone number, including area code)

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

Title of each class	**Trading Symbol**	**Name of each exchange on which registered**
Common Stock, $0.01 par value	CLFD	The NASDAQ Stock Market LLC

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 Exchange Act.

☐ YES ☒ NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ YES ☐NO

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

☒ YES ☐ NO

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

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐
Smaller Reporting Company ☒ Emerging Growth Company ☐

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

Indicate whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

☐ YES ☒NO

The aggregate market value of the voting and non-voting equity held by non-affiliates of the registrant, as of the last business day of the registrant’s most recently completed second fiscal quarter computed by reference to the price at which the common equity was last sold was approximately $163,326,246.

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

Class:	Outstanding as of November 8, 2019
Common stock, par value $.01	13,641,805

Documents Incorporated by Reference:

Portions of our proxy statement for the 2020 Annual Meeting of Shareholders, to be filed within 120 days after the end of the fiscal year covered by this report, are incorporated by reference into Part III.

CLEARFIELD, INC.

ANNUAL REPORT ON FORM 10-K
TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS

Background

Clearfield, Inc. (referred to herein as "Clearfield," "we," "us," "our," and the "Company") designs, manufactures and distributes fiber protection, fiber management and fiber delivery solutions to enable rapid and cost-effective fiber-fed deployment throughout the broadband service provider space across North America. Our "fiber to anywhere" platform serves the unique requirements of leading incumbent local exchange carriers (Traditional Carriers), wireless operators, MSO/cable TV companies, and competitive local exchange carriers (Alternative Carriers), while also catering to the broadband needs of the utility/municipality, enterprise, data center, and military markets.

We were incorporated under the laws of Minnesota and founded in 1979. Our corporate headquarters are located at 7050 Winnetka Avenue North, Suite 100, Brooklyn Park, Minnesota, 55428, and our corporate website is www.seeclearfield.com. The information available on our website is not part of this Report. Our annual report on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available free of charge through the "About Clearfield" link at our website as soon as reasonably practicable after we file such material with, or furnish it to, the Securities and Exchange Commission. Our filings with the Securities and Exchange Commission are also available at www.sec.gov.

Description of Business

Service providers of all types are being challenged to deliver Gigabit speed bandwidth using fiber connections for a variety of uses--residential homes, businesses, and network infrastructure. Clearfield is focused on providing fiber management, fiber protection, and fiber delivery products that accelerate the turn-up of these fiber services in the wireline and wireless access network. We offer a broad portfolio of fiber products that allow service providers to build fiber networks faster, meet service delivery demands, and align build costs with take rates.

Our products allow our customers to connect twice as many homes in their Fiber to the Home (FTTH) builds by using fewer resources in less time. Our products speed up the time to revenue for our service provider customers in Multiple Dwelling Units (MDUs) and Multiple Tenant Units (MTUs) by reducing the amount of labor and materials needed to provide Gigabit service. Our products help make business services more profitable through faster building access, easier reconfiguration and quicker services turn-up. Finally, Clearfield is removing barriers to wireless small cell, Cloud Radio Access Network (C-RAN), and distributed antenna system (DAS) deployments through better fiber management, test access, and fiber protection.

By combining in-house engineering and technical knowledge alongside customers' needs, the Company has been able to develop, customize and enhance products from design through production. Substantially all of the final build and assembly is completed at Clearfield's plants in Brooklyn Park, Minnesota and Mexico, with manufacturing support from a network of domestic and global manufacturing partners. Clearfield specializes in producing these products on both a quick-turn and scheduled delivery basis.

On February 20, 2018, the Company completed the acquisition of a portfolio of Telcordia certified outdoor active cabinet products from Calix, Inc. ("Calix") upon the terms and conditions contained in an Asset Purchase Agreement dated February 20, 2018. The introduction of the Clearfield active cabinet line provides customers a single point of contact for cabinet solutions—both passive and powered. The acquisition enables Clearfield to expand its Fiber-to-Anywhere expertise to include active powered electronic cabinet platforms while leveraging its supply chain. The acquisition also enables Clearfield to capitalize on and expand its reach to a broader customer base, including service providers in the Tier 1 and Tier 2 markets. Acquisition date fair value of the consideration transferred totaled $10,350,000 which was comprised of a cash payment of $10,350,000 from the Company's cash operating account. We assumed no liabilities in the acquisition.

Products

FieldSmart® is a series of panels, cabinets, wall boxes and other enclosures that house the Clearview components to provide a consistent design from the inside plant of the telco's "central office" or cable television's "head-end," all the way through the outside plant to the access network to within the home or business. The central building block of FieldSmart is the patented technology surrounding the Clearview® Cassette.

WaveSmart® optical components are integrated for signal coupling, splitting, termination, multiplexing, demultiplexing and attenuation for a seamless integration within our fiber management platform. The products are built and tested for harsh environments to meet the strictest industry standards ensuring customers trouble-free performance in extreme outside plant conditions.

The **ODC** outdoor active cabinet product line was acquired from Calix in February 2018. This product line features a line of fully integrated, fully engineered cabinets equipped with specific active electronics configurations as well as Clearfield's fiber management solutions housing the Clearview Cassette. These Clearfield ODC cabinets meet the rigorous demands of delivering information, communication, and entertainment services in an evolving, multi-media environment.

FieldShield® is a patented fiber pathway and protection method aimed at reducing the cost of broadband deployment. FieldShield takes industry standard glass and makes it easier and less expensive to install. FieldShield starts with a ruggedized microduct designed to support all aerial, direct bury, and inside plant "last mile" needs. Created from rugged high density polyethylene polymers, FieldShield Microduct is strong enough to be placed using traditional methods of boring and plowing, leveraging existing conduit placement equipment, as well as newer, less disruptive technologies such as micro trenching or saw cutting.

FieldShield Pushable Fiber easily slips through the microduct's smooth inner wall. Utilizing bend-insensitive glass, FieldShield Pushable Fiber is available in a variety of fiber counts, with bulk reels or factory terminated options offering total installation flexibility. A factory pre-connectorized FieldShield Pushable Connector eliminates costly labor in the field and presents reliable, consistent and guaranteed performance along with lower installation costs. FieldShield FLEXdrop, FieldShield Flat Drop, FieldShield D-ROP and FieldShield Strong Fiber, through the use of the Flexport and Flex Connector, provide same port connectivity regardless of the media being deployed.

The **YOURx® Platform** continues the Company theme of using a modular, building block approach with tool-less system design focusing on the fiber drop to the customer. The YOURx platform consists of hardened terminals, test access points, and multiple drop cable options designed for the most challenging portion of the access network across all fiber drop cable media.

CraftSmart® is a full line of optical protection field enclosures, extending Clearfield presence in the fiber industry. The CraftSmart Fiber Protection Pedestals (FPP) and CraftSmart Fiber Protection Vaults (FPV) are integrated solutions, optimized to house FieldSmart products at the last mile access point of the network in above-grade or below-grade installations.

Clearfield manufactures high quality **Fiber and Copper assemblies** with an industry-standard or customer-specified configuration. In addition, Clearfield's engineering services team works alongside the engineering design departments of our original equipment manufacturer (OEM) customers to design and manufacture custom solutions for both in-the-box as well as network connectivity assemblies specific to that customer's product line.

Markets and Customers

Clearfield's products are sold across broadband service providers, which we categorize as Community Broadband (Tier 2 and 3 telco carriers, utilities, municipalities, and alternative carriers), National Carrier (wireless/wireless national telco carriers (Tier 1)), Multiple Service Operators (cable television), International (primarily Central/Latin America and Canada), and Legacy (primarily contract manufacturing).

FTTP
Fiber to the Premise (also called Fiber to the Home) is a means of delivering the highest possible level of bandwidth directly to the user. The Company's sales and marketing efforts have principally been focused on the U.S., with investments in Canada and Central/Latin America.

FTTB
Fiber to the Business is the rapid expansion of fiber services, principally by Multiple Service Operators (cable television) and wireless/wireless national telco carriers (Tier 1) to penetrate the business marketplace.

FTT-Cell site
Fiber to the Cell site is the trend in which wireless service providers are re-focusing their efforts from building towers for coverage to enhancing their coverage for bandwidth. Fiber is the medium of choice for their upgrade. Currently, the majority of these cell sites are served by fiber.

DAS
A distributed-antenna system, or DAS, is a network of spatially separated antenna nodes connected to a common source via a transport medium that provides wireless service within a geographic area or structure. DAS antenna elevations are generally at or below the clutter level and node installations are compact. Fiber may be used to backhaul data from the antenna.

C-RAN
C-RAN uses front-haul fiber to connect the Remote Radio Head (RRH) to a Baseband Unit (BBU) located in a datacenter (i.e., the cloud). C-RAN is an evolution of RAN cellular architecture that traditionally used fiber to backhaul signals from the BBU at a tower back to the mobile core network.

Build to Print
In addition to a proprietary product line designed for the broadband service provider marketplace, Clearfield provides contract manufacturing services for original equipment manufacturers requiring copper and fiber cable assemblies built to their specification.

Competition

Competitors to the FieldSmart product lines include, but are not limited to, Corning Cabling Systems, Inc., OFS (Furukawa Electric North America, Inc.), AFL Telecommunications (a subsidiary of Fujikura Ltd.), Fujikura Ltd., Nokia, and CommScope, Inc. Competitors to the CraftSmart product line include Emerson Network Power, a subsidiary of Emerson Electric Co., and Charles Industries, Ltd. Competitors to FieldShield include PPC Broadband, Inc. Nearly all of these firms are substantially larger than Clearfield and as a result may be able to procure necessary components and labor at much lower prices. Clearfield believes that it has a competitive advantage with customers who can leverage the cost savings the Clearview Cassette can provide and those who require quick-turn, high-performance customized products, and that it is at a competitive disadvantage with customers who principally seek large volume commodity products.

Sources of Materials and Outsourced Labor

Numerous purchased materials, components, and labor are used in the manufacturing of the Company's products. Most of these are readily available from multiple suppliers. However, some components and outsourced labor are purchased from a single or a limited number of suppliers. The loss of access to some components and outsourced labor could have an adverse effect on our ability to deliver products on a timely basis and on our financial performance.

Major Customers and Financial Information about Geographic Areas

For the fiscal years ended September 30, 2019, 2018, and 2017, the Company had two customers that comprised 29%, 33%, and 35% of net sales, respectively. Both of these customers are distributors. These major customers, like our other customers, purchase our products from time to time through purchase orders, and we do not have any agreements that obligate these major customers to purchase products in the future from us.

As of September 30, 2019, two customers accounted for 28% of accounts receivable. Both of these customers were distributors. As of September 30, 2018, two customers accounted for 45% of accounts receivable. One of these customers was a distributor and one was a private label original equipment manufacturer.

The Company allocates sales from external customers to geographic areas based on the location to which the product is transported. Sales outside the United States are principally to customers in countries in the Caribbean, Canada, Central and South America.

Patents and Trademarks

As of September 30, 2019, we had 19 patents granted and multiple patent applications pending both inside and outside the United States. We have also developed and are using trademarks and logos to market and promote our products, including Clearview®, FieldSmart®, FieldShield®, CraftSmart®, and YOURx®.

Backlog

Backlog reflects purchase order commitments for our products received from customers that have yet to be fulfilled. Backlog orders are generally shipped within three months. The Company had a backlog of $4,210,000, and $5,637,000 as of September 30, 2019, and 2018, respectively.

Seasonality

We are affected by the seasonal trends in the industries we serve. We typically experience sequentially lower sales in our first and second fiscal year quarters, primarily due to customer budget cycles, deployment schedules, some customer geographical concentrations as well as standard vacation and holiday calendars. Sales usually reach a seasonal peak in our third and fourth fiscal quarters.

Product Development

Product development for Clearfield's product line program has been conducted internally. We believe that the communication industry environment is constantly evolving and our success depends on our ability to anticipate and respond to these changes. Our focus is to analyze the environment and technology and work to develop products that simplify our customers' business by developing innovative high quality products utilizing modular design wherever possible. Research and development are reflected in Selling, General, & Administrative expenses.

Employees

As of September 30, 2019, the Company had approximately 240 full-time employees. We also employ seasonal, part-time employees and independent contractors. None of our employees are covered by any collective bargaining agreement. We believe our employee relations to be good.

Segment Reporting

The Company operates in a single reportable segment.

ITEM 1A. RISK FACTORS

To compete effectively, we must continually improve existing products and introduce new products that achieve market acceptance.

The telecommunications equipment industry is characterized by rapid technological changes, evolving industry standards, changing market conditions and frequent new product and service introductions and enhancements. The introduction of products using new technologies or the adoption of new industry standards can make our existing products, or products under development, obsolete or unmarketable. In order to remain competitive and increase sales, we will need to anticipate and adapt to these rapidly changing technologies, enhance our existing products and introduce new products to address the changing demands of our customers.

Many of our competitors have greater engineering and product development resources than we have. Although we expect to continue to invest resources in product development activities, our efforts to achieve and maintain profitability will require us to be selective and focused with our research and development expenditures. In addition, sales to certain broadband service providers may require third-party independent laboratory testing in order to obtain industry certifications to be able to sell to those customers. Further, our existing and development-stage products may become obsolete if our competitors introduce newer or more appealing technologies. If these technologies are patented or proprietary to our competitors, we may not be able to access these technologies.

If we fail to anticipate or respond in a cost-effective and timely manner to technological developments, changes in industry standards or customer requirements, or if we experience any significant delays in product development or introduction, our business, operating results and financial condition could be affected adversely.

If the telecommunications market does not expand as we expect, our business may not grow as fast as we expect, which could adversely impact our business, financial condition and operating results.

Our future success as a provider of fiber management, fiber protection and fiber delivery products depends on the continued growth of demand for fiber broadband and, in particular, the continued expansion in the United States and in our other markets of information networks, particularly those directly or indirectly dependent upon a fiber optic infrastructure. As part of that growth, we anticipate that demand for voice, video, and other data services delivered over high-speed connections (both wired and wireless) will continue to increase. If this demand does not increase, the need for enhanced high speed bandwidth using fiber connections may not increase. Currently, demand for high-speed broadband capabilities and access is increasing but future growth may be limited by several factors, including, among others: (1) relative strength or weakness of the global economy or certain countries or regions, (2) an uncertain regulatory environment, and (3) uncertainty regarding long-term sustainable business models as multiple industries, such as the cable, traditional telecommunications, wireless and satellite industries, offer competing content delivery solutions. The telecommunications market also has experienced periods of overcapacity, some of which have occurred even during periods of relatively high network usage and bandwidth demands. If the factors described above were to occur and cause the demand for fiber broadband capabilities or access to slow, stop or reverse, our business, financial condition and operating results would be negatively affected.

Our operating results may fluctuate significantly from quarter to quarter, which may make budgeting for expenses difficult and may negatively affect the market price of our common stock.

Because many purchases by customers of our products relate to a specific customer project and are procured by the customer from time to time through purchase orders, the short-term demand for our products can fluctuate significantly. This fluctuation can be further affected by the long sales cycles necessary to obtain contracts to supply equipment for these projects, the availability of capital to fund our customers' projects, changes, or delays in customer deployment schedules and the impact of the government regulation to encourage service to unserved or underserved communities, rural areas or other high cost areas on customer buying patterns. These long sales cycles may result in significant effort expended with no resulting sales or sales that are not made in the anticipated quarter or fiscal year. Certain customers and prospective customers, typically larger broadband service providers, are conducive to these long sales cycles which may be multi-year efforts. Demand for our products will also depend upon the extent to which our customers and prospective customers initiate these projects and the extent to which we are selected to provide our equipment in these projects, neither of which can be assured. In addition, a sharp increase in demand could result in actual lead times longer than quoted, and a sharp decrease in demand could result in excess stock. These factors generally result in fluctuations, sometimes significant, in our operating results. Other factors that may affect our quarterly operating results include:

- the volume and timing of orders from and shipments to our customers, particularly significant customers;
- mergers and acquisitions activity among our customers;
- work stoppages and other developments affecting the operations of our customers;
- the timing of and our ability to obtain required certifications or qualifications to sell products, the timing of and our ability to obtain new customer contracts, and the timing of revenue recognition;
- the timing of new product and service announcements;
- the availability of products and services;
- market acceptance of new and enhanced versions of our products and services, including the impact of government regulations on customers purchasing decisions;
- variations in the mix of products and services we sell;
- the utilization of our production capacity and employees;
- the availability and cost of key components of our products, including the impact of new or increased tariffs; and
- accounting treatment related to stock-based compensation.

Further, we budget our expenses based in part on expectations of future sales. If sales levels in a particular quarter are lower than expected, our operating results will be affected adversely.

Because of these factors, our quarterly operating results are difficult to predict and are likely to vary in the future. If our operating results are below financial analysts' or investors' expectations, the market price of our common stock may fall abruptly and significantly.

Our success depends upon adequate protection of our patent and intellectual property rights.

Our future success depends in part upon our proprietary technology. We attempt to protect our proprietary technology through patents, trademarks, copyrights and trade secrets. However, these legal means afford us only limited protection and may not adequately protect our rights or remedies to gain or keep any advantages we may have over our competitors. Accordingly, we cannot predict whether these protections will be adequate, or whether our competitors will develop similar technology independently, without violating our proprietary rights.

Our competitors, many of which have significant resources, may make substantial investments in competing products and technologies, or may apply for and obtain patents that will prevent, limit, or interfere with our ability to manufacture or market our products. We may litigate to enforce patents issued to us and to defend against claimed infringement of the rights of others or to determine the ownership, scope, or validity of our proprietary rights and the rights of others.

Litigation has been in the past and may be necessary in the future to defend or enforce our intellectual property rights, to protect our patents and trade secrets, and to determine the validity and scope of our proprietary rights. Any litigation also may involve substantial costs and diversion of the attention of company management away from operational activities. Any claim of infringement against us could involve significant liabilities to third parties, could require us to seek licenses from third parties, and could prevent us from manufacturing, selling or using our products. The occurrence of this litigation or the effect of an adverse determination in the current litigation or similar future litigation could have a material adverse effect on our business, financial condition and results of operations.

Intense competition in our industry may result in price reductions, lower gross profits and loss of market share.

Competition in the telecommunications equipment and services industry is intense. Our competitors may have or could develop or acquire marketing, financial, development and personnel resources that exceed ours. Our ability to compete successfully will depend on whether we can continue to advance the technology of our products and develop new products, the acceptance of our products among our customers and prospective customers, and our ability to anticipate customer needs in product development, as well as the price, quality and reliability of our products, our delivery and service capabilities and our control of operating expenses.

We cannot assure you that we will be able to compete successfully against our current or future competitors. Competition from manufacturers of telecommunications equipment such as ours may result in price reductions, lower gross profit margins, and increased discounts to customers and loss of market share and could require increased spending by us on research and development, sales and marketing, and customer support.

We rely on single-source suppliers, which could cause delays, increases in costs or prevent us from completing customer orders, all of which could materially harm our business.

We assemble our products using materials and components supplied by various subcontractors and suppliers. We purchase critical components for our products, including injected molded parts, various cabling, optical components, and connectors from third parties, some of whom are single- or limited-source suppliers. If any of our suppliers are unable to ship critical components, we may be unable to manufacture and ship products to our distributors or customers. If the price of these components increases for any reason, or if these suppliers are unable or unwilling to deliver, we may have to find another source, which could result in interruptions, increased costs, delays, lost sales and quality control problems.

Further, the costs to obtain certain raw materials and supplies, such as fiber and copper cabling, are subject to price fluctuations, which may be substantial, because of global market demands. Many companies utilize the same raw materials and supplies in the production of their products as we use in our products. Companies with more resources than us may have a competitive advantage in obtaining raw materials and supplies due to greater purchasing power. Some raw materials or supplies may be subject to regulatory actions, which may affect available supplies. Further, tariffs may be imposed by the U.S. on imports from other countries that are the single- or limited-source of our materials and components. Tariffs increase the cost of the materials and components that go into making our products, but we are generally unable to pass long these increased costs to our customers. Accordingly, these increased costs adversely impact the gross margin that we earn on our products. Furthermore, due to general economic conditions in the United States and globally, our suppliers may experience financial difficulties, which could result in increased delays, additional costs, or loss of a supplier.

The termination or interruption of any of these relationships, or the failure of these manufacturers or suppliers to supply components or raw materials to us on a timely basis or in sufficient quantities, likely would cause us to be unable to meet orders for our products and harm our reputation and our business. Identifying and qualifying alternative suppliers would take time, involve significant additional costs and may delay the production of our products. If we fail to forecast our manufacturing requirements accurately or fail to properly manage our inventory with our contract manufacturers, we could incur additional costs, experience manufacturing delays and lose sales. Further, if we obtain a new supplier or assemble our product using an alternative source of supply, we may need to conduct additional testing of our products to ensure they meet our quality and performance standards. Any delays in delivery of our product to distributors or customers could be extended, and our costs associated with the change in product manufacturing could increase.

The failure of our third-party manufacturers to manufacture the products for us or the failure of our suppliers of components and raw materials to supply us consistent with our requirements as to quality, quantity and timeliness could materially harm our business by causing delays, lost sales, increases in costs and lower gross profit margins.

A significant percentage of our sales in the last three fiscal years have been made to a small number of customers, and the loss of these major customers would adversely affect us.

Our customer base includes direct customers, original equipment manufacturers (OEMs) and distributors. For fiscal years 2019, 2018, and 2017, the Company had two customers that comprised 29%, 33%, and 35% of net sales, respectively. Both of these customers are distributors.

These customers, like our other customers, purchase our products from time to time through purchase orders. We do not have any agreements that obligate our customers to purchase products in the future from us. Our agreements with our distributor customers do not prohibit them from purchasing or offering products or services that compete with ours.

We believe that the loss of our major distributor customers would likely result in purchases being re-directed through other sales channels, for example our other distributors, independent sales representatives, or through direct sales to customers. However, there can be no assurance that the loss of a distributor customer would not have an adverse effect on our sales or gross margins in this event.

The loss of any one or more of our key customers, the substantial reduction, delay or cancellation in orders from any such customer or our inability to collect the accounts receivable from these customers, could have a material adverse effect on our business, financial position and results of operations.

Further consolidation among our customers may result in the loss of some customers and may reduce sales during the pendency of business combinations and related integration activities.

We believe consolidation among our customers in the future will continue in order for them to increase market share and achieve greater economies of scale. In connection with this merger and acquisition activity, our customers may postpone or cancel orders for our product based on revised plans for technology or network expansion pending consolidation activity. Customers integrating large-scale acquisitions may also reduce their purchases of equipment during the integration period, or postpone or cancel orders.

The impact of significant mergers among our customers on our business is likely to be unclear until sometime after such transactions are completed, which may take a year or more. After a consolidation occurs, a customer may choose to reduce the number of vendors from which it purchases equipment and may choose one of our competitors as its preferred vendor. There can be no assurance that we will continue to supply equipment to the surviving communications service provider after a business combination is completed.

We may be subject to risks associated with acquisitions, and the risks could adversely affect future operating results.

We monitor our product portfolio and business and customer trends. In response, we have made and may continue to make acquisitions. The success of our acquisitions will depend on our ability to integrate the new products or operations with our existing products or operations. We cannot ensure that the expected benefits of any acquisition will be realized or will be realized within the time frames we expect. Costs could be incurred on pursuits or proposed acquisitions that have not yet or may not close which could impact our operating results, financial condition, or cash flows. Additionally, after the acquisition, unforeseen issues could arise which adversely affect the anticipated returns or which are otherwise not recoverable as an adjustment to the purchase price. The price we pay for a business or product line may exceed the value we realize, and we cannot provide assurance that we will obtain the expected revenues, anticipated synergies and strategic benefits of any acquisition within the time we expect or at all. Acquisitions may result in the recording of goodwill and other intangible assets which are subject to potential impairments in the future that could negatively impact our financial results.

Product defects or the failure of our products to meet specifications could cause us to lose customers and sales or to incur unexpected expenses.

If our products do not meet our customers' performance requirements, our customer relationships may suffer. Also, our products may contain defects or fail to meet product specifications. Any failure or poor performance of our products could result in:

- lack of or delayed market acceptance of our products;
- delayed product shipments;
- unexpected expenses and diversion of resources to replace defective products or identify and correct the source of errors;
- damage to our reputation and our customer relationships;
- delayed recognition of sales or reduced sales;
- increased product warranty claims; and
- product liability claims or other claims for damages that may be caused by any product defects or performance failures.

Our products are often critical to the performance of telecommunications systems. We offer customers limited warranty provisions. If the limitations on the product warranties are unenforceable in a particular jurisdiction or if we are exposed to product liability claims that are not covered by insurance, a claim could harm our business.

We are dependent on key personnel.

Our failure to attract and retain skilled personnel could hinder the management of our business, our research and development, our sales and marketing efforts and our manufacturing capabilities. Our future success depends to a significant degree upon the continued services of key senior management personnel, including Cheryl Beranek, our Chief Executive Officer and John Hill, our Chief Operating Officer. We have employment agreements with Ms. Beranek and Mr. Hill that provide that if we terminate the employment of either executive without cause or if the executive terminates her or his employment for good reason, we would be required to make specified payments to them as described in their employment agreements. We have key person life insurance on Ms. Beranek and Mr. Hill. We also have employment agreements with other key management. Further, our future success also depends on our continuing ability to attract, retain and motivate highly qualified managerial, technical and sales personnel. Our inability to retain or attract qualified personnel could have a significant negative effect and thereby materially harm our business and financial condition.

We face risks associated with expanding our sales outside of the United States.

We believe that our future growth depends in part upon our ability to increase sales in international markets. These sales are subject to a variety of risks, including fluctuations in currency exchange rates, tariffs, import restrictions and other trade barriers, unexpected changes in regulatory requirements, longer accounts receivable payment cycles, potentially adverse tax consequences, and export license requirements. In addition, we are subject to the risks inherent in conducting business internationally, including political and economic instability and unexpected changes in diplomatic and trade relationships. Currency fluctuations may also increase the relative price of our product in international markets and thereby could also cause our products to become less affordable or less price competitive than those of international manufacturers. These risks associated with international operations may have a material adverse effect on our revenue from or costs associated with international sales.

Our business is dependent on effective management information systems and information technology infrastructure

We rely on effective management information systems, including our enterprise resource planning ("ERP") software, for critical business operations and to support strategic business decisions. We rely on our ERP system to support such important business operations as processing sales orders and invoicing, manufacturing, shipping, inventory control, purchasing and supply chain management, human resources, and financial reporting. Some of these systems are made up of multiple software and system providers. The interdependence of these solutions and systems is a risk, and the failure of any one system could have a material adverse effect on our overall information technology infrastructure. We also rely on management information systems to produce information for business decision-making and planning and to support e-commerce activities. Failure to maintain an adequate digital platform to support e-commerce activities could have a material adverse impact on our business through lost sales opportunities. If we are unable to maintain our management information systems, including our IT infrastructure, to support critical business operations and to produce information for business decision-making activities, we could experience a material adverse impact on our business or an inability to timely and accurately report our financial results.

Our IT systems may also be vulnerable to disruptions from human error, outdated applications, computer viruses, natural disasters, unauthorized access, cyber-attack and other similar disruptions. Any system failure, accident or security breach could result in disruptions to our operations. To the extent that any disruptions, cyber-attack or other security breach results in a loss or damage to our data, or inappropriate disclosure of confidential information, it could harm our business. In addition, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Our results of operations could be adversely affected by economic conditions and the effects of these conditions on our customers' businesses.

Adverse changes in economic conditions have in the past resulted and may in the future result in lower spending among our customers and contribute to decreased sales. Further, our business may be adversely affected by factors such as downturns in economic activity in specific geographic areas or in the telecommunications industry; social, political or labor conditions; trade restrictions such as tariffs or changes imposed on international trade agreements; or adverse changes in the availability and cost of capital, interest rates, tax rates, or regulations. These factors are beyond our control, but may result in decreases in spending among customers and softening demand for our products. Declines in demand for our products will adversely affect our sales. Further, challenging economic conditions also may impair the ability of our customers to pay for products and services they have purchased. As a result, our cash flow may be negatively impacted and our allowance for doubtful accounts and write-offs of accounts receivable may increase.

Our stock price has been volatile historically and may continue to be volatile. The price of our common stock may fluctuate significantly.

The trading price of our common stock has been and may continue to be subject to wide fluctuations. Our stock price may fluctuate in response to a number of events and factors, such as quarterly variations in operating results, announcements of technological innovations or new products by us or our competitors, changes in financial estimates and recommendations by securities analysts, the operating and stock price performance of other companies that investors may deem comparable to us, and new reports relating to trends in our markets or general economic conditions.

In addition, the stock market is subject to price and volume fluctuations that affect the market prices for companies in general, and small-capitalization, high-technology companies like us in particular. These broad market and industry fluctuations may adversely affect the price of our common stock, regardless of our operating performance. Further, any failure by us to meet or exceed the expectations of financial analysts or investors is likely to cause a decline in our common stock price. Further, recent economic conditions have resulted in significant fluctuations in stock prices for many companies, including Clearfield. We cannot predict when the stock markets and the market for our common stock may stabilize. In addition, although our common stock is listed on the NASDAQ Stock Market, our common stock has at times experienced low trading volume in the past. Limited trading volume subjects our common stock to greater price volatility and may make it difficult for our shareholders to sell shares at an attractive price.

Changes in National Broadband Plan's government funding programs may cause our customers and prospective customers to delay or reduce purchases.

The telecommunications and cable television industries are subject to significant and changing U.S. federal and state regulation, some of which subsidizes or encourages spending on initiatives that utilize our products.

For example, programs like the Connect America Fund (CAF), which provides a capital expenditure subsidy for the build-out of the country's broadband network, and the Rural Digital Opportunity Fund, which will provide a capital expenditure subsidy for the support high-speed broadband networks in rural America, may subsidize or encourage spending by our customers or prospective customers on capital spending projects that utilize our products. Customers may seek to time or otherwise adjust their technology or network expansion projects to the availability of subsidies under these or other programs, which will affect the timing and size of orders for our products. In addition, other universal service and inter-carrier compensation reforms scheduled to begin in the coming years will eliminate subsidies that carriers have traditionally relied upon to support service in high-cost, rural areas. Further, changes in government programs in our industry or uncertainty regarding future changes could adversely impact our customers' or prospective customers' decisions regarding timing and amounts of capital spending, which could decrease demand for our products, delay orders or result in pricing pressure from these customers.

Anti-takeover provisions in our organizational documents, Minnesota law and other agreements could prevent or delay a change in control of our company.

Certain provisions of our articles of incorporation and bylaws, Minnesota law, and other agreements may make it more difficult for a third-party to acquire, or discourage a third-party from attempting to acquire, control of our company, including:

- the provisions of our bylaws setting forth the advance notice and information requirements for shareholder proposals, including nominees for directors, to be considered properly brought before shareholders;
- the right of our board of directors to establish more than one class or series of shares and to fix the relative rights and preferences of any such different classes or series;
- the provisions of Minnesota law relating to business combinations and control share acquisitions; and
- the provisions of our stock option plans allowing for the acceleration of vesting or payments of awards granted under the plans in the event of specified events that result in a "change in control" and provisions of agreements with certain of our executive officers requiring payments if their employment is terminated and there is a "change in control."

These measures could discourage or prevent a takeover of us or changes in our management, even if an acquisition or such changes would be beneficial to our shareholders. This may have a negative effect on the price of our common stock.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses.

Keeping abreast of, and in compliance with, changing laws, regulations and standards relating to corporate governance and public company disclosure requirements, including the Sarbanes-Oxley Act of 2002 and in particular Section 404 of that Act relating to management certification of internal controls, new disclosures relating to "conflict minerals'" the regulations of the Securities and Exchange Commission and the rules of the NASDAQ Stock Market have required an increased amount of management attention and external resources. We intend to invest all reasonably necessary resources to comply with evolving corporate governance and public disclosure standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Clearfield leases a 71,000 square foot facility at 7050 Winnetka Avenue North, Brooklyn Park, Minnesota consisting of our corporate offices, manufacturing and warehouse space. The lease term is ten years and two months and commenced on January 1, 2015. On June 30, 2019, the Company amended its lease to add 14,000 square feet to this facility, with the lease term for the additional space coterminous with the original lease. Upon proper notice and payment of a termination fee of approximately $249,000, the Company has a one-time option to terminate the lease effective as of the last day of the eighth year of the term after the Company commenced paying base rent.

We also have an indirect lease arrangement for a 46,000 square foot manufacturing facility in Tijuana, Mexico. The lease term is three years and commenced on August 1, 2017.

We believe our existing facilities are sufficient to meet our current and future space requirements.

ITEM 3. LEGAL PROCEEDINGS

There are no pending legal proceedings against or involving the Company for which the outcome is likely to have a material adverse effect upon its financial position or results of operations.

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

Our common stock is traded on The NASDAQ Global Market system of The NASDAQ Stock Market LLC under the symbol "CLFD."

Number of Holders of Common Stock

There were 283 holders of record of our common stock as of November 8, 2019.

Dividends

We have never paid cash dividends on our common stock. We currently intend to retain any earnings for use in our operations and do not intend in the foreseeable future to pay cash dividends on our common stock.

Equity Compensation Plan Information

The following table describes shares of our common stock that are available on September 30, 2019 for purchase under outstanding stock-based awards, or reserved for issuance under stock-based awards or other rights that may be granted in the future, under our equity compensation plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding those reflected in first column)
Equity compensation plans approved by security holders			
2010 Employee Stock Purchase Plan	-	$ -	49,846
2007 Stock Compensation Plan	290,750	11.86	851,134
Total	290,750	$ 11.86	900,980

There are no equity compensation plans not approved by the Company's shareholders and all outstanding equity awards have been granted pursuant to shareholder-approved plans. In addition to options, the 2007 Stock Compensation Plan permits restricted stock awards and other stock-based awards.

Issuer Repurchases

The Company repurchased a total of 10,464 shares of our common stock during the fourth quarter of fiscal year 2019 in connection with payment of taxes upon the vesting of restricted stock previously issued to employees.

Additionally, in November 2014, the Company's Board of Directors authorized an $8,000,000 common stock repurchase program, which was increased by $4,000,000 on April 25, 2017 to a total authorization of $12,000,000. As of September 30, 2019, we have repurchased an aggregate of 523,794 shares for approximately $6,600,000, leaving approximately $5,400,000 available within our $12,000,000 stock repurchase program. The repurchase program does not obligate Clearfield to repurchase any particular amount of common stock during any period. The repurchase will be funded by cash on hand. The repurchase program is expected to continue indefinitely until the maximum dollar amount of shares has been repurchased or until the repurchase program is earlier modified, suspended or terminated by the Board of Directors.

The following table presents the total number of shares repurchased during the fourth quarter of fiscal 2019 by month and the average price paid per share:

ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (1)
July 1-31, 2019	-	$ -	-	$ 5,409,326
August 1-31, 2019	10,464	11.60	-	5,409,326
September 1-30, 2019	-	-	-	5,409,326
Total	10,464	$ 11.60	-	$ 5,409,326

(1) Amount remaining from the aggregate $12,000,000 repurchase authorizations approved by the Company's Board of Directors on April 25, 2017.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data has been derived from our financial statements and should be read in conjunction with the Financial Statements and related notes thereto set forth in Item 8 and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of this Annual Report on Form 10-K. Further, please see Item 1 "Business – Description of Business" for a summary of our acquisition of the Calix active cabinet product line effective February 20, 2018, which may materially affect the comparability of the information reflected in the following selected financial data.

	Year Ended September 30				
	2019	2018	2017	2016	2015
Selected Statements of Earnings Data					
Net sales	$ 85,034,182	$ 77,651,354	$ 73,947,619	$ 75,287,726	$ 60,323,917
Gross profit	32,689,123	30,996,784	30,264,259	32,870,248	24,867,953
Income from operations	5,188,134	5,070,851	5,311,883	10,731,692	7,051,355
Income tax expense	1,360,437	1,253,405	1,737,974	2,876,032	2,475,328
Net income	4,566,156	4,274,547	3,847,839	8,013,062	4,682,008
Net income per share basic	$ 0.34	$ 0.32	$ 0.28	$ 0.60	$ 0.35
Net income per share diluted	$ 0.34	$ 0.32	$ 0.28	$ 0.59	$ 0.34
Selected Balance Sheet Data					
Total assets	$ 81,888,563	$ 74,228,642	$ 69,494,037	$ 70,595,313	$ 57,627,617
Long-term liabilities	348,114	372,975	725,796	655,534	1,311,232
Shareholders' equity	74,933,387	68,874,876	64,525,120	62,594,043	51,279,130

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

Cautionary Statement Regarding Forward-Looking Information

Statements made in this Annual Report on Form 10-K, in the Company's other SEC filings, in press releases and in oral statements, that are not statements of historical fact are "forward-looking statements." Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results or performance of the Company to be materially different from the results or performance expressed or implied by such forward-looking statements. The words "believes," "expects," "anticipates," "seeks," "may," "will," and similar expressions identify forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statement was made. The risks and uncertainties that could cause actual results to differ materially and adversely from those expressed or implied by the forward-looking statements include those risks described in Part I, Item 1A "Risk Factors."

Overview of Business: The Company sells highly configurable fiber management and connectivity products to broadband service providers serving the Fiber-to-the-Premises (FTTP), Fiber-to-the-Business (FTTB), and Fiber-to-the-Cell site markets in the U.S. and in certain limited markets outside the U.S., including countries in the Caribbean, Canada, Central and South America. On February 20, 2018, the Company completed the acquisition of a portfolio of Telcordia certified outdoor active cabinet products from Calix. The Company's sales channels include direct to customer, through distribution partners, and to original equipment suppliers who private label its products. The Company's products are sold by its sales employees and independent sales representatives.

Critical Accounting Policies: In preparing our financial statements, we make estimates, assumptions and judgments that can have a significant impact on our sales, income or loss from operations and net income or loss, as well as on the value of certain assets and liabilities on our balance sheet. We believe that there are several accounting policies that are critical to an understanding of our historical and future performance, as these policies affect the reported amounts of sales, expenses and significant estimates and judgments applied by management. While there are a number of accounting policies, methods and estimates affecting our financial statements, areas that are particularly significant include:

- Revenue recognition
- Accounting for stock based compensation and
- Valuation of inventory, long-lived assets, finite lived intangible assets and goodwill

Revenue Recognition Effective October 1, 2018, we adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and all related amendments. Our revenue is comprised of the sale of our products to customers and is recognized when the Company satisfies its performance obligations under the contract. A performance obligation is a promise in a contract to transfer a distinct product or service to a customer. The majority of our contracts have a single performance obligation and are short term in nature. We recognize revenue by transferring the promised products to the customer, with substantially all revenue recognized at the point in time the customer obtains control of the products. Shipping and handling costs charged to our customers are included in net sales, while the corresponding shipping expenses are included in cost of goods sold. Sales, value add, and other taxes collected from customers and remitted to governmental authorities are accounted for on a net (excluded from revenue) basis.

Income Taxes We account for income taxes in accordance with Accounting Standards Codification ("ASC") 740, *Income Taxes*, under which deferred income taxes are recognized based on the estimated future tax effects of differences between the financial statement and tax bases of assets and liabilities given the provisions of enacted tax laws. Deferred income tax provisions and benefits are based on changes to the assets or liabilities from year to year. In providing for deferred taxes, we consider tax regulations of the jurisdictions in which we operate, estimates of future taxable income, and available tax planning strategies. If tax regulations, operating results, or the ability to implement tax-planning strategies vary, adjustments to the carrying value of deferred tax assets and liabilities may be required. A valuation allowance is recorded when it is more likely than not that a deferred tax asset will not be realized. The recorded valuation allowance is based on significant estimates and judgments and if the facts and circumstances change, the valuation allowance could materially change.

In accounting for uncertainty in income taxes, we recognize 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 realized upon ultimate settlement with the relevant tax authority. The Company recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense.

As of September 30, 2019 and 2018, the Company had no U.S. federal net operating loss ("NOL") carry-forwards and approximately $1,905,000 and $3,468,000 of state NOLs, respectively. The state NOL carry forward amounts expire in fiscal years 2020 through 2022 if not utilized. In fiscal year 2009, the Company completed an Internal Revenue Code Section 382 analysis of the loss carry-forwards and determined that all of the Company's loss carry-forwards were utilizable and not restricted under Section 382. The Company has not updated its Section 382 analysis subsequent to 2009 and does not believe there have been any events subsequent to 2009 that would impact the analysis.

As part of the process of preparing our financial statements, we are required to estimate our income tax liability in each of the jurisdictions in which we do business. This process involves estimating our actual current tax expense 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. We must then assess the likelihood that these deferred tax assets will be recovered from future taxable income and, to the extent we believe that recovery is not more likely than not or unknown, we must establish a valuation allowance. If the valuation allowance is reduced, the Company would record an income tax benefit in the period in which that determination is made. If the valuation allowance is increased, the Company would record additional income tax expense.

As of September 30, 2019 and 2018, the Company's remaining valuation allowance of approximately $47,000 and $105,000, respectively, related to state net operating loss carry forwards. During the fourth quarter of 2019, the Company reversed approximately $58,000 of its remaining valuation allowance. This consisted of decreasing the valuation allowance for the expiration and utilization of state net operating losses in 2019 of approximately $68,000 and increasing the valuation allowance by approximately $10,000 for future expected NOL utilization based on updated profitability estimates. The remaining valuation allowance balance as of September 30, 2019 of $47,000 relates entirely to state net operating loss carry forwards we do not expect to utilize. The Company will continue to assess the assumptions used to determine the amount of our valuation allowance and may adjust the valuation allowance in future periods based on changes in assumptions of estimated future income and other factors.

The Company files income tax returns in the U.S. Federal jurisdiction and various state jurisdictions. Based on its evaluation, the Company has concluded that it has no significant unrecognized tax benefits. With limited exceptions, the Company is no longer subject to U.S. federal and state income tax examinations for fiscal years ending prior to 2004. We are generally subject to U.S. federal and state tax examinations for all tax years since 2004 due to our net operating loss carryforwards and the utilization of the carryforwards in years still open under statute. During the year ended September 30, 2018, the Company was examined by the U.S. Internal Revenue Service for fiscal year 2016. This examination resulted in no adjustments.

Impairment of Long-Lived Assets and Goodwill The Company's long-lived assets as of September 30, 2019 consisted primarily of property, plant and equipment, patents, intangibles, and goodwill. The Company reviews the carrying amount of its property, plant and equipment and patents if events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. When this review indicates the carrying amount of an asset or asset group exceeds the sum of the future undiscounted cash flows expected to be generated by the assets, the Company recognizes an asset impairment charge against operations for the amount by which the carrying amount of the impaired asset exceeds its fair value.

Determining fair values of property, plant and equipment and patents using a discounted cash flow method involves significant judgment and requires the Company to make significant estimates and assumptions, including long-term projections of cash flows, market conditions and appropriate discount rates. Judgments are based on historical experience, current market trends, consultations with external valuation specialists and other information. If facts and circumstances change, the use of different estimates and assumptions could result in a materially different outcome. The Company generally develops these forecasts based on recent sales data for existing products, planned timing of new product launches or acquisitions, and estimated expansion of the FTTP market.

The Company operates as one reporting unit and reviews the carrying amount of goodwill annually in the fourth quarter of each fiscal year and more frequently if events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. The Company determines its fair value for goodwill impairment testing purposes by calculating its market capitalization and comparing that to the Company's carrying value. The Company's goodwill impairment test for the years ended September 30, 2019, and 2018 resulted in excess fair value over carrying value and therefore, no adjustments were made to goodwill. During the year ended September 30, 2019, there were no triggering events that indicated goodwill could be impaired.

A significant reduction in our market capitalization or in the carrying amount of net assets of a reporting unit could result in an impairment charge. If the carrying amount of a reporting unit exceeds its fair value, the Company would measure the possible goodwill impairment loss based on an allocation of the estimate of fair value of the reporting unit to all of the underlying assets and liabilities of the reporting unit, including any previously unrecognized intangible assets. The excess of the fair value of a reporting unit over the amounts assigned to its assets and liabilities is the implied fair value of goodwill. An impairment loss is recognized to the extent that a reporting unit's recorded goodwill exceeds the implied fair value of goodwill. An impairment loss would be based on significant estimates and judgments, and if the facts and circumstances change, a potential impairment could have a material impact on the Company's financial statements.

During the year ended September 30, 2017, the Company incurred an impairment charge on long-lived assets of $643,604. This impairment was related to the cancellation of an enterprise resource planning software implementation. No impairment of long-lived assets or goodwill has occurred during the years ended September 30, 2019 or 2018, respectively.

Valuation of Inventory The Company maintains a material amount of inventory to support its manufacturing operations and customer demand. This inventory is stated at the lower of cost or net realizable value. On a regular basis, the Company reviews its inventory and identifies that which is excess, slow moving and obsolete by considering factors such as inventory levels, expected product life and forecasted sales demand. Any identified excess, slow moving and obsolete inventory is written down to its market value through a charge to cost of sales. It is possible that additional inventory write-down charges may be required in the future if there is a significant decline in demand for the Company's products and the Company does not adjust its manufacturing production accordingly.

Results of Operations

Year ended September 30, 2019 compared to year ended September 30, 2018

Net sales for fiscal year 2019 increased 9.5%, or $7,383,000, to $85,034,000 from net sales of $77,651,000 in 2018. The Company allocates sales from external customers to geographic areas based on the location to which the product is transported. Accordingly, international sales represented 8% and 7% of net sales for the years ended September 30, 2019 and 2018, respectively.

Sales in fiscal year 2019 to commercial data networks and broadband service providers were 95% of net sales, or $80,366,000, compared to $73,900,000, or 95%, of net sales in fiscal 2018. Among this group, the Company recorded $6,481,000 in international sales in fiscal year 2019 versus $5,356,000 in fiscal year 2018. Sales associated with build-to-print manufacturing for original equipment manufacturers in 2019 were 5% of net sales, or $4,668,000, compared to $3,751,000, or 5%, of net sales in fiscal year 2018.

The increase in net sales for fiscal year 2019 of $7,383,000 as compared to fiscal year 2018 is primarily attributable to an increase in sales to Tier 1 customers in the amount of $2,845,000 and an increase in broadband service providers of $2,004,000, partially driven by the acquisition of our active cabinet line in February 2018. In addition, sales to international customers increased $1,124,000 for fiscal year 2019 as compared to fiscal 2018 due to higher demand in the Company's Latin America market. Revenue from all customers is obtained from purchase orders submitted from time to time. Accordingly, the Company's ability to predict orders in future periods or trends affecting orders in future periods is limited.

Cost of sales for fiscal year 2019 was $52,345,000, an increase of $5,690,000, or 12.2%, from the $46,655,000 in fiscal year 2018. Gross profit increased 5.5%, or $1,692,000, from $30,997,000 for fiscal year 2018 to $32,689,000 for fiscal year 2019. Gross profit percent was 38.4% in fiscal year 2019, as compared to 39.9% for fiscal year 2018. The year-over-year increase in gross profit was primarily due to increased sales volume. The decrease in gross profit percent was primarily due to the increase in sales of the Company's active cabinet line acquired in fiscal year 2018 as well as a higher percentage of sales associated with these products, which generally have lower gross margins, as well as increased tariff costs of $1,028,966.

Selling, general and administrative expense for fiscal year 2019 was $27,501,000, an increase of $1,575,000, or 6.1%, compared to $25,926,000 for fiscal year 2018This increase is primarily composed of an increase of $2,822,000 in compensation costs due to increased sales and engineering personnel and performance based compensation accruals, $513,000 increase in external sales commissions and agent fees, and an increase of $197,000 in depreciation and amortization expense. These were partially offset by a decrease of $2,087,000 in legal expenses, mainly due expense in fiscal year 2018 associated with the defense of the patent infringement litigation including a one-time payment of $850,000 in settlement of that litigation.

Income from operations for fiscal year 2019 was $5,188,000 compared to $5,071,000 for fiscal year 2018. This increase is attributable to increased gross profit, offset by increased selling, general and administrative expenses as described above.

Interest income in fiscal year 2019 was $738,000 compared to $457,000 for fiscal year 2018. The increase is due to higher interest rates earned on increased investment balance in fiscal 2019. The Company invests its excess cash primarily in FDIC-backed bank certificates of deposit, treasury securities, and money market accounts

Income tax expense for fiscal year 2019 was $1,360,000 compared to $1,253,000 for fiscal year 2018. The increase in tax expense of $107,000 from the year ended September 30, 2018 is primarily due to the increase in taxable income for fiscal year 2019. The increase in the income tax expense rate to 22.9% for fiscal year 2019 from 22.7% for fiscal year 2018 is primarily due to the increase in state NOL expirations in fiscal year 2019. Our provision for income taxes include current federal tax expense, state income tax expense, and deferred tax expense.

Net income for fiscal year 2019 was $4,566,000 or $0.34 per basic and diluted share, compared to $4,275,000 or $0.32 per basic and diluted share for the fiscal year 2018.

Year ended September 30, 2018 compared to year ended September 30, 2017

Net sales for fiscal year 2018 increased 5%, or $3,703,000, to $77,651,000 from net sales of $73,948,000 in 2017. The Company allocates sales from external customers to geographic areas based on the location to which the product is transported. Accordingly, international sales represented 7% and 8% of net sales for the years ended September 30, 2018 and 2017, respectively.

Sales in fiscal year 2018 to commercial data networks and broadband service providers were 95% of net sales, or $73,900,000, compared to $69,921,000, or 95%, of net sales in fiscal 2017. Among this group, the Company recorded $5,356,000 in international sales in fiscal year 2018 versus $6,047,000 in fiscal year 2017. Sales associated with build-to-print manufacturing for original equipment manufacturers in 2018 were 5% of net sales, or $3,751,000, compared to $4,027,000, or 5%, of net sales in fiscal year 2017.

The increase in net sales for fiscal year 2018 of $3,703,000 as compared to fiscal year 2017 is primarily attributable to an increase in sales to an OEM manufacturer in the amount of $5,913,000 driven by the acquisition of our active cabinet line in February 2018. This was slightly offset by a decrease in the ongoing builds of an Alternative Carrier customer of $1,383,000 and a decrease in international sales of $691,000 for fiscal year 2018 as compared to fiscal 2017 due to decreased demand. Revenue from all customers is obtained from purchase orders submitted from time to time. Accordingly, the Company's ability to predict orders in future periods or trends affecting orders in future periods is limited.

Cost of sales for fiscal year 2018 was $46,655,000, an increase of $2,972,000, or 7%, from the $43,683,000 in fiscal year 2017. Gross profit increased 2%, or $733,000, from $30,264,000 for fiscal year 2017 to $30,997,000 for fiscal year 2018. Gross profit percent was 39.9% in fiscal year 2018, as compared to 40.9% for fiscal year 2017. The year-over-year increase in gross profit was primarily due to increased sales volume. The decrease in gross profit percent was primarily due to the integration of the Company's acquired active cabinet line into its manufacturing processes as well as a higher percentage of sales associated with these products, which generally have lower gross margins.

Selling, general and administrative expense for fiscal year 2019 was $27,501,000, an increase of $1,575,000, or 6.1%, compared to $25,926,000 for fiscal year 2018. This increase is primarily composed of an increase of $2,822,000 in compensation costs due to increased sales and engineering personnel and performance based compensation accruals, $513,000 increase in external sales commissions and agent fees, and an increase of $197,000 in depreciation and amortization expense. These were partially offset by a decrease of $2,087,000 in legal expenses, mainly due to the expense in fiscal year 2018 associated with the defense of the patent infringement litigation including a one-time payment of $850,000 in settlement of that litigation.

Income from operations for fiscal year 2018 was $5,071,000 compared to $5,312,000 for fiscal year 2017. This decrease is attributable to increased selling, general and administrative expenses described above.

Interest income in fiscal year 2018 was $457,000 compared to $274,000 for fiscal year 2017. The increase is due mainly to higher interest rates earned on its investments in fiscal 2018. The Company invests its excess cash primarily in FDIC-backed bank certificates of deposit and money market accounts.

Income tax expense for fiscal year 2018 was $1,253,000 compared to $1,738,000 for fiscal year 2017. The decrease in tax expense of $485,000 from the year ended September 30, 2017 is primarily due to the Tax Reform Act enacted on December 22, 2017 that resulted in a lower federal tax rate and a one-time benefit of $384,000 related to the favorable impact of a revaluation of our net deferred tax liability that decreased the income tax provision. The decrease in the income tax expense rate to 22.7% for fiscal year 2018 from 31.1% for fiscal year 2017 is primarily due to the Tax Reform Act as described above. Our provisions for income taxes include current federal tax expense, state income tax expense, and deferred tax expense.

Net income for fiscal year 2018 was $4,275,000 or $0.32 per basic and diluted share, compared to $3,848,000 or $0.28 per basic and diluted share for the year 2017.

Liquidity and Capital Resources

As of September 30, 2019, the Company had combined balances of cash, cash equivalents, short term and long-term investments of $47,508,000 as compared to $35,452,000 as of September 30, 2018. As of September 30, 2019, our principal source of liquidity was our cash and cash equivalents and short-term investments. Those sources total $23,606,000 as of September 30, 2019, compared to $17,478,000, as of September 30, 2018. Investments considered long-term were $23,902,000 as of September 30, 2019, compared to $17,974,000 as of September 30, 2018. Our excess cash is invested mainly in certificates of deposit, U. S. Treasuries, and money market accounts. Substantially all of our funds are insured by the FDIC. We believe the combined balances of short-term cash and investments along with long-term investments provide a more accurate indication of our available liquidity. We had no long-term debt obligations as of September 30, 2019 or 2018, respectively.

We believe our existing cash equivalents and short-term investments, along with cash flow from operations, will be sufficient to meet our working capital and investment requirements beyond the next 12 months. The Company intends on utilizing its available cash and assets primarily for its continued organic growth and potential future strategic transactions, as well as execution of the share repurchase program adopted by our Board of Directors. The share repurchase program was originally adopted on November 13, 2014 with $8,000,000 authorized for common stock repurchases. On April 25, 2017, our Board of Directors increased the authorization to $12,000,000 of common stock.

Operating Activities

Net cash generated from operations for the fiscal year ended September 30, 2019 totaled $14,733,000. Cash provided by operations included net income of $4,566,000 for the fiscal year ended September 30, 2019, non-cash expenses for depreciation and amortization of $2,178,000, stock-based compensation of $1,729,000, and a change in allowance for doubtful accounts of $210,000, slightly offset by a non-cash amortization of discounts on investments of $72,000, in addition to changes in operating assets and liabilities using cash. Changes in operating assets and liabilities providing cash include a decrease to inventories of $1,037,000 and accounts receivables of $3,493,000. The decrease in accounts receivable was due to improved days sales outstanding in the current year. Days sales outstanding, which measures how quickly receivables are collected, decreased 17 days to 35 days from September 30, 2018 to September 30, 2019. Also, changes in operating assets and liabilities providing cash include an increase in accounts payable and accrued expenses of $1,605,000.

Net cash generated from operations for the fiscal year ended September 30, 2018 totaled $4,548,000. Cash provided by operations included net income of $4,275,000 for the fiscal year ended September 30, 2018, non-cash expenses for depreciation and amortization of $2,048,000, and stock-based compensation of $2,003,000, slightly offset by a non-cash benefit to deferred taxes of $339,000 related to the Tax Reform Act enacted in December 2017, in addition to changes in operating assets and liabilities using cash. Changes in operating assets and liabilities providing cash include a decrease to inventories of $1,184,000, net of the acquisition of $2,781,000 in inventories as a result of the product line acquisition of Calix active cabinets that occurred during the year ended September 30, 2018. Also, changes in operating assets and liabilities providing cash include an increase in accounts payable and accrued expenses of $724,000 due primarily to increased inventory. Changes in operating assets and liabilities using cash include an increase in accounts receivable from September 30, 2017 to September 30, 2018 of $5,584,000. The increase in accounts receivable was primarily due to increased net sales for the three months ended September 30, 2018 when compared to the three months ended September 30, 2017. Additionally, days sales outstanding, increased 16 days to 52 days from September 30, 2017 to September 30, 2018.

Net cash generated from operations for the fiscal year ended September 30, 2017 totaled $6,298,000. Cash provided by operations included net income of $3,848,000 for the fiscal year ended September 30, 2017, which included non-cash expenses for depreciation and amortization of $1,622,000, stock-based compensation of $2,320,000, and impairment of long-lived assets of $644,000 offset by changes in operating assets and liabilities using cash. Changes between fiscal year 2017 and fiscal year 2016 in working capital items using cash consisted primarily of a decrease in accounts payable and accrued expenses of $3,065,000 offset slightly by a decrease in accounts receivable of $762,000. The decrease in accounts payable and accrued expenses is primarily due to decreased performance compensation accruals. The decrease in accounts receivable is primarily attributable to decreased sales in the quarter ended September 30, 2017 compared to the same quarter of fiscal 2016. Days sales outstanding was 36 days for September 30, 2017 and 35 days for September 30, 2016.

Investing Activities

For the fiscal year ended September 30, 2019, we used $2,512,000 in cash for the purchase of capital equipment and patents. These purchases were mainly related to manufacturing equipment, including the expansion of capacity in our Mexico facility, as well as information technology equipment. During fiscal year 2019, we purchased $20,311,000 of FDIC-backed certificates of deposit and U.S. Treasuries and sold $9,861,000 of FDIC-backed certificates of deposit. The result is cash used in investing activities of $12,962,000 in fiscal year 2019 as compared to $12,608,000 in fiscal year 2018. In fiscal year 2020, the Company intends to continue investing in the necessary computer hardware and software required to optimize its business, along with appropriate manufacturing equipment to continue to maintain a competitive position in manufacturing capability.

For the fiscal year ended September 30, 2018,we acquired the active cabinet product line in February 2018 for the amount of $10,350,000, which was paid from our available cash. Additionally, we used $1,190,000 in cash for the purchase of capital equipment and patents. These purchases weremainly related to information technology and manufacturing equipment. During fiscal year 2018, we purchased $7,283,000 of FDIC-backed certificates of deposit and sold $6,132,000 of FDIC-backed certificates of deposit. The result is cash used in investing activities of $12,608,000 in fiscal year 2018 as compared to $11,540,000 in fiscal year 2017.

For the fiscal year ended September 30, 2017, we used $2,022,000 in cash for the purchase of capital equipment and patents. These purchases weremainly related to information technology and manufacturing equipment. During fiscal year 2017, we purchased $17,630,000 of FDIC-backed certificates of deposit and sold $8,107,000 of FDIC-backed certificates of deposit. The result is cash used in investing activities of $11,540,000 in fiscal year 2017 as compared to $1,642,000 in fiscal year 2016.

Financing Activities

For the fiscal year ended September 30, 2019, the Company did not use any cash to repurchase its common stock. For the fiscal year ended September 30, 2019, the Company received $314,000 from employees' purchase of stock through our Employee Stock Purchase Plan ("ESPP"). The Company used $553,000 to pay for taxes as a result of employees' exercises of stock options and vesting of restricted shares using share withholding. As a result, the net cash used in financing activities during fiscal year 2019 was $236,670.

For the fiscal year ended September 30, 2018, the Company used $1,760,000 for the repurchase of common stock. Also, the Company received $298,000 during the fiscal year ended September 30, 2018 from employees' purchase of stock through the ESPP. The Company used $489,000 to pay for taxes as a result of employees' exercises of stock options and vesting of restricted shares using share withholding. As a result, the net cash used in financing activities during fiscal year 2018 was $1,928,000.

For the fiscal year ended September 30, 2017, the Company used $3,647,000 for the repurchase of common stock. Also, the Company received $335,000 during the fiscal year ended September 30, 2017 from employees' purchase of stock through the ESPP. The Company used $953,000 to pay for taxes as a result of employees' exercises of stock options and vesting of restricted shares using share withholding. As a result, the net cash used in financing activities during fiscal year 2017 was $4,237,000.

Recent Accounting Pronouncements:

Effective October 1, 2018, we adopted the FASB ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and all related amendments. ASU 2014-09 supersedes the revenue recognition requirements in ASC 605, *Revenue Recognition,* and is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. It also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue, cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. The adoption of ASU 2014-09, using the modified retrospective approach, had no material impact on our results of operations, cash flows, or financial position. Revenue continues to be recognized at a point in time for our product sales when products are delivered to or picked up by the customer. Additional information and disclosures required by this new standard are contained in Note A, "Summary of Significant Accounting Policies" and Note E, "Concentrations."

In February 2016, the FASB issued ASU 2016-02, *Leases*. There have been further amendments, including practical expedients, with the issuance of ASU 2018-01 in January 2018, ASU 2018-11 in July 2018 and ASU 2018-20 in December 2018. The amended guidance requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous guidance. The update is effective for annual reporting periods beginning after December 15, 2018, including interim periods within those reporting periods, with early adoption permitted. The guidance will be applied on a modified retrospective basis with the earliest period presented. Based on the effective date, this guidance will apply beginning October 1, 2019. The adoption of ASU 2016-02 will have no impact to retained earnings or net income. Upon adoption of ASU 2016-02 on October 1, 2019, we anticipate recording a right-of-use asset and an offsetting lease liability of approximately $2.3 to $2.9 million.

In January 2017, the FASB issued ASU 2017-04, *Intangibles-Goodwill,* which offers amended guidance to simplify the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test. A goodwill impairment will now be measured as the amount by which a reporting unit's carrying value exceeds its fair value, limited to the amount of goodwill allocated to that reporting unit. This guidance is to be applied on a prospective basis effective for the Company's interim and annual periods beginning after January 1, 2020, with early adoption permitted for any impairment tests performed after January 1, 2017. The Company does not believe the adoption of this ASU will have a material impact on our financial statements.

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments.* In November 2018, the FASB issued update ASU 2018-19 that clarifies the scope of the standard in the amendments in ASU 2016-13. This guidance introduces a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. Financial instruments impacted include accounts receivable, trade receivables, other financial assets measured at amortized cost and other off-balance sheet credit exposures. The new guidance is effective for the Company beginning in the first quarter of fiscal 2021, with early adoption permitted. The Company is evaluating the impact of the adoption of ASU 2016-13 on our financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The disclosure is not required for a smaller reporting company.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Clearfield, Inc.
INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Clearfield, Inc.:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying balance sheets of Clearfield, Inc. (the "Company") as of September 30, 2019 and 2018, the related statements of earnings, shareholders' equity and cash flows, for each of the three years in the period ended September 30, 2019, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of September 30, 2019, based on criteria established in *Internal Control – Integrated Framework: (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of September 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2019, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2019, based on criteria established in *Internal Control – Integrated Framework: (2013)* issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Baker Tilly Virchow Krause, LLP

We have served as the Company's auditor since 2014.

Minneapolis, Minnesota

November 15, 2019

CLEARFIELD, INC.
BALANCE SHEETS

	September 30, 2019	September 30, 2018
Assets		
Current Assets		
Cash and cash equivalents	$ 10,081,721	$ 8,547,777
Short-term investments	13,524,270	8,930,225
Accounts receivables, net	9,118,639	12,821,258
Inventories, net	9,012,980	10,050,135
Other current assets	769,161	742,136
Total current assets	42,506,771	41,091,531
Property, plant and equipment, net	5,413,241	4,744,584
Other Assets		
Long-term investments	23,902,000	17,974,000
Goodwill	4,708,511	4,708,511
Intangible assets, net	5,147,135	5,482,555
Other	210,905	227,461
Total other assets	33,968,551	28,392,527
Total Assets	$ 81,888,563	$ 74,228,642
Liabilities and Shareholders' Equity		
Current Liabilities		
Accounts payable	$ 3,173,599	$ 2,363,380
Accrued compensation	3,224,860	2,048,904
Accrued expenses	208,603	568,507
Total current liabilities	6,607,062	4,980,791
Other Liabilities		
Deferred taxes	101,690	104,935
Deferred rent	246,424	268,040
Total other liabilities	348,114	372,975
Total liabilities	6,955,176	5,353,766
Shareholders' Equity		
Preferred stock, $.01 par value; 500,000 shares; no shares issued or outstanding	-	-
Common stock, authorized 50,000,000, $.01 par value; 13,641,805 and 13,646,553, shares issued and outstanding as of September 30, 2019 and September 30, 2018	136,418	136,466
Additional paid-in capital	56,976,162	55,483,759
Retained earnings	17,820,807	13,254,651
Total shareholders' equity	74,933,387	68,874,876
Total Liabilities and Shareholders' Equity	$ 81,888,563	$ 74,228,642

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

CLEARFIELD, INC.
STATEMENTS OF EARNINGS

	Year Ended September 30, 2019	Year Ended September 30, 2018	Year Ended September 30, 2017
Net sales	$ 85,034,182	$ 77,651,354	$ 73,947,619
Cost of sales	52,345,059	46,654,570	43,683,360
Gross profit	32,689,123	30,996,784	30,264,259
Operating expenses			
Selling, general and administrative	27,500,989	25,925,933	24,952,376
Income from operations	5,188,134	5,070,851	5,311,883
Interest income	738,459	457,101	273,930
Income before income taxes	5,926,593	5,527,952	5,585,813
Income tax expense	1,360,437	1,253,405	1,737,974
Net income	$ 4,566,156	$ 4,274,547	$ 3,847,839
Net income per share Basic	$ 0.34	$ 0.32	$ 0.28
Net income per share Diluted	$ 0.34	$ 0.32	$ 0.28
Weighted average shares outstanding:			
Basic	13,442,871	13,429,232	13,532,375
Diluted	13,451,214	13,452,860	13,660,806

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

CLEARFIELD, INC.
STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock		Additional	Retained	Total share-
	Shares	Amount	paid-in capital	earnings	holders' equity
Balance as of September 30, 2016	14,126,279	$ 141,263	$ 57,320,515	$ 5,132,265	$ 62,594,043
Stock-based compensation expense	-	-	2,319,975	-	2,319,975
Repurchase of common stock	(270,124)	(2,701)	(3,644,613)	-	(3,647,314)
Restricted stock issuance, net	(7,809)	(78)	78	-	-
Issuance of common stock under employee stock purchase plan	25,867	258	334,434	-	334,692
Exercise of stock options, net of shares exchanged for payment	14,053	140	28,577	-	28,717
Repurchase of shares for payment of withholding taxes for vested restricted stock grants	(75,445)	(754)	(952,078)	-	(952,832)
Net income	-	-	-	3,847,839	3,847,839
Balance as of September 30, 2017	13,812,821	138,128	55,406,888	8,980,104	64,525,120
Stock-based compensation expense	-	-	2,003,207	-	2,003,207
Repurchase of common stock	(154,491)	(1,545)	(1,758,897)	-	(1,760,442)
Restricted stock issuance, net	(7,987)	(80)	80	-	-
Issuance of common stock under employee stock purchase plan	30,174	302	297,558	-	297,860
Exercise of stock options, net of shares exchanged for payment	8,025	81	23,931	-	24,012
Repurchase of shares for payment of withholding taxes for vested restricted stock grants	(41,989)	(420)	(489,008)	-	(489,428)
Net income	-	-	-	4,274,547	4,274,547
Balance as of September 30, 2018	13,646,553	136,466	55,483,759	13,254,651	68,874,876
Stock-based compensation expense	-	-	1,729,025	-	1,729,025
Restricted stock issuance, net	(7,490)	(75)	75	-	-
Issuance of common stock under employee stock purchase plan	37,235	372	313,519	-	313,891
Exercise of stock options, net of shares exchanged for payment	6,440	64	2,540	-	2,604
Repurchase of shares for payment of withholding taxes for vested restricted stock grants	(40,933)	(409)	(552,756)	-	(553,165)
Net income	-	-	-	4,566,156	4,566,156
Balance as of September 30, 2019	13,641,805	$ 136,418	$ 56,976,162	$ 17,820,807	$ 74,933,387

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

CLEARFIELD, INC.
STATEMENTS OF CASH FLOWS

	Year Ended September 30, 2019	Year Ended September 30, 2018	Year Ended September 30, 2017
Cash flows from operating activities			
Net income	$ 4,566,156	$ 4,274,547	$ 3,847,839
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,178,409	2,047,746	1,622,094
Impairment of long-lived assets	-	-	643,604
Change in allowance for doubtful accounts	210,000	-	-
Amortization of discount on investments	(71,652)	-	-
Deferred taxes	(3,245)	(339,141)	32,297
(Gain) loss on disposal of assets	-	(17,691)	35,281
Stock-based compensation	1,729,025	2,003,207	2,319,975
Changes in operating assets and liabilities:			
Accounts receivable	3,492,619	(5,583,617)	761,569
Inventories, net	1,037,155	1,183,998	(80,412)
Other assets	(10,469)	254,501	180,456
Accounts payable, accrued expenses and deferred rent	1,604,655	723,990	(3,064,650)
Net cash provided by operating activities	14,732,653	4,547,540	6,298,053
Cash flows from investing activities			
Purchases of property, plant and equipment and intangible assets	(2,511,646)	(1,189,853)	(2,021,551)
Purchases of investments	(20,311,393)	(7,283,075)	(17,630,075)
Proceeds from sale of property, plant, and equipment	-	83,052	5,100
Proceeds from maturities of investments	9,861,000	6,132,000	8,107,000
Business acquisition	-	(10,350,000)	-
Net cash used in investing activities	(12,962,039)	(12,607,876)	(11,539,526)
Cash flows from financing activities			
Repurchases of common stock	-	(1,760,442)	(3,647,314)
Proceeds from issuance of common stock under employee stock purchase plan	313,891	297,860	334,692
Proceeds from issuance of common stock upon exercise of stock options	2,604	24,012	28,717
Tax withholding related to vesting of restricted stock grants	(553,165)	(489,428)	(952,832)
Net cash used in financing activities	(236,670)	(1,927,998)	(4,236,737)
Increase (decrease) in cash and cash equivalents	1,533,944	(9,988,334)	(9,478,210)
Cash and cash equivalents, beginning of year	8,547,777	18,536,111	28,014,321
Cash and cash equivalents, end of year	$ 10,081,721	$ 8,547,777	$ 18,536,111
Supplemental disclosures for cash flow information			
Cash paid during the year for income taxes	$ 1,683,113	$ 719,694	$ 1,471,203
Non-cash financing activities			
Cashless exercise of stock options	$ 17,390	$ 5,782	$ 34,268

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

NOTES TO FINANCIAL STATEMENTS

NOTE A – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business: Clearfield, Inc., (the "Company") is a manufacturer of a broad range of standard and custom passive connectivity products to customers throughout the United States and internationally. These products include fiber distribution systems, optical components, Outside Plant ("OSP") cabinets, and fiber and copper cable assemblies that serve the communication service provider, including Fiber-to-the-Premises ("FTTP"), large enterprise, and original equipment manufacturer ("OEM") markets.

Revenue Recognition: Effective October 1, 2018, we adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and all related amendments. ASU 2014-09 supersedes the revenue recognition requirements in ASC 605,*Revenue Recognition,* and is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. It also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue, cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. The adoption of ASU 2014-09, using the modified retrospective approach, had no material impact on our results of operations, cash flows, or financial position. Revenue continues to be recognized at a point in time for our product sales when products are delivered to or picked up by the customer and revenue for shipping and handling charges continues to be recognized when products are delivered to or picked up by the customer. Additional information and disclosures required by this new standard are contained in Note E, "Concentrations."

Our revenue is comprised of the sale of our products to customers and is recognized when the Company satisfies its performance obligations under the contract. A performance obligation is a promise in a contract to transfer a distinct product or service to a customer. The majority of our contracts have a single performance obligation and are short term in nature. We recognize revenue by transferring the promised products to the customer, with substantially all revenue recognized at the point in time when the customer obtains control of the products. Shipping and handling costs charged to our customers are included in net sales, while the corresponding shipping expenses are included in cost of goods sold. Sales, value add, and other taxes collected from customers and remitted to governmental authorities are accounted for on a net (excluded from revenue) basis.

Cash and Cash Equivalents: The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. Cash equivalents as of September 30, 2019 and 2018 consist entirely of short-term money market accounts.

The Company maintains cash balances at several financial institutions, and at times, such balances exceed insured limits. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash and cash equivalents.

Investments: The Company currently invests its excess cash in bank certificates of deposit ("CDs") that are fully insured by the Federal Deposit Insurance Corporation ("FDIC") and Unites States Treasury securities with terms of not more than five years, as well as money market accounts. CDs and Treasuries with original maturities of more than three months are reported as held-to-maturity investments and are recorded at amortized cost, which approximates fair value due to the negligible risk of changes in value due to interest rates. The maturity dates of the Company's investments are as follows:

	September 30, 2019	September 30, 2018
Less than one year	$ 13,524,270	$ 8,930,225
1-5 years	23,902,000	17,974,000
Total	$ 37,426,270	$ 26,904,225

Fair Value of Financial Instruments: The financial statements include the following financial instruments: cash and cash equivalents, short-term investments, long-term investments, accounts receivable, accounts payable and accrued expenses. Other than long-term investments, all financial instruments' carrying values approximate fair values because of the short-term nature of the instruments. Long-term investments' carrying value approximates fair value due to the negligible risk of changes in value due to interest rates.

Accounts Receivable: Credit is extended based on the evaluation of a customer's financial condition and collateral is generally not required. Accounts that are outstanding longer than the contractual payment terms are considered past due. The Company does not charge interest on past due receivables. The Company determines its allowance by considering a number of factors, including the length of time trade receivables are past due, the Company's previous loss history, the customer's current ability to pay its obligation to the Company, and the condition of the general economy and the industry as whole. The Company writes off accounts receivable when they become uncollectible; payments subsequently received on such receivables are credited to the allowance for doubtful accounts.

The allowance for doubtful accounts activity for the years ended September 30, 2019, 2018, and 2017 is as follows:

Year Ended	Balance at Beginning of Year	Additions Charged to Costs and Expenses	Less Write-offs	Balance at End of Year
September 30, 2019	$ 79,085	$ 210,000	$ -	$ 289,085
September 30, 2018	79,085	-	-	79,085
September 30, 2017	93,473	-	(14,338)	79,085

Inventories: Inventories consist of finished goods, raw materials and work-in-process and are stated at the lower of average cost (which approximates first-in, first-out) or net realizable value. Inventory is valued using material costs, labor charges, and allocated factory overhead charges and consists of the following:

	September 30, 2019	September 30, 2018
Raw materials	$ 7,115,298	$ 6,013,166
Work-in-process	540,962	560,988
Finished goods	1,356,720	3,475,981
Inventories, net	$ 9,012,980	$ 10,050,135

On a regular basis, the Company reviews its inventory and identifies that which is excess, slow moving, and obsolete by considering factors such as inventory levels, expected product life, and forecasted sales demand. Any identified excess, slow moving, and obsolete inventory is written down to its net realizable value through a charge to cost of sales. It is possible that additional inventory write-down charges may be required in the future if there is a significant decline in demand for the Company's products and the Company does not adjust its manufacturing production accordingly or if new products are not accepted by the market.

Also during the year ended September 30, 2018, the Company adopted Accounting Standards Update ("ASU") 2015-11, *Inventory (Topic 330) Related to Simplifying the Measurement of Inventory* which applies to all inventory except inventory that is measured using last-in, first-out or the retail inventory method. This adoption had no effect on the financial statements and was applied prospectively. Therefore, prior periods were not retrospectively adjusted.

Property, Plant and Equipment: Property, plant and equipment are recorded at cost. Significant additions or improvements extending asset lives are capitalized, while repairs and maintenance are charged to expense when incurred. Depreciation is provided in amounts sufficient to relate the cost of assets to operations over their estimated useful lives. Leasehold improvements are amortized over the shorter of the remaining term of the lease or estimated life of the asset.
Estimated useful lives of the assets are as follows:

	Years
Equipment	3 – 7
Leasehold improvements	7 - 10 or life of lease
Vehicles	3

Property, plant and equipment consist of the following:

	September 30, 2019	September 30, 2018
Manufacturing equipment	$ 7,106,041	$ 5,202,532
Office equipment	3,996,251	3,809,614
Leasehold improvements	2,436,346	2,417,786
Vehicles	245,903	226,221
Construction in progress	8,921	-
Property, plant and equipment, gross	13,793,462	11,656,153
Less accumulated depreciation	8,380,221	6,911,569
Property, plant and equipment, net	$ 5,413,241	$ 4,744,584

Depreciation expense for the years ended September 30, 2019, 2018, and 2017 were $1,705,583, $1,748,945, and $1,614,272, respectively.

Goodwill and Intangible Assets: The Company operates as one reporting unit and reviews the carrying amount of goodwill annually in the fourth quarter of each fiscal year and more frequently if events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. The Company determines its fair value for goodwill impairment testing purposes by calculating its market capitalization and comparing that to the Company's carrying value. The Company's goodwill impairment test for the years ended September 30, 2019, 2018, and 2017 resulted in excess fair value over carrying value and therefore, no adjustments were made to goodwill. During the years ended September 30, 2019, and 2018, there were no triggering events that indicated goodwill could be impaired.

A significant reduction in our market capitalization or in the carrying amount of net assets of a reporting unit could result in an impairment charge. If the carrying amount of a reporting unit exceeds its fair value, the Company would measure the possible goodwill impairment loss based on an allocation of the estimate of fair value of the reporting unit to all of the underlying assets and liabilities of the reporting unit, including any previously unrecognized intangible assets. The excess of the fair value of a reporting unit over the amounts assigned to its assets and liabilities is the implied fair value of goodwill. An impairment loss is recognized to the extent that a reporting unit's recorded goodwill exceeds the implied fair value of goodwill. An impairment loss would be based on significant estimates and judgments, and if the facts and circumstances change, a potential impairment could have a material impact on the Company's financial statements.

No impairment of goodwill has occurred during the years ended September 30, 2019, or 2018, respectively.

The Company capitalizes legal costs incurred to obtain patents. Once accepted by either the U.S. Patent Office or the equivalent office of a foreign country, these legal costs are amortized using the straight-line method over the remaining estimated lives, not exceeding 20 years. As of September 30, 2019, the Company has 19 patents granted and multiple pending applications both inside and outside the United States.

In addition, the Company has various finite life intangible assets, most of which were acquired as a result of the acquisition of a portfolio of Telcordia certified outdoor active cabinet products from Calix, Inc. ("Calix") during fiscal year 2018 as described in Note F in greater detail below. Finite life intangible assets as of September 30, 2019 and 2018 are as follows:

	September 30, 2019			
	Years	Gross Carrying Amount	Accumulated Amortization	Net Book Value Amount
Customer relationships	15	$ 3,742,000	$ 405,384	$ 3,336,616
Certifications	8	1,068,000	216,937	851,063
Trademarks	8	563,000	114,359	448,641
Patents	20	530,409	38,247	492,162
Other	5	31,091	12,438	18,653
Totals		$ 5,934,500	$ 787,365	$ 5,147,135

	September 30, 2018			
	Years	Gross Carrying Amount	Accumulated Amortization	Net Book Value Amount
Customer relationships	15	$ 3,742,000	$ 155,917	$ 3,586,083
Certifications	8	1,068,000	83,437	984,563
Trademarks	8	563,000	43,984	519,016
Patents	20	$ 393,002	$ 24,981	$ 368,021
Other	5	31,091	6,219	24,872
Totals		$ 5,797,093	$ 314,538	$ 5,482,555

Amortization expense related to these assets for the years ended September 30, 2019, 2018, and 2017 were $472,827, $298,801, and $7,822, respectively.

Impairment of Long-Lived Assets: The Company assesses potential impairments to its long-lived assets or asset groups when there is evidence that events occur or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recovered. An impairment loss is recognized when the carrying amount of the long-lived asset or asset group is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset or asset group is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset or asset group.

Any required impairment loss is measured as the amount by which the carrying amount of a long-lived asset or asset group exceeds its fair value and is recorded as a reduction in the carrying value of the related asset or asset group and a charge to operating results. During the year ended September 30, 2017, the Company incurred an impairment charge on long-lived assets of $643,604 which was charged to selling, general, and administrative expenses. This impairment was related to the cancellation of an enterprise resource planning software implementation. No impairment of long-lived assets occurred during the years ended September 30, 2019 or 2018, respectively.

Income Taxes: The Company records income taxes in accordance with the liability method of accounting. Deferred taxes are recognized for the estimated taxes ultimately payable or recoverable based on enacted tax law. The Company establishes a valuation allowance to reduce the deferred tax assets when it is more likely than not that a deferred tax asset will not be realizable. Changes in tax rates are reflected in the tax provision as they occur.

In accounting for uncertainty in income taxes, we recognize 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 realized upon ultimate settlement with the relevant tax authority. As of both September 30, 2019 and September 30, 2018, the Company did not have any unrecognized tax benefits. The Company recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. We do not expect any material changes in our unrecognized tax benefits over the next 12 months.

Stock-Based Compensation: We measure and recognize compensation expense for all stock-based awards at fair value over the requisite service period. We use the Black-Scholes option pricing model to determine the weighted average fair value of options. For restricted stock grants, fair value is determined as the average price of the Company's stock on the date of grant. Equity-based compensation expense is broken out between cost of sales and selling, general and administrative expenses based on the classification of the employee. The determination of fair value of stock-based awards on the date of grant using an option-pricing model is affected by our stock price as well as by assumptions regarding a number of subjective variables. These variables include, but are not limited to, the expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors.

The expected terms of the options are based on evaluations of historical and expected future employee exercise behavior. The risk-free interest rate is based on the U.S. Treasury rates at the date of grant with maturity dates approximately equal to the expected life at grant date. Volatility is based on historical and expected future volatility of the Company's stock. The Company has not historically issued any dividends and does not expect to in the future. Forfeitures for both option and restricted stock grants are estimated at the time of the grant and revised in subsequent periods if actual forfeitures differ from estimates.

If factors change and we employ different assumptions in the determination of the fair value of grants in future periods, the related compensation expense that we record may differ significantly from what we have recorded in the current periods.

Research and Development Costs: Research and development costs amounted to $1,089,637, $787,364, and $865,568, for the years ended September 30, 2019, 2018, and 2017, respectively, and are charged to expense when incurred.

Advertising Costs: Advertising costs amounted to $278,057, $365,859, and $378,217, for the years ended September 30, 2019, 2018, and 2017, respectively, and are charged to expense when incurred.

Net Income Per Share: Basic and diluted net income per share is computed by dividing net income by the weighted average number of common shares outstanding and the weighted average number of dilutive shares outstanding, respectively.

Weighted average common shares outstanding for the years ended September 30, 2019, 2018, and 2017 were as follows:

Year ended September 30,	2019	2018	2017
Net income	$ 4,566,156	$ 4,274,547	$ 3,847,839
Weighted average common shares	13,442,871	13,429,232	13,532,375
Dilutive potential common shares	8,343	23,628	128,431
Weighted average dilutive common shares outstanding	13,451,214	13,452,860	13,660,806
Earnings per share:			
Basic	$ 0.34	$ 0.32	$ 0.28
Diluted	$ 0.34	$ 0.32	$ 0.28

There were 268,000 and 108,000 shares for the years ended September 30, 2019 and 2018, respectively, that were excluded from the above calculation as they were considered antidilutive in nature. No shares were considered antidilutive for the year ended September 30, 2017.

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 reported amounts of assets and liabilities, related revenues and expenses and disclosure about contingent assets and liabilities at the date of the financial statements. Significant estimates include the rebates related to revenue recognition, stock based compensation and the valuation of inventory, long-lived assets, finite lived intangible assets and goodwill. Actual results may differ materially from these estimates.

Recently Issued Accounting Pronouncements: In February 2016, the FASB issued ASU 2016-02, *Leases*. There have been further amendments, including practical expedients, with the issuance of ASU 2018-01 in January 2018, ASU 2018-11 in July 2018 and ASU 2018-20 in December 2018. The amended guidance requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous guidance. The update is effective for annual reporting periods beginning after December 15, 2018, including interim periods within those reporting periods, with early adoption permitted. The guidance will be applied on a modified retrospective basis with the earliest period presented. Based on the effective date, this guidance will apply beginning October 1, 2019. The adoption of ASU 2016-02 will have no impact to retained earnings or net income. Upon adoption of ASU 2016-02 on October 1, 2019, we anticipate recording a right-of-use asset and an offsetting lease liability of approximately $2.3 to $2.9 million.

In January 2017, the FASB issued ASU 2017-04 *Intangibles-Goodwill,* which offers amended guidance to simplify the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test. A goodwill impairment will now be measured as the amount by which a reporting unit's carrying value exceeds its fair value, limited to the amount of goodwill allocated to that reporting unit. This guidance is to be applied on a prospective basis effective for the Company's interim and annual periods beginning after January 1, 2020, with early adoption permitted for any impairment tests performed after January 1, 2017. The Company does not believe the adoption of this ASU will have a material impact on our financial statements.

In June 2016, the FASB issued ASU 2016-13,*Measurement of Credit Losses on Financial Instruments*. In November 2018, the FASB issued update ASU 2018-19 that clarifies the scope of the standard in the amendments in ASU 2016-13. This guidance introduces a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. Financial instruments impacted include accounts receivable, trade receivables, other financial assets measured at amortized cost and other off-balance sheet credit exposures. The new guidance is effective for the Company beginning in the first quarter of fiscal 2021, with early adoption permitted. The Company is evaluating the impact of the adoption of ASU 2016-13 on our financial statements.

NOTE B – COMMITMENTS AND FACILITIES

Operating Leases: The Company leases office and manufacturing facilities in Minnesota and Mexico for its ongoing operations, which expire at various dates through February 2025. The Company also leases various pieces of office equipment. Certain of these leases have escalating rent payment provisions. We recognize rent expense under such leases on a straight-line basis over the term of the lease. For the years ended September 30, 2019, 2018, and 2017, total rent expense was $908,000, $869,000 and $768,000 respectively. Rent expense includes operating expenses, insurance, and related taxes.

As of September 30, 2019, the future minimum lease payments required under operating lease agreements are as follows:

Year ending September 30	Operating leases	
2020	$	643,040
2021		479,213
2022		491,397
2023		503,895
2024		516,720
Thereafter		217,551
Total minimum lease payments	$	2,851,816

NOTE C – SHAREHOLDERS' EQUITY

Share Repurchase Program: On November 13, 2014, the Company announced that its Board of Directors had approved a stock repurchase program under which it will purchase up to $8,000,000 of its outstanding shares of common stock. On April 25, 2017, the Board of Directors increased the repurchase authorization by $4,000,000 to $12,000,000 of common stock. The program does not obligate Clearfield to repurchase any particular amount of common stock during any period. The repurchase will be funded by cash on hand. The repurchase program is expected to continue indefinitely until the maximum dollar amount of shares has been repurchased or until the repurchase program is earlier modified, suspended or terminated by the board of directors. As of September 30, 2019, the Company may repurchase up to $5,409,326 of its outstanding shares of common stock.

The Company is authorized to issue 50,000,000 shares of common stock at $.01 par value and 5,000,000 undesignated shares. From the undesignated shares, 500,000 shares have been designated as Series B Junior Participating Preferred Shares and none of such shares have been issued or are outstanding. The Board of Directors may, by resolution, establish from the remaining undesignated shares different classes or series of shares and may fix the relative rights and preferences of shares in any class or series.

Stock-Based Compensation: The Company's stock-based compensation plans are administered by the Compensation Committee of the Board of Directors, which selects persons to receive awards and determines the number of shares subject to each award and the terms, conditions, performance measures and other provisions of the award.

The Company currently has one equity compensation plan, the 2007 Stock Compensation Plan, from which it grants equity awards that are used as an incentive for directors, officers, and other employees. The 2007 Stock Compensation Plan has 851,134 shares available for issue as of September 30, 2019. As of September 30, 2019, $2,371,309 of total unrecognized compensation expense related to non-vested awards is expected to be recognized over a period of approximately 4.9 years. The Company recorded related compensation expense for the years ended September 30, 2019, 2018, and 2017 of $1,729,025, $2,003,207, and $2,319,975, respectively. For the year ended September 30, 2019, $1,638,829 of this expense was included in selling, general and administrative expense and $90,196 was included in cost of sales. For the year ended September 30, 2018, $1,835,086 of this expense was included in selling, general and administrative expense and $168,121 was included in cost of sales. For the year ended September 30, 2017, $2,103,621 of this expense was included in selling, general and administrative expense and $216,354 was included in cost of sales.

Stock Options: The Company uses the Black-Scholes option pricing model to determine the weighted average fair value of options granted. During the fiscal year ended September 30, 2019, the Company granted employees non-qualified stock options to purchase an aggregate of 172,000 shares of common stock with a weighted average contractual term of 4 years, a three year vesting term, and a weighted average exercise price of $12.17. During the fiscal year ended September 30, 2018, the Company granted employees non-qualified stock options to purchase an aggregate of 108,000 shares of common stock with a weighted average contractual term of 4.7 years, a three year vesting term, and a weighted average exercise price of $13.37. There were no stock options granted during the year ended September 30, 2017. The fair value was estimated at the grant date using the assumptions listed below:

	Year ended September 30, 2019	Year ended September 30, 2018
Dividend yield	0%	0%
Weighted average expected volatility	37.77%	43.68%
Weighted average risk-free interest rate	2.92%	2.70%
Weighted average expected life (in years)	3.0	3.7
Vesting period (in years)	3.0	3.0

The expected stock price volatility is based on the historical volatility of the Company's stock for a period approximating the expected life. The expected life represents the period of time that options are expected to be outstanding after their grant date. The risk-free interest rate reflects the interest rate at grant date on zero-coupon U.S. governmental bonds having a remaining life similar to the expected option term.

Options are generally granted at fair market values determined on the date of grant and vesting normally occurs over a three to five-year period. However, options granted to directors have a one year vesting period and a six year contractual term. The maximum contractual term is normally six years. Shares issued upon exercise of a stock option are issued from the Company's authorized but unissued shares. There were 36,000 options vested during the year ended September 30, 2019 and no options vested during the year ended September 30 2018. For the year ended September 30, 2019, there were 6,750 stock options that were exercised using a cashless method of exercise. For the year ended September 30, 2018, there were 2,250 stock options that were exercised using a cashless method of exercise. The intrinsic value of options exercised during the years ended September 30, 2019 and September 30, 2018 was $81,728 and $75,767, respectively.

Option transactions under the 2007 Stock Compensation Plan during the years ended September 30, 2019 and 2018 are summarized as follows:

	Number of shares	Weighted average exercise price	Weighted average fair value
Outstanding as of September 30, 2017	38,950	$ 2.79	
Granted	108,000	13.37	$ 4.78
Cancelled or Forfeited	-	-	
Exercised	(8,450)	3.58	
Outstanding as of September 30, 2018	138,500	10.99	
Granted	172,000	12.17	$ 3.53
Cancelled or Forfeited	(12,000)	12.17	
Exercised	(7,750)	2.58	
Outstanding as of September 30, 2019	290,750	$ 11.86	

The following table summarizes information concerning options exercisable under the 2007 Stock Compensation Plan:

Year ended	Exercisable	Weighted average remaining contractual life (in years)	Weighted average exercise price
September 30, 2019	58,750	2.40	$ 9.19
September 30, 2018	30,500	1.89	$ 2.58

The following table summarizes information concerning options currently outstanding at:

Year Ended	Number outstanding	Weighted average remaining contractual life (in years)	Weighted average exercise price	Aggregate intrinsic value
September 30, 2019	290,750	3.04	$ 11.86	$ 156,173
September 30, 2018	138,500	3.82	$ 10.99	$ (4,097)

Restricted Stock: The Company's 2007 Stock Compensation Plan permits our Compensation Committee to grant other stock-based awards. The Company has awarded restricted stock grants to employees that vest over one to ten years.

Restricted stock transactions during the years ended September 30, 2019 and 2018 are summarized as follows:

	Number of shares	Weighted average grant date fair value
Unvested shares as of September 30, 2017	370,530	$ 15.24
Granted	7,235	14.17
Vested	(113,930)	16.45
Forfeited	(15,222)	15.41
Unvested shares as of September 30, 2018	248,613	14.65
Granted	4,340	14.40
Vested	(110,683)	16.31
Forfeited	(11,830)	14.47
Unvested shares as of September 30, 2019	130,440	$ 13.25

The Company repurchased a total of 40,933 shares of our common stock at an average price of $13.51 in connection with payment of taxes upon the vesting of restricted stock previously issued to employees for the year ended September 30, 2019. The Company repurchased a total of 41,989 shares of our common stock at an average price of $11.66 in connection with payment of taxes upon the vesting of restricted stock previously issued to employees for the year ended September 30, 2018.

Employee Stock Purchase Plan: The Clearfield, Inc. 2010 Employee Stock Purchase Plan ("ESPP") allows participating employees to purchase shares of the Company's common stock at a discount through payroll deductions. The ESPP is available to all employees subject to certain eligibility requirements. Terms of the ESPP provide that participating employees may purchase the Company's common stock on a voluntary after tax basis. Employees may purchase the Company's common stock at a price that is no less than the lower of 85% of the fair market value of one share of common stock at the beginning or end of each stock purchase period or phase. The ESPP is carried out in six-month phases, with phases beginning on July 1 and January 1 of each calendar year. For the phases that ended on December 31, 2018 and June 30, 2019, employees purchased 17,312 and 19,923 shares, respectively, at a price of $8.43. For the phases that ended on December 31, 2017 and June 30, 2018, employees purchased 14,242 and 15,932 shares, respectively, at a price of $10.41 and $9.39 per share, respectively. As of September 30, 2019, the Company has withheld approximately $80,708 from employees participating in the phase that began on July 1, 2019. After the employee purchase on June 30, 2019, 49,846 shares of common stock were available for future purchase under the ESPP.

NOTE D – INCOME TAXES

Components of the income tax expense are as follows for the years ended:

	September 30, 2019	September 30, 2018	September 30, 2017
Current:			
Federal	$ 1,260,552	$ 1,472,512	$ 1,627,125
State	103,130	120,034	78,552
Current income tax expense	1,363,682	1,592,546	1,705,677
Deferred:			
Federal	(38,534)	(463,798)	8,680
State	35,289	124,657	23,617
Deferred income tax expense	(3,245)	(339,141)	32,297
Income tax expense	$ 1,360,437	$ 1,253,405	$ 1,737,974

The following is a reconciliation of the federal statutory income tax rate to the effective tax rate as a percent of pre-tax income for the following years ended:

	September 30, 2019	September 30, 2018	September 30, 2017
Federal statutory rate	21%	24%	34%
Federal rate change	-	(5%)	-
State income taxes	2%	2%	1%
Permanent differences	-	-	(1%)
Change in valuation allowance	(1%)	(3%)	(4%)
Expiration and utilization of state NOL's	2%	4%	3%
Research and development credits	(2%)	(1%)	(1%)
Excess tax expense (benefits) from stock-based compensation	1%	2%	(1%)
Tax rate	23%	23%	31%

The federal statutory rate for the year ended September 31, 2018 is a blended rate due to the change in federal statutory rates resulting from the Tax Cuts and Jobs Act which was signed into law on December 22, 2017.

As of September 30, 2019, the current income tax payable was approximately $145,000 and as of September 30, 2018, the current income tax payable was approximately $464,000. Current income tax payable amounts are included in Accrued Expenses in the Company's balance sheets.

As of September 30, 2019 and 2018, the Company had no U.S. federal net operating loss ("NOL") carry-forwards and approximately $1,905,000 and $3,468,000 state NOLs, respectively. The state NOL carry forward amounts expire in fiscal years 2020 through 2022 if not utilized. In addition, as of September 30, 2019, the Company has Minnesota research and development and alternative minimum tax credits of $241,000 and $50,000, respectively. The Company has not recorded a valuation allowance on these research and development related deferred tax assets as the Company believes it is more likely than not they will be utilized before they begin to expire in fiscal year 2030.

Significant components of deferred income tax assets and liabilities are as follows at:

		September 30, 2019		September 30, 2018
Deferred income tax assets (liabilities):				
Intangibles	$	(75,190)	$	(70,467)
Property and equipment depreciation		(521,586)		(552,119)
Net operating loss carry forwards and credits		377,505		464,274
Stock-based compensation		114,118		151,558
Inventories		350,197		400,111
Prepaid expenses		(63,252)		(60,806)
Accrued expenses and reserves		371,414		250,787
Goodwill		(607,882)		(583,415)
Gross deferred tax liability		(54,676)		(77)
Valuation allowance		(47,014)		(104,858)
Net deferred tax liability	$	(101,690)	$	(104,935)

Realization of net operating loss carryforwards and other deferred tax temporary differences are contingent upon future taxable earnings. The Company's deferred tax assets were reviewed for expected utilization by assessing the available positive and negative factors surrounding their recoverability.

As of September 30, 2018, the Company's remaining valuation allowance of approximately $105,000 related to state net operating loss carry forwards. During the fourth quarter of 2019, the Company reversed approximately $58,000 of its valuation allowance. This consisted of decreasing the valuation allowance for the expiration and utilization of state net operating losses in 2019 of approximately $68,000 and increasing the valuation allowance by approximately $10,000 for future expected NOL utilization based on updated profitability estimates and changes to the loss utilization rules. The remaining valuation allowance balance as of September 30, 2019 of approximately $47,000 relates entirely to state net operating loss carry forwards we do not expect to utilize. The Company will continue to assess the assumptions used to determine the amount of our valuation allowance and may adjust the valuation allowance in future periods based on changes in assumptions of estimated future income and other factors. If the valuation allowance is reduced, we would record an income tax benefit in the period the valuation allowance is reduced. If the valuation allowance is increased, we would record additional income tax expense.

The valuation allowance activity for the years ended September 30, 2019, 2018, and 2017 is as follows:

Year Ended	Balance at Beginning of Year	Income Tax Expense (Benefit)	Reversal for State NOL Expiration and Utilization	Balance at End of Year
September 30, 2019	$ 104,858	$ 10,448	$ (68,292)	$ 47,014
September 30, 2018	159,154	79,377	(133,673)	104,858
September 30, 2017	322,404	(32,154)	(131,096)	159,154

The Company completed an Internal Revenue Code Section 382 analysis of the loss carry forwards in 2009 and determined then that all of the Company's loss carry forwards are utilizable and not restricted under Section 382. The Company has not updated its Section 382 analysis subsequent to 2009 and does not believe there have been any events subsequent to 2009 that would impact the analysis.

The Company is required to recognize 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 realized upon ultimate settlement with the relevant tax authority. The Company applies the interpretation to all tax positions for which the statute of limitations remained open. The Company had no liability for unrecognized tax benefits and did not recognize any interest or penalties during the years ended September 30, 2019, 2018, or 2017.

The Company is subject to income taxes in the U.S. federal jurisdiction, and various state jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. With few exceptions, the Company is no longer subject to U.S. federal, state and local, income tax examinations by tax authorities for fiscal years ending prior to 2004. We are generally subject to U.S. federal and state tax examinations for all tax years since 2003 due to our net operating loss carryforwards and the utilization of the carryforwards in years still open under statute. During the year ended September 30, 2018, the Company was examined by the U.S. Internal Revenue Service for fiscal year 2016. This examination resulted in no adjustments. The Company changed its fiscal year end in 2007 from March 31 to September 30.

NOTE E – CONCENTRATIONS

Suppliers: The Company purchases critical components for our products, including injection molded parts and connectors from third parties, some of whom are single- or limited-source suppliers. If any of our suppliers are unable to ship critical components, we may be unable to manufacture and ship products to our distributors or customers. If the price of these components increases for any reason, or if these suppliers are unable or unwilling to deliver, we may have to find another source, which could result in interruptions, increased costs, delays, loss of sales and quality control problems.

Customers: For the fiscal years ended September 30, 2019, 2018, and 2017, the Company had two customers that comprised 29%, 33%, and 35% of net sales, respectively. Both of these customers are distributors. These major customers, like our other customers, purchase our products from time to time through purchase orders, and we do not have any agreements that obligate these major customers to purchase products in the future from us.

As of September 30, 2019, two customers accounted for 28% of accounts receivable. Both of these customers were distributors. As of September 30, 2018, two customers accounted for 45% of accounts receivable. One of these customers was a distributor and one was a private label original equipment manufacturer.

Disaggregation of Revenue

The Company allocates sales from external customers to geographic areas based on the location to which the product is transported. Sales outside the United States are principally to customers in countries in the Caribbean, Canada, Central and South America.

The following table presents our domestic and international sales for each of the last three fiscal years:

	Year Ended September 30,		
	2019	2018	2017
United States	$ 78,553,000	$ 72,295,000	$ 67,901,000
All Other Countries	6,481,000	5,356,000	6,047,000
Total Net Sales	$ 85,034,000	$ 77,651,000	$ 73,948,000

Long-lived assets: As of September 30, 2019 and 2018, the Company had property, plant and equipment with a net book value of $1,406,546 and $412,755, respectively, located in Mexico.

NOTE F – ACQUISITION

On February 20, 2018, the Company completed the acquisition of a portfolio of Telcordia certified outdoor active cabinet products from Calix, Inc. ("Calix") upon the terms and conditions contained in an Asset Purchase Agreement dated February 20, 2018.

The introduction of the Clearfield active cabinet line provides customers a single point of contact for cabinet solutions—both passive and powered. The acquisition enables Clearfield to expand its Fiber-to-Anywhere expertise to include active powered electronic cabinet platforms while leveraging its supply chain. The acquisition also enables Clearfield to capitalize on and expand its reach to a broader customer base, including service providers in the Tier 1 and Tier 2 markets.

Acquisition date fair value of the consideration transferred totaled $10,350,000 which was comprised of a cash payment of $10,350,000 from the Company's cash operating account. We assumed no liabilities in the acquisition.

The following table summarizes the estimated fair values of the assets acquired at the acquisitiondate:

	February 20, 2018
Inventories	$ 2,781,000
Property, plant and equipment	58,000
Trademarks	563,000
Customer relationships	3,742,000
Product certification	1,068,000
Goodwill	2,138,000
Total Assets	$ 10,350,000

The active cabinet acquisition resulted in $2,138,000 of goodwill, which is expected to be deductible for tax purposes Specifically, the goodwill recorded as part of the acquisition of the Calix active cabinets includes the expected synergies and other benefits that we believe will result from combining the operations of active cabinet lines with the operations of Clearfield, Inc.

The Company incurred approximately $106,000 in legal, professional, and other costs related to this acquisition accounted for as selling and administrative expenses when incurred. The remaining weighted-average useful life of intangible assets acquired was 12.5 years as of the acquisition date.

As the active cabinet business was not operated as a separate subsidiary, division or entity, Calix did not maintain separate financial statements for the active cabinet business. As a result, we are unable to accurately determine earnings/loss for the active cabinet business on a standalone basis since the date of acquisition.

The following table below reflects our unaudited pro forma combined results of operations as if the acquisition had taken place as of October 1, 2016 and shows the net sales and net income as if the active cabinet business were combined with the Clearfield business for the years ended September 30, 2018 and 2017.

The pro forma includes estimated expenses relating to the amortization of intangibles purchased, the amortization of the inventory fair value adjustment, and estimated personnel costs:

	Pro Forma Year Ended September 30, 2018 (unaudited)	Pro Forma Year Ended September 30, 2017 (unaudited)
Net sales	$ 80,958,789	$ 89,672,074
Income from operations	$ 5,554,766	$ 8,174,841
Net income	$ 4,794,757	$ 5,809,018
Net income per share:		
Basic	$ 0.36	$ 0.43
Diluted	$ 0.36	$ 0.43

The pro forma unaudited results do not purport to be indicative of the results which would have been obtained had the acquisition been completed as of the beginning of the earliest period presented or of results that may be obtained in the future. In addition, they do not include any benefits that may result from the acquisition due to synergies that may be derived from the elimination of any duplicative costs.

NOTE G – EMPLOYEE BENEFIT PLAN

The Company maintains a contributory 401(k) profit sharing benefit plan, whereby eligible employees may contribute a portion of their earnings, not to exceed annual amounts allowed under the Internal Revenue Code. The Company matched 100% of the first 3% and 50% of the next 3% of the participant's eligible compensation that was contributed by the participant. The Company's contributions under this plan were $702,202, $654,001 and $652,615 for the years ended September 30, 2019, 2018, and 2017, respectively.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company’s management carried out an evaluation, under the supervision and with the participation of the Company’s Chief Executive Officer and the Company’s Chief Financial Officer of the effectiveness of the design and operation of the Company’s disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended) as of September 30, 2019. Based upon that evaluation, the Company’s Chief Executive Officer and the Company’s Chief Financial Officer concluded that the Company’s disclosure controls and procedures were effective.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in the 2013 *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management concluded that, as of September 30, 2019, our internal control over financial reporting was effective. Management reviewed the results of its assessment with our Audit Committee. The effectiveness of our internal control over financial reporting as of September 30, 2019 has been audited by Baker Tilly Virchow Krause, LLP, an independent registered public accounting firm, as stated in its report which is included in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

No changes in the Company’s internal control over financial reporting occurred during the fourth quarter of fiscal year 2019 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by Item 10 to be included in our Proxy Statement for our 2020 Annual Meeting of Shareholders (the “2020 Proxy Statement”), which will be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days after the end of the fiscal year for which this report is filed, is incorporated herein by reference into this section.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 to be included in the 2020 Proxy Statement, is incorporated herein by reference into this section.

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

See “Equity Compensation Plan Information” under Item 5, “Market For Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities” of Part II hereof.

The remainder of the information required by Item 12 to be included in the 2020 Proxy Statement, is incorporated herein by reference into this section.

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

The information required by Item 13 to be included in the 2020 Proxy Statement, is incorporated herein by reference into this section.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 14 to be included in the 2020 Proxy Statement, is incorporated herein by reference into this section.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report.

(1) Financial Statements.

The financial statements of Clearfield, Inc. are filed herewith under Item 8. “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

(2) Certain financial statement schedules have been omitted because they are not required, not applicable, or the required information is provided in other financial statements or the notes to the financial statements.

(3) Exhibits: See Items 15(b) below.

(b) Exhibits.

EXHIBIT INDEX

Number	Description	Incorporated by Reference to
2.1	Asset Purchase Agreement dated February 20, 2018 by and between Calix, Inc. and Clearfield Inc.	Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated February 20, 2018
3.1	Restated Articles of Incorporation, of APA Optics, Inc. (n/k/a Clearfield, Inc.) dated November 3, 1983 and Articles of Amendment dated December 9, 1983, July 30, 1987, March 22, 1989, September 14, 1994 and August 17, 2000	Exhibit 3.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2000
3.1 (a)	Articles of Amendment to Articles of Incorporation dated August 25, 2004	Exhibit 3.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004
3.2	Amended and Restated Bylaws of Clearfield, Inc.	Exhibit 3.1 to Registrant's Current Report on Form 8-K dated February 25, 2016
4.1	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	**
*10.1	Form of Agreement regarding Indemnification of Directors and Officers with certain current and former directors	Exhibit 10.1 to Registrant's Annual Report on Form 10-K for the quarter ended September 30, 2017
*10.2	2007 Stock Compensation Plan, as amended through December 23, 2016	Appendix A to the Registrant's Proxy Statement filed with the SEC on January 10, 2017 for the 2017 Annual Meeting of Shareholders held on February 23, 2017
*10.3	Employment Agreement dated December 16, 2008 by and between Clearfield, Inc. and Cheryl P. Beranek	Exhibit 10.26 to Registrant's Current Report on Form 8-K dated December 16, 2008
*10.4	Employment Agreement dated December 16, 2008 by and between Clearfield, Inc. and John P. Hill	Exhibit 10.27 to Registrant's Current Report on Form 8-K dated December 16, 2008
*10.5	Clearfield, Inc. Code 280G Tax Gross Up Payment Plan Adopted November 18, 2010	Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 18, 2010
10.6	Clearfield, Inc. 2010 Employee Stock Purchase Plan	Appendix A to the Registrant's Proxy Statement filed with the SEC on January 26, 2010 for the 2010 Annual Meeting of Shareholders held on February 25, 2010
10.7	Standard Form Industrial Building Lease dated September 9, 2014 by and between Clearfield, Inc. and First Industrial, L.P.	Exhibit 10.1 to Registrant's Current Report on Form 8-K dated September 10, 2014

10.8	First Amendment to Lease Agreement dated May 9, 2019 by and between First Industrial, L.P. and Clearfield, Inc.	Exhibit 10.1 to Registrant's Current Report on Form 8-K dated May 15, 2019
*10.9	Employment Agreement dated November 16, 2017 by and between Clearfield, Inc. and Daniel Herzog	Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 16, 2017
23.1	Consent of Baker Tilly Virchow Krause, LLP	**
31.1	Certification of Chief Executive Officer (principal executive officer) Pursuant to Rules 13a-14(a) and 15d-14(a) of the Exchange Act	**
31.2	Certification of Chief Financial Officer (principal financial officer) Pursuant to Rules 13a-14(a) and 15d-14(a) of the Exchange Act	**
32	Certification of Chief Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. § 1350	**
101.INS	XBRL Instance Document	**
101.SCH	XBRL Taxonomy Extension Schema	**
101.CAL	XBRL Taxonomy Calculation Linkbase	**
101.LAB	XBRL Taxonomy Labels Linkbase	**
101.PRE	XBRL Taxonomy Presentation Linkbase	**
101.DEF	XBRL Taxonomy Definition Linkbase	**

* Indicates a management contract or compensatory plan or arrangement.

** Filed herewith.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Clearfield, Inc.

Date: November 15, 2019

/s/ Cheryl Beranek
Cheryl Beranek
President and Chief Executive Officer

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 dates indicated.

Each person whose signature appears below hereby constitutes and appoints Cheryl Beranek and Daniel Herzog and each of them, as his true and lawful attorney-in-fact and agent, with full power of substitution, to sign on his behalf, individually and in each capacity stated below, all amendments to this Form 10-K and to file the same, with all exhibits thereto and any other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully and to all intents and purposes as each might or could do in person, hereby ratifying and confirming each act that said attorneys-in-fact and agents may lawfully do or cause to be done by virtue thereof.

Signatures	Title	Date
/s/ Cheryl Beranek Cheryl Beranek	President, Chief Executive Officer (principal executive officer) and Director	November 15, 2019
/s/ Daniel Herzog Daniel Herzog	Chief Financial Officer (principal financial and accounting officer)	November 15, 2019
/s/ Ronald G. Roth Ronald G. Roth	Director	November 15, 2019
/s/ Roger G. Harding Roger G. Harding	Director	November 15, 2019
/s/ Donald R. Hayward Donald R. Hayward	Director	November 15, 2019
/s/ Charles N. Hayssen Charles N. Hayssen	Director	November 15, 2019
/s/ Patrick F. Goepel Patrick F. Goepel	Director	November 15, 2019

Exhibit 4.1

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

Clearfield, Inc. ("Clearfield," "we," "our," or "us") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock.

DESCRIPTION OF CAPITAL STOCK

The following summary of the general terms and provisions of our capital stock does not purport to be complete and is based upon and qualified by reference to our articles of incorporation and bylaws, which are filed as exhibits to our Annual Report on Form 10-K and are incorporated by reference herein. We encourage you to read our articles of incorporation, our bylaws and the applicable provisions of the Minnesota Business Corporation Act, or MBCA, for additional information.

Authorized Shares of Capital Stock

The aggregate number of shares of capital stock that the Company has authority to issue is 55,000,000 shares, which consists of 50,000,000 shares of common stock, par value $0.01, and 5,000,000 undesignated shares, par value $0.01 per share.

Common Stock

Holders of the Company's common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the shareholders and do not have cumulative voting rights. Except as otherwise provided by law, our articles of incorporation or our bylaws, matters will generally be decided by the vote of the holders of a majority of the voting power present in person or represented by proxy. Our bylaws provide that the authorized number of directors shall be fixed from time to time by a resolution of the board of directors. Our board of directors is not classified.

Holders of our common stock are entitled to receive dividends declared by our board of directors out of funds legally available for the payment of dividends, subject to the rights, if any, of preferred shareholders. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and the liquidation preferences of outstanding shares of preferred stock, if any.

Holders of common stock have no preemptive, conversion or subscription rights, and there are no redemption provisions applicable to the common stock.

All outstanding shares of our common stock are fully paid and non-assessable.

The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

The transfer agent and registrar for our common stock is Equiniti Trust Company.

Our common stock is currently listed on The NASDAQ Stock Market LLC under the trading symbol "CLFD."

Preferred Stock

From the 5,000,000 undesignated shares of capital stock, 500 shares have been designated as 2% Series A Convertible Preferred Stock and 500,000 shares have been designated as Series B Junior Participating Preferred Shares. On July 18, 2000, the Company redeemed all 500 authorized and then issued shares of the 2% Series A Convertible Preferred Stock. The shares of 2% Series A Convertible Preferred Stock redeemed were cancelled and may not be reissued. No shares of Series B Junior Participating Preferred Shares are outstanding. The Series B Junior Participating Preferred Shares are summarized below under "Anti-Takeover Effects of Provisions of our Articles of Incorporation, our Bylaws and Minnesota Law."

Under Clearfield's articles of incorporation, our board of directors may, from time to time, establish by resolution from the undesignated shares different classes or series of shares and may fix the relative rights and preferences of said shares in any class or series. The Company's board of directors has further authority to issue shares of the common stock to the holders of shares of the common stock and to the holder of any class or series of the undesignated shares and it may issue shares of any class or series of the undesignated shares to the holders of shares of the common stock and to the holder of any class or series of the undesignated shares, in any case, for any purpose.

Anti-Takeover Effects of Provisions of our Articles of Incorporation, our Bylaws and Minnesota Law

Certain provisions of Minnesota law, our articles of incorporation and our bylaws may be deemed to have an anti-takeover effect.

Series B Junior Participating Preferred Shares

On November 3, 2000, our board of directors adopted resolutions creating a series of preferred stock, par value $0.01 per share, designated as the Series B Junior Participating Preferred Shares and authorizing 500,000 shares as constituting the Series B Junior Participating Preferred Shares. The Series B Junior Participating Preferred Shares were created in connection with our shareholder rights plan which expired on November 13, 2010.

Under the shareholder rights plan when it was in effect, if any person or group (the "Acquiring Person") became the beneficial owner of 15% or more of our outstanding common stock, all other holders of our common stock would be entitled to purchase from us 1/100 of a Series B Junior Participating Preferred Share at a price of $80 per 1/100 of a Preferred Share, subject to adjustment. In the event that any person or group became an Acquiring Person, each holder of this Preferred Share purchase right, other than rights that are or were beneficially owned by the Acquiring Person (which would thereafter be void), would thereafter have the right to receive, upon exercise thereof at the then current exercise price of the right, that number of shares of our common stock having a market value of two times the exercise price of the right. The effect of the shareholder rights plan was to dilute the Acquiring Person thereby making the cost of abusive unsolicited takeover practices prohibitive and create an incentive for a potential acquiror to negotiate in good faith with our board of directors.

Although the shareholder rights plan expired on November 13, 2010, our board of directors has the right to reinstate the shareholder rights plan or adopt a new shareholder rights plan without shareholder approval.

The resolutions creating the Series B Junior Participating Preferred Shares provide that the holders of Series B Junior Participating Preferred Shares are entitled, in preference to holders of common stock, to quarterly dividends when, if and as declared by our board of directors in an amount equal to the greater of $1 per share or 100 times the dividend declared per share of common stock whenever such dividend is declared. In the event of liquidation, the holders of Series B Junior Participating Preferred Shares will be entitled to the greater of a minimum preferential liquidation payment of $100 per share or aggregate payment of 100 times the payment made per share of common stock. Each Series B Junior Participating Preferred Share will have 100 votes, voting together with common stock. In the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each Series B Junior Participating Preferred Share will be entitled to receive 100 times the amount received per share of common stock. These rights will be protected by customary anti-dilution provisions. Series B Junior Participating Preferred Shares are not redeemable.

Designation of Capital Stock

The ability of our board of directors to designate classes or series of stock from our authorized stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Shareholder Meetings

Under our bylaws, annual meetings of our shareholders may be called only by our board of directors.

Under our bylaws, special meetings of our shareholders may be held at any time and for any purpose and may be called by the chief executive officer, chief financial officer, any two directors, or by a shareholder or shareholders holding 10% or more of the voting power of all shares entitled to vote on the matters to be presented to the meeting, except that a special meeting for the purpose of considering any action to directly or indirectly effect a business combination, including any action to change or otherwise affect the composition of the board of directors for that purpose, must be called by 25% or more of the voting power of all shares entitled to vote.

Requirements for Advance Notification of Shareholder Nominations and Proposals

Nominations for election to our board of directors may be made by the board of directors or a committee appointed by the board of directors or by any shareholder entitled to vote generally in the election of directors who follows the advance notice procedures described in Section 2. 14-a of our bylaws. In general, a shareholder must submit a written notice of the nomination to our principal executive office not less than 90 days nor more than 120 days prior to the first anniversary of the date on which we first mailed our proxy materials for the preceding year's annual meeting of shareholders, together with required information regarding the shareholder and each person the shareholder proposes to nominate.

Shareholders can propose business, other than nominations to our board of directors, to be considered at an annual meeting of shareholders only if a shareholder follows the advance notice procedures described in Section 2. 14-b of our bylaws. In general, a shareholder must submit a written notice of the proposal together with required information regarding the shareholder and the shareholder's interest in the proposal to our corporate secretary not less than 90 days nor more than 120 days prior to the first anniversary of the date on which we first mailed our proxy materials for the preceding year's annual meeting of shareholders.

Unanimous Shareholder Action in Writing

Our bylaws permit shareholders to take any action that might be taken at a meeting of the shareholders by written action, but only if it is signed by all of the shareholders entitled to vote on that action.

Provisions of Minnesota Law

The following provisions of the MBCA may have an effect of delaying, deterring or preventing an unsolicited takeover of the Company or make an unsolicited takeover of the Company more difficult.

In general, Section 302A.553 of the MBCA prohibits a publicly held corporation, such as Clearfield, from purchasing shares entitled to vote for more than market value from a person that beneficially owns more than 5% of the voting power of the corporation if the shares have been beneficially owned for less than two years unless the purchase or agreement to purchase is approved at a meeting of shareholders by the affirmative vote of the holders of a majority of the voting power of all shares entitled to vote or the corporation makes an offer, of at least equal value per share, to all shareholders for all other shares of that class or series and any other class or series into which they may be converted.

In general, Section 302A.671 of the MBCA provides that shares of an "issuing public corporation," such as Clearfield, acquired by an "acquiring person" in a "control share acquisition" that exceed the threshold of voting power of any of the three ranges identified below will not have voting rights, unless the issuing public company's shareholders vote to accord such shares the voting rights normally associated with such shares. A "control share acquisition" is an acquisition, directly or indirectly, by an "acquiring person" (as defined in the MBCA) of beneficial ownership of shares of an issuing public corporation that, but for Section 302A.671, would, when added to all other shares of the issuing public corporation beneficially owned by the acquiring person, entitle the acquiring person, immediately after the acquisition, to exercise or direct the exercise of a new range of voting power of the issuing public corporation with any of the following three ranges: (i) at least 20 percent but less than 33-1/3 percent; (ii) at least 33-1/3 percent but less than or equal to 50 percent; and (iii) over 50 percent. The issuing public company also has an option to call for redemption all, but not less than all, shares acquired in the control share acquisition that exceed the threshold of voting power of any of the specified ranges at a price equal to the fair market value of the shares at the time the call is given if (i) the acquiring person fails to deliver the information statement to the issuing public company by the tenth day after the control share acquisition; or (ii) shareholders have voted not to accord voting rights to the shares acquired in the control share acquisition.

In general, Section 302A.673 of the MBCA prohibits a public Minnesota corporation, such as Clearfield, from engaging in a business combination with an interested shareholder for a period of four years after the date of the transaction in which the person became an interested shareholder, unless either the business combination or the acquisition by which such person becomes an interested shareholder is approved in a prescribed manner before the person became an interested shareholder. The term "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested shareholder. An "interested shareholder" is a person who is the beneficial owner, directly or indirectly, of 10% or more of a corporation's voting stock, or who is an affiliate or associate of the corporation, and who, at any time within four years before the date in question, was the beneficial owner, directly or indirectly, of 10% or more of the corporation's outstanding voting stock.

If a takeover offer is made for our stock, Section 302A.675 of the MBCA precludes the offeror from acquiring additional shares of stock (including in acquisitions pursuant to mergers, consolidations or statutory share exchanges) within two years following the completion of the takeover offer, unless shareholders selling their shares in the later acquisition are given the opportunity to sell their shares on terms that are substantially the same as those contained in the earlier takeover offer. A "takeover offer" is a tender offer which results in an offeror who owned ten percent or less of a class of our shares acquiring more than ten percent of that class, or which results in the offeror increasing its beneficial ownership of a class of our shares by more than ten percent of the class, if the offeror owned ten percent or more of the class before the takeover offer. Section 302A.675 does not apply if a committee of our board of directors formed in accordance with Section 302A.675 approves the proposed acquisition before any shares are acquired pursuant to the earlier tender offer.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-8 (File No. 333-44500, File No. 333-136828, File No. 333-151504, File No. 333-166495, File No. 333-173793 and File No. 333-217652) of Clearfield, Inc. of our report dated November 15, 2019, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this annual report on Form 10-K for the year ended September 30, 2019.

/s/ Baker Tilly Virchow Krause, LLP

Minneapolis, Minnesota
November 15, 2019

Exhibit 31.1

CERTIFICATION

I, Cheryl Beranek, certify that:

1. I have reviewed this annual report on Form 10-K of Clearfield, Inc.;

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

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 controls 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 controls over financial reporting.

November 15, 2019

/s/ Cheryl Beranek
Cheryl Beranek
Chief Executive Officer
(Principal executive officer)

Exhibit 31.2

CERTIFICATION

I, Daniel Herzog, certify that:

1. I have reviewed this annual report on Form 10-K of Clearfield, Inc.;

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

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 controls 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 controls over financial reporting.

November 15, 2019

/s/ Daniel Herzog
Daniel Herzog
Chief Financial Officer
(Principal financial and accounting officer)

Exhibit 32

CERTIFICATION

The undersigned certifies pursuant to 18 U.S.C. Section 1350 that:

1. The accompanying Annual Report on Form 10-K for Clearfield, Inc. (the "Company") for the period ended September 30, 2019 fully complies with the requirements of Sections 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.

Date: November 15, 2019

/s/ Cheryl Beranek
Cheryl Beranek
Chief Executive Officer

/s/ Daniel Herzog
Daniel Herzog
Chief Financial Officer