Risk Factors Comparison 2023-11-29 to 2022-11-23 Form: 10-K

Legend: **New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

Risks Relating to Our Operations ~~The COVID- 19 pandemic has significantly impacted worldwide economic conditions and could have a material adverse effect on our business, financial condition and operating results. As a result of the COVID- 19 pandemic, governmental authorities have implemented and are continuing to implement numerous and constantly evolving measures to try to contain the virus, such as travel bans and restrictions, limits on gatherings, quarantines, shelter- in- place orders, and business shutdowns. We have manufacturing operations in the U. S. and Mexico that have been affected by the outbreak and we have taken measures to try to contain it. Measures providing for business shutdowns generally exclude certain essential services, and those essential services commonly include critical infrastructure and the businesses that support that critical infrastructure. While our facilities currently remain operational, these measures have impacted and may further impact our workforce and operations, as well as those of our customers and suppliers. The constraints and limits imposed on our operations may slow or diminish our product development activities and qualification activities with our customers. Although many governmental measures have had specific expiration dates, some of those measures have already been extended more than once; as a result, there is considerable uncertainty regarding the duration of such measures and potential future measures. Restrictions on our manufacturing, support operations or workforce, or similar limitations for our suppliers, could limit our ability to meet customer demand and could have a material adverse effect on our financial condition and results of operations. Furthermore, restrictions or disruptions of transportation, such as reduced availability of air transport, port closures and increased border controls or closures, resulting in higher costs and delays, which could harm our profitability, make our products less competitive, or cause our customers to seek alternative suppliers. In response to these developments, we have modified our business practices, including restricting employee travel, modifying employee work locations, implementing social distancing and enhanced sanitary measures in our facilities, and cancelling attendance at industry events and conferences. Many of our customers, suppliers, and service providers have made similar modifications. The resources available to employees working remotely may not enable them to maintain the same level of productivity and efficiency, particularly our sales employees whose in- person access to our customers and customer prospects has been significantly limited. While we have experienced only limited absenteeism from those employees who are required to be on- site to perform their jobs, absenteeism may increase in the future and may harm our productivity. Further, our increased reliance on remote access to our information systems increases our exposure to potential cybersecurity breaches. We may take further actions as government authorities require or recommend or as we determine to be in the best interests of our employees, customers, partners and suppliers. There is no certainty that such measures will be sufficient to mitigate the risks posed by COVID- 19, in which case our ability to continue operations may be significantly negatively impacted, and we may be required to temporarily suspend our operations in the U. S., Mexico or Finland. The resumption of normal business operations after such interruptions may be delayed or constrained by lingering effects of COVID- 19 on our suppliers, third- party service providers, and / or customers. In addition, government funding programs such as the CARES Act, which was enacted in response to the COVID- 19 pandemic, provides grant money for customers that deploy products by certain calendar dates. The Company has increased its inventory to respond to increased demand related to this program. If the program ends or is not extended, we could see a decrease in orders which may result in decreasing customer purchasing patterns. If the programs are extended by governments, we may not be able to predict increases and decreased in customer purchasing patterns. The degree to which COVID- 19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the virus and address its impact, and how quickly and to what extent normal economic and operating conditions can resume.~~ Inflationary price pressures and uncertain availability of components, raw materials, labor and logistics used by us **,** and our suppliers could negatively impact our profitability. Increases in the price of raw materials, labor and other components utilized in the production of our products, along with logistics and other related costs, may lead to higher production and shipping costs for our products. Additionally, increasing global demand for, and uncertain supply of, such materials could disrupt our ability to obtain such materials in a timely manner to meet our supply needs and could lead to increased costs. An increase in the cost of inputs needed to produce our products could lead to higher costs and could negatively impact our results of operation, future profitability **,** and ability to meet customer demand. Passing along these increased prices to our customers to offset the impact of higher costs ~~,~~ may cause certain customers to cancel, push out, or refrain from purchasing our products, which could negatively impact demand for our products, and therefore also negatively impact our results of operations and future profitability. 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~~ **most of** these increased costs **on** 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 U. S. 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 these items 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. An increasing ~~amount~~ **number** of products manufactured by the Company are produced outside the U. S., including in our Mexico facilities. The Company’ s manufacturing facilities in Mexico are authorized to operate as Maquiladoras by the Ministry of Economy of Mexico. Maquiladora status allows the Company to import certain items from the U. S. into Mexico duty- free, provided that such items, after processing, are exported from Mexico within a stipulated time frame. Maquiladora status, which is renewed periodically, is subject to various restrictions and requirements, including compliance with the terms of the Maquiladora program and other local regulations. Failure to comply with these regulations or other disruptions within the program could adversely affect the Company’ s financial position, results of operations, and cash flows. ~~Due to COVID- 19, the Company has increased its safety stock of inventory at multiple facilities in order to be able to manufacture it products to increased levels in the case there is a shut down or short- term disruptions at any of its production facilities. As a result, the Company has increased inventory of high run rate components to meet increased orders for fiber optic products. Should ordering patterns decline in the short term for any reason, the Company may have excess inventory.~~ We depend on the availability of sufficient supply of certain materials ~~and~~ **.** ~~global~~ **Global** disruptions in the supply chain for these materials could prevent us from meeting customer demand for our products. We **purchase critical components for our products, including injected molded parts, various cabling, optical components, components for active cabinets, and connectors from third parties, some of whom are single- or limited-source suppliers. We** depend on the ability of these third- party suppliers to secure a sufficient supply of raw materials and maintain sufficient manufacturing and shipping capacity. The global supply chain for raw materials critical to our products ~~, such as resin used to manufacture plastics and fiber optic cable, recently~~ has **in the past, and may again in the future,** ~~suffered~~ -- **suffer** shortages, shipping delays and shipping shortages. This ~~has~~ **may** ~~led~~ **lead** some manufacturers who depend on these raw materials to experience shortages, delivery delays and price increases for both the raw materials and shipping, with the corresponding consequence that these manufacturers may be delayed in delivering products to **us** ~~their customers~~ or may charge higher prices for these products, or there may be increased shipping costs associated with the products. Some manufacturers ~~have~~ **may also** ~~allocated~~ -- **allocate** short supply **of products** among **Clearfield and** their **other** customers. **Increased** ~~Additionally, the COVID- 19 pandemic has driven~~ demand for ~~certain goods that have exacerbated these disruptions as supply has not kept pace with demand. We believe these global supply chain issues will persist and will likely intensify into the future due to the complex and compounding problems associated with shortages of personnel due to the COVID- 19 pandemic, backlogs at ports, shortages of shipping containers, extreme weather events, and other logistical issues. In fiscal 2022,~~ the Company **’ s** ~~has experienced and expects to continue to experience increased demand for its~~ products from its customers ~~,~~ ~~putting~~ **may put** pressure on the Company’ s supply chain ~~to meet demand amidst~~ **, particularly during periods of disruption in** ~~these~~ -- **the** global **supply chain and may lead to** ~~issues. While we have not experienced significant~~ increases in costs or delays in obtaining the materials and components for our products from our suppliers ~~, we cannot assure you that we will not experience these costs or delays in the future~~ . The Company’ s ability to recognize revenue in the future for customer orders will depend on our ability to manufacture and deliver products to the customers and fulfill other contractual obligations. Our ability to meet ~~expected~~ future customer demand for our products will in turn depend upon our suppliers receiving timely and adequate ~~supply~~ **supplies** of raw materials to be able to produce the critical materials and components they supply to us. Although we place a high value on long- term relationships with our suppliers, generally we do not have long- term supply contracts but instead conduct business on an order- by- order basis. Therefore, we also compete with other companies for the production capacity of manufacturers of the materials and components we need for our products. We also are exposed to potentially increasing costs associated with the materials and components we purchase from suppliers or increased costs associated with shipping generally. We may attempt to mitigate the effect of increases in our cost of goods sold through sourcing or stocking initiatives and by selectively increasing the prices of our products. However, we may be unable to fully pass on these costs to our customers. Long lead times for certain components **and changes in** ~~, as detailed above, along with increased~~ demand for our products may impact our ability to accurately forecast our production requirements. As a result, certain component inventory purchases may become excess or obsolete, which could have an adverse effect on our financial condition and results of operations. The reduction of available production capacity among our suppliers, their failures to meet production deadlines or increases to us in their manufacturing or shipping costs may impact our ability to deliver quality products to our customers on a timely basis, make our products less competitive due to extended delivery times or increased price, negatively impact our customer or distributor relationships, and result in lower net sales and profit. Any delays or inabilities in meeting customer required shipping dates may also expose us to order cancellations in our sales **order** backlog by customers, which could have an adverse effect on our results of operations. ~~We rely on our manufacturing operations to produce product to ship to customers. Manufacturing constraints and disruptions could result in decreased future revenue. We currently manufacture our products at our manufacturing facilities in Brooklyn Park, Minnesota, Tijuana, Mexico, Oulu, Finland and Keila, Estonia. We also rely on our network of suppliers and subcontractors that supply these facilities. Disruption affecting our manufacturing operations, subcontractors, or in the transportation of components to these facilities could significantly impact our ability to ship products to our customers. Any significant interruption in manufacturing or supply availability, including natural disasters, transportation delays and disruptions, pandemics, social unrest, labor shortages or competition for components, would require us to reduce our product supply to customers, which would result in lost or delayed revenue and negatively impact our relationships with customers.~~ 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 could adversely affect us. Our customer base includes direct customers, OEMs **,** and distributors **. For fiscal year 2023, the Company had one customer that comprised 16 % of net sales** . For fiscal year 2022, the Company had one customer that comprised 14 % of net sales ~~. For~~ **, and for** fiscal ~~years~~ - **year** 2021 ~~and 2020,~~ the Company had two customers that comprised **a combined** 28 % **,** ~~and 30 %~~ of net sales ~~, respectively~~ . These customers are all 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 by the Company 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 of orders received from any of our customers in our sales backlog 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 **mergers or** acquisitions may also reduce their purchases of equipment during the integration period ~~,~~ or postpone or cancel orders. The impact of significant mergers **and acquisitions** 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 **company** ~~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 **successfully identify and properly value suitable acquisition candidates, negotiate appropriate acquisition terms, obtain financing at a reasonable cost, prevail against competing acquirers, complete the acquisitions, and** integrate the **acquired businesses into** ~~new products or operations with~~ our existing **business** ~~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 . We have exposure to movements in...... successfully integrate Nestor within our anticipated timeframe . If we are unable to complete acquisitions or successfully integrate and develop acquired businesses, our financial results could be materially and adversely affected. The risks inherent in pursuing or completing an acquisition include: ● diversion of management' s **time and** attention **away** from existing business activities; ● difficulties or delays in integrating and assimilating information and financial systems, operations and products of an acquired business or other business venture or in realizing projected efficiencies, growth prospects, cost savings and synergies; ● potential difficulties in managing our expanded **operations and, in the case of** international ~~operations and, in the case of the Nestor acquisition~~ **acquisitions** , potential difficulties in managing ~~our~~ non- U. S. subsidiaries, including the burden and cost of complying with a variety of international laws; ● potential loss of key employees, customers and suppliers of the acquired businesses or adverse effects on relationships with existing customers and suppliers; ● adverse impact on overall profitability if the acquired business does not achieve the return on investment projected at the time of acquisition; ● currency translations and fluctuations may adversely affect the financial performance of our consolidated operations; and ● with respect to the acquired assets and liabilities, inaccurate assessment of additional post- acquisition capital investments; undisclosed, contingent **,** or other liabilities; problems executing backlog of material supply or installation projects; unanticipated costs; and an inability to recover or manage such liabilities and costs. These risks associated with acquisition, integration of acquired businesses and management of our expanded ~~international~~

operations may have a material adverse effect on our sales, financial condition, and results of operations .We have exposure to movements in foreign currency exchange rates **.** Nestor ~~Cable~~ **Cables '** ~~' s~~ functional currency is the Euro **,** which is translated to the Company' s reporting currency of the U.S.dollar.Fluctuations in exchange rates between the Euro and U.S.dollar may impact our results of operations,financial position and cashflows.The Company expects to continue to experience fluctuations in the **value of the** U.S.dollar **against** ~~value of these~~ -- **the** ~~activities~~ **Euro and other currencies** if it is not possible,cost- effective or should we not elect to hedge certain currency exposure.These factors,which are variable and generally outside of our control,could materially impact our results of operations,anticipated future results,financial position **,** and cash flows ~~.If we are unable to integrate~~ . Adverse global economic conditions and geopolitical issues could have a negative effect on our business, and results of operations and financial condition. Our business, including global supply chain **,** is affected by global economic conditions and geopolitical issues. Geopolitical issues, such as the ~~Russia~~ **Russian** invasion of Ukraine and related economic sanctions and tensions between Russia and NATO countries, has resulted in increasing global tensions, rising ~~fuel~~ **energy** costs and creates uncertainty for our global supply chain. Sustained or worsening ~~of~~ global economic conditions and geopolitical issues may disrupt or increase our cost of doing business and otherwise disrupt and delay our supply chain operations. These factors could negatively affect the cost and supply of components needed for our products, our ability to ship products to customers and ultimately impact our business, financial condition **,** and result of operations. ~~Our planned growth~~ **Growth** may strain our business infrastructure, which could adversely affect our operations and financial condition. ~~Net sales for fiscal year 2022 increased 92 % as compared to net sales in fiscal year 2021. In fiscal year 2023, we expect to experience additional significant net sales growth as compared to fiscal year 2022.~~ As we grow, we will face the risk that our existing resources and systems, including management resources, enterprise technology and operating systems, may be inadequate to support our growth. ~~We cannot~~ **There can be no** ~~assure~~ **assurance** ~~you~~ that we will be able to retain the personnel or make the changes in our systems that may be required to support our growth. Failure to secure these resources and implement these systems on a timely basis could have a material adverse effect on our operating results. In addition, hiring additional personnel and implementing changes and enhancements to our systems will require capital expenditures and other increased costs that could also have a material adverse impact on our operating results. Product defects or the failure of our products to meet specifications **or domestic content requirements** 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. **In addition, certain of our products will be required to meet Build America, Buy America (BABA) Act domestic content requirements to enable certain customers to qualify for grant funding under the Broadband Equity, Access, and Deployment (BEAD) program. Any failure of such products to meet BABA domestic content requirements would result in those products being ineligible for purchase and use by certain customers under the BEAD program, and could result in lost sales, lost business opportunity, breach of warranty claims, and damage to our reputation and customer relationships.** 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 **, develop** and retain skilled personnel could hinder the management **and growth** 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 P. 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, **develop,** retain, and motivate highly qualified managerial, technical and sales personnel. Our inability to **attract, develop and** retain ~~or attract~~ qualified personnel could have a significant negative effect and thereby materially harm our business and financial condition. Cyber- security incidents ~~on our information technology systems~~ , including ransomware, data breaches or computer viruses, could disrupt our business operations, damage our reputation, **result in increased expense** and potentially lead to ~~litigation~~ **legal proceedings** . Cybersecurity threats continue to expand and evolve, making it difficult to detect and prevent such threats from impacting the Company. While we monitor our networks and continue to enhance our network security measures ~~, particularly as we transitioned to some remote work~~ , cyber- attacks have increased in frequency and sophistication, and our efforts may not be adequate to prevent all cybersecurity incidents. Cybersecurity threats to the Company could lead to unauthorized access to the Company' s information technology systems, customers, suppliers, and third- party service providers. Cybersecurity incidents could potentially result in the disruption of our business operations and / or the theft, destruction, publication, or corruption of critical data and confidential or proprietary information. Cybersecurity events could also result in the Company being unable to access critical data in a timely manner, or at all. Cybersecurity incidents could also result from unauthorized parties gaining access to our systems or information through fraudulent or other means of deceiving our employees, suppliers, customers, or third- party service providers. Despite the Company' s implementation of preventative security measures and controls to prevent, detect, and mitigate these threats, our infrastructure may still be susceptible to disruptions from cybersecurity incidents including ransomware attacks, security breaches, computer viruses, outages, **and** systems failures, any of which could include the inability to access critical data, reputational damage, loss of our intellectual property, release of highly sensitive confidential information, litigation with third parties and / or governmental investigations and fines, which could have a material adverse effect on our financial condition and results of operations. Additionally, as cybersecurity threats continue to evolve, we may be required to devote additional resources to continue to enhance our information security measures and controls to mitigate these new and emerging threats. Our business is dependent on interdependent management information systems. 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 **are in the process of consolidating several of these solutions and systems into one integrated ERP system for our North American operations. Failure to successfully consolidate and integrate these solutions and systems could result in disruptions to our operations and adversely impact our business. Failure or abandonment of all or any part of the ERP system consolidation and integration project could result in a write- off of all or part of the costs that have been capitalized in connection with the project, which may negatively impact our financial results. 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 **. Natural disasters, extreme weather conditions or other catastrophic events could negatively affect our business, financial condition, and operating results. Natural disasters, extreme weather events and other catastrophic events such as flooding, tornadoes, hurricanes, unusually heavy precipitation, earthquakes, tsunamis, fires, explosions, acts of war, terrorism, civil unrest, or pandemics could increase the cost of doing business or otherwise harm our operations, our suppliers and our customers. Such events could reduce demand for our products or make it difficult or impossible for us to receive raw materials from suppliers and deliver products to our customers. Pandemics and other health crises, including COVID- 19, could have a material adverse effect on our business, financial condition, and operating results. Pandemics and other health crises, including COVID-19, and governmental, business, and societal responses to pandemics or other health crises, have had, and in the future may have, an adverse effect on our operations, work force, supply chains, distribution channels, and customers. Constraints and limits imposed on our operations due to pandemics or other health crises may slow or diminish our sales and marketing programs, product development activities and qualification activities with our customers. Restrictions on our manufacturing, support operations or workforce, or similar limitations for our suppliers, could limit our ability to meet customer demand. Restrictions or disruptions of transportation, such as reduced availability of air transport, port closures and increased border controls or closures, resulting in higher costs and delays, could harm our profitability, make our products less competitive, or cause our customers to seek alternative suppliers. Employee health, availability, productivity, and efficiency may be adversely impacted. The degree to which pandemics and other health crises impact our results will depend on numerous factors and future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the pandemic and address its impact, and how quickly and to what extent normal economic and operating conditions can resume** . Risks Relating to Our Markets and Industry 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 continue to expand, 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 ~~rapidly due to the pandemic~~ , 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, ~~including the impact of the current global effects due to COVID- 19,~~ (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~~ **(4) excess product inventory in the marketplace, (5) lack** of ~~which have occurred even during periods of relatively high~~ **available skilled labor to install product; and (6) delays in the permitting process for fiber optic** network **installations** ~~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. Changes in U. S. government funding programs may cause our customers and prospective customers to delay, reduce, or accelerate purchases, leading to unpredictable and irregular purchase cycles. 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 (RDOF), which will provide a capital expenditure subsidy for the support **of** high- speed broadband networks in rural America **, and the Broadband Equity, Access and Deployment (BEAD) program, among others, which will provide funding for broadband deployment, mapping and adoption projects in unserved and underserved areas in the United States, its territories, and the District of Columbia** , 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~~ **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. **Moreover** ~~In addition~~ , **disruptions at U. S.** government ~~funding~~ **agencies responsible for implementing broadband** programs ~~such~~ **and subsidies, including** as **a result of government shutdowns or pandemics like** ~~the CARES Act, which was enacted in March 2020 in response to the~~ COVID- 19 ~~pandemic~~ , ~~provides grants to~~ **may also delay the availability of subsidies or implementation of programs affecting** our customers ~~and prospective customers for deploying improved broadband connections to unserved and underserved areas of the United States provided they are deployed by specific calendar deadlines~~ , which may **adversely affect our business** ~~cause customers and prospective customers to accelerate their purchases for their long term network deployment plans into a shorter timeframe~~ . 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 **production capacity and** operating expenses. ~~We cannot~~ **There can be no** ~~assure~~ **assurance** ~~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, increased discounts to customers, and loss of market share **, which** could require increased spending by us on research and development, sales and marketing, and customer support. Our success depends upon adequate protection of our patent and **other** 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 **necessary** 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~~ **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 **any settlement or** 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. 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 **manage our international**

operations and 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 **legal and** 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 **, and a complex system of commercial and trade laws, regulations, and policies, including those related to data privacy, trade compliance, anti- corruption, and anti- bribery** . Currency fluctuations may also increase the **cost of our international operations and 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 **operations or** sales **. Expectations relating to environmental, social and governance matters may increase our cost of doing business and expose us to reputational harm and potential liability. Many regulators, investors, employees, vendors, customers, community members and other stakeholders are increasingly focused on environmental, social and governance matters relating to businesses, including climate change, greenhouse gas emissions, human capital, civil rights, and diversity, equity, and inclusion. We may make public statements about various environmental, social and governance matters and initiatives from time to time through our website, press releases and other communications. Addressing stakeholder expectations relating to environmental, social and governance matters requires an investment of time, money and other resources, and depends in part on third-party performance or data that is outside of our control, any, or all of which may increase our cost of doing business. In addition, as investor and other stakeholder expectations relating to environmental, social and governance matters change and evolve over time, any failure or perceived failure by us to adequately address those expectations may damage our reputation and adversely affect our business and results of operations. Similarly, public statements we make about environmental, social and governance matters and initiatives may result in increased scrutiny by our stakeholders and require additional attention relating to these issues. Federal, state or international government bodies or agencies have in the past adopted, and may in the future adopt, laws and regulations relating to environmental, social or governance matters. These laws or regulations could require us to modify our business practices to comply and could result in increased costs. Additionally, any failure to comply with federal, state, or international environmental, social and governance laws and regulations, could adversely affect our business and results of operations** . Risks Relating to Our Common Stock 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~~ **programs** 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; ● **seasonal trends in the industries we serve; ●** market acceptance of new and enhanced versions of our products and services, including the impact of government ~~regulations~~ **programs** on customers purchasing decisions; ● variations in the mix of products and services we sell; ● the utilization of our production capacity and employees, including foreign operations; ● 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 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 **industry and** 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. Anti- takeover provisions in our organizational documents, Minnesota law and other agreements could prevent or delay a change in control of our ~~company~~ **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~~ **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 equity compensation 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.