UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 10-Q

(Zip Code)

(Mark one) (X) QUARTERLY REPORT PURSUANT TO SECTION 1 THE SECURITIES EXCHANGE ACT	` '
FOR THE QUARTERLY PERIOD ENDED JANUARY 31, 1	999
OR	
() TRANSITION REPORT PURSUANT TO SECTION: THE SECURITIES EXCHANGE ACT	` '
FOR THE TRANSITION PERIOD FROM	T0
COMMISSION FILE NUMBER: 0-21969	
CIENA CORPOR (Exact name of registrant as sp	
DELAWARE (State or other jurisdiction of (I.) incorporation or organization)	23-2725311 R.S. Employer Identification No.)
1201 WINTERSON ROAD, LINTHICUM, MD	21090

(410) 865-8500

(Address of Principal Executive Offices)

(Registrant's telephone number, including area code)

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

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

OUTSTANDING AT FEBRUARY 18, 1999 CLASS -----103,381,736 Common stock. \$.01 par value

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ITEM 1. FINANCIAL STATEMENTS

CIENA CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS (IN THOUSANDS, EXCEPT PER SHARE DATA) (UNAUDITED)

	Quarter ended January 31,	
	1998	1999
Revenue Cost of goods sold	\$ 145,092 58,980	\$ 100,417 65,778
Gross profit	86,112	34,639
Operating expenses: Research and development	10,203 9,968 3,792 23,963	17,416 12,568 4,261 34,245
Income from operations	62,149	394
Interest and other income (expense), net	3,775	3,117
Interest expense	(84)	(58)
Income before income taxes	65,840	3,453
Provision for income taxes	26,142	1,191
Net income	\$ 39,698 ======	\$ 2,262 ======
Basic net income per common share	\$ 0.39 =====	\$ 0.02 =====
Diluted net income per common share and dilutive potential common share	\$ 0.37 =====	\$ 0.02 =====
Weighted average basic common shares outstanding	100,641 ======	103,292 ======
Weighted average basic common and dilutive potential common shares outstanding	107,552 ======	107,826 ======

CONSOLIDATED BALANCE SHEETS (IN THOUSANDS, EXCEPT SHARE DATA)

	October 31, 1998	January 31, 1999
ASSETS		
Current assets: Cash and cash equivalents Marketable debt securities Accounts receivable, net Inventories, net Deferred income taxes Prepaid income taxes Prepaid expenses and other	\$ 227,397 15,993 85,472 70,908 15,301 8,558 4,415	\$ 194,683 89,702 80,257 58,571 11,525
Total current assets Equipment, furniture and fixtures, net Goodwill and other intangible assets, net Other assets Total assets	428,044 123,405 16,270 4,705 \$ 572,424	444,364 124,317 15,361 4,644 588,686
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities: Accounts payable	\$ 25,686 34,328 - 1,084 838	\$ 30,576 37,414 3,145 785 792
Total current liabilities Deferred income taxes Other long-term obligations	61,936 34,125 1,414	72,712 34,314 1,255
Total liabilities Commitments and contingencies	97,475 - 	108,281 -
Stockholders' equity: Preferred stock - par value \$.01; 20,000,000 shares authorized; zero shares issued and outstanding	1,032 294,926 (357) (107) 179,455	1,034 298,117 (355) (108) 181,717
Total liabilities and stockholders' equity	\$ 572,424	\$ 588,686

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CONSOLIDATED STATEMENTS OF CASH FLOWS (IN THOUSANDS) (UNAUDITED)

	Three Months Ended January 31,	
	1998	1999
Cash flows from operating activities: Net income	\$ 39,698	\$ 2,262
provided by operating activities: Non-cash charges from equity transactions Amortization of premiums on marketable debt securities Effect of translation adjustment Depreciation and amortization Provision for inventory excess and obsolescence Provision for warranty and other contractual obligations	10 77 (32) 5,634 557 1,721	10 42 (1) 11,401 1,533 2,218
Changes in assets and liabilities: (Increase)/decrease in accounts receivable	(16,969) (1,720) (20,836) (567) - (1,178) 9,385 17,156 979 720	5,215 (5,153) 10,804 3,776 8,558 61 5,758 3,145 189 (299)
Net cash provided by operating activities	34,635	49,519
Cash flows from investing activities: Additions to equipment, furniture and fixtures	(21,060) (31,166) (1,005)	(11,404) (73,809)
Net cash used in investing activities	(53,231)	(85,213)
Cash flows from financing activities: Repayment of other obligations Net proceeds for issuance of common stock Tax benefit related to exercise of stock options	(419) 1,025 6,827	(205) 257 2,928
Net cash provided by financing activities	7,433	2,980
Net decrease in cash and cash equivalents Cash and cash equivalents at beginning of period	(11,163) 268,588	(32,714) 227,397
Cash and cash equivalents at end of period	\$ 257,425 ======	\$ 194,683 ======

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

(1) SIGNIFICANT ACCOUNTING POLICIES

Interim Financial Statements

The interim financial statements included herein for CIENA Corporation (the "Company") have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. In the opinion of management, financial statements included in this report reflect all normal recurring adjustments which the Company considers necessary for the fair presentation of the results of operations for the interim periods covered and of the financial position of the Company at the date of the interim balance sheet. Certain information and footnote disclosures normally included in the annual financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. However, the Company believes that the disclosures are adequate to understand the information presented. The operating results for interim periods are not necessarily indicative of the operating results for the entire year. These financial statements should be read in conjunction with the Company's October 31, 1998 audited consolidated financial statements and notes thereto included in the Company's Form 10-K annual report for the fiscal year ended October 31, 1998.

Revenue Recognition

The Company recognizes product revenue in accordance with the shipping terms specified. For transactions where the Company has yet to obtain customer acceptance, revenue is deferred until the terms of acceptance are satisfied. Revenue for installation services is recognized as the services are performed unless the terms of the supply contract combine product acceptance with installation, in which case revenues for installation services are recognized when the terms of acceptance are satisfied and installation is completed. Revenues from installation service fixed price contracts are recognized on the percentage of costs incurred to date compared to estimated total costs for each contract. Amounts received in excess of revenue recognized are recorded as deferred revenue. For distributor sales where risks of ownership have not transferred, the Company recognizes revenue when the product is shipped through to the end user.

(2) INVENTORIES

Inventories are comprised of the following (in thousands):

	October 31, 1998	January 31, 1999
Raw materials Work-in-process Finished goods	\$ 43,268 8,592 30,202	\$ 36,373 9,066 26,514
Less reserve for excess and obsolescence	82,062 (11,154)	71,953 (13,382)
	\$ 70,908 ======	\$ 58,571 ======

(3) EARNINGS PER SHARE CALCULATION

The following is a reconciliation of the numerators and denominators of the basic net income per common share ("basic EPS") and diluted net income per common and dilutive potential common share ("diluted EPS"). Basic EPS is computed using the weighted average number of common shares outstanding. Diluted EPS is computed using the weighted average number of common shares outstanding, and stock options using the treasury stock method. (in thousands except per share amounts).

	Quarter ende	d January 31,
	1998	1999
Net Income	\$ 39,698	\$ 2,262 ========
Weighted average shares-basic	100,641	103,292
Effect of dilutive securities: Employee stock options	6,911	4,534
Weighted average shares-diluted	107,552	107,826
Basic EPS	\$ 0.39	\$ 0.02
Diluted EPS	\$ 0.37 =======	\$ 0.02 =======

During the quarter ended January 31, 1999 approximately 1,548,000 anti-diluted weighted shares from employee stock options have been excluded from the computation of diluted EPS because the options' exercise price was greater than the average market price of the common shares.

(4) COMPREHENSIVE INCOME

In June 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 130 (SFAS No.130), "Comprehensive Income". SFAS No.130 became effective for the Company's fiscal year 1999. SFAS No. 130 establishes new rules for the reporting and display of comprehensive income and its components: however, the adoption of this statement had no impact on the Company's net income or shareholders' equity. SFAS No. 130 requires that changes in the amounts of certain items, including foreign currency translation adjustments and gains and loses on certain securities be shown in the financial statements. The Company's accumulated other comprehensive income is comprised entirely of accumulated foreign currency translation adjustments and is shown as a separate amount on the Company's Consolidated Balance Sheets. During the first quarter of fiscal 1998 and 1999, total comprehensive income, which includes net income and changes in foreign currency translation adjustments, amounted to \$39,666,000 and \$2,261,000, respectively.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations contains certain forward-looking statements that involve risks and uncertainties. The Company has set forth in Form 10-K Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations-Risk Factors," as filed with the Securities and Exchange Commission on December 10, 1998, a detailed statement of risks and uncertainties relating to the Company's business. In addition, set forth below under the heading "Risk Factors" is a further discussion of certain of those risks as they relate to the period covered by this report, the Company's near-term outlook with respect thereto, and the forward-looking statements set forth herein; however, the absence in this quarterly report of a complete recitation of or update to all risk factors identified in the Form 10-K should not be interpreted as modifying or superseding any such risk factor, except to the extent set forth below. Investors should review this quarterly report in combination with the Form 10-K in order to have a more complete understanding of the principal risks associated with an investment in the Company's Common Stock.

OVERVIEW

CIENA Corporation is a market leader of open architecture, optical networking systems leveraging the bandwidth enhancing abilities of dense wavelength division multiplexing ("DWDM") technology. As a leader in the implementation of new technology in a rapidly evolving and often unpredictable industry, the Company's quarterly operating results have varied and are expected to vary in the future. See "Risk Factors" for a detailed discussion of the many factors that have caused such variation in the past, and may cause similar variations in the future.

The Company has increased the number of optical transport equipment customers from a total of seven customers during the first quarter ended January 31, 1998 to thirteen customers for current quarter ended January 31, 1999. This reflects the Company's ongoing strategy in the face of aggressive price competition to continue to build market share potentially at the cost of reduced margins. The Company intends to preserve and enhance its market leadership and eventually build on its installed base with new and additional products. The Company believes that its product and service quality, manufacturing experience, and proven track record of delivery will enable it to endure gross margin pressure while it concentrates on efforts to reduce product costs and maximize production efficiencies.

The Company is committed to achieving commercial availability of MultiWave(R) Metro(TM), the Company's 24-channel system designed for use in metropolitan ring applications within the next several months, as well as 10 gigabit per second transmission capability for its MultiWave Sentry(TM) line of products in the second half of the year. The commercial availability of the Company's next generation long-distance optical transport system, a MultiWave platform capable of 96-channel configuration, is also expected in the second half of the year. The Company's performance on these commitments relative to customer expectations will likely have a material impact on the Company's near-term operating results, as well as on its ability to further solidify its position in the communications industry as a credible, long-term supplier of multiple products and successive next-generation solutions. The Company believes it will be successful in this effort, but there is no assurance of that, and there will likely be few objective "leading indicators" of the Company's success or failure, other than purchasing by its customers.

Pursuit of these strategies, in conjunction with increased investments in research and development, selling, marketing, and customer service activities, will likely limit the Company's operating profitability over at least the first half of fiscal 1999, and may result in near-term operating losses.

As of January 31, 1999 the Company employed 1,421 people, which was an increase of 39 persons over the 1,382 employed on October 31, 1998.

RESULTS OF OPERATIONS

THREE MONTHS ENDED JANUARY 31, 1998 COMPARED TO THREE MONTHS ENDED JANUARY 31, 1999

REVENUE. The Company recognized revenues of \$145.1 million and \$100.4 million for the first quarters ended January 31, 1998 and 1999, respectively. The approximate \$44.7 million or 30.8% decrease in revenues in the first quarter 1999 compared to the first quarter 1998 was largely the result of decreased sales to Sprint and MCIWorldCom. This decrease was partially offset by an increase in revenues recognized from thirteen different optical transport equipment customers in the quarter ended January 31, 1999, as compared to seven such customers in the same quarter of the prior year. Additionally, during the quarter ended January 31, 1999, each of three optical transport equipment customers accounted for at least 10% or more of the Company's quarterly revenue and combined accounted for 71.0% of the Company's quarterly revenue. This compares to the quarter ended January 31, 1998 where each of three optical transport equipment customers, accounted for at least 10% or more of the Company's quarterly revenue and combined accounted for approximately 84.9% of the Company's quarterly revenue. Revenues derived from foreign sales accounted for approximately 19.4% and 42.0% of the Company's revenues during the first quarter ended January 31, 1998 and 1999, respectively.

Revenues in the Company's first quarter 1998 were largely attributed to sales of the Company's 16 channel MultiWave(R) 1600 and MultiWave Sentry(TM) 1600 systems. This compares to a large majority of

the revenues from first quarter 1999 attributable to sales of the Company's 40 channel MultiWave Sentry 4000 systems, which were not available for sale in the first quarter of 1998. Revenues derived from engineering, furnishing and installation services were relatively constant for the comparable first quarters. Sales from this

activity increased as a percentage of total revenue from approximately 8.0% to 11.7% of the Company's revenue from the first quarter ended January 31, 1998 compared to the first quarter ended January 31,1999, respectively.

The Company expects revenues in the near term to be largely dependent upon sales to several new customers and to be largely derived from sales of MultiWave Sentry 4000, new products using a MultiWave platform capable of 96-channel configuration, and MultiWave Metro. There are material risks associated with the Company's dependence on these customers, as well as the successful ramping up of manufacturing of these products. See "Risk Factors".

GROSS PROFIT. Cost of goods sold consists of component costs, direct compensation costs, warranty and other contractual obligations, royalties, license fees, inventory obsolescence costs and overhead related to the Company's manufacturing and engineering, furnishing and installation operations. Gross profits were \$86.1 million and \$34.6 million for the first quarters ended January 31, 1998 and 1999, respectively. The approximate \$51.5 million or 59.8% decrease in gross profit in the first quarter 1999 compared to the first quarter 1998 was the result of decreased revenues in the first quarter 1999 compared to first quarter 1998. Gross margin as a percentage of revenues was 59.3% and 34.5% for the first quarters 1998 and 1999, respectively. The decrease in gross margin percentage for the first quarter 1999 compared to the first quarter 1998 was largely attributable to aggressive price competition resulting in lower selling prices for optical transport systems.

The Company's gross margins may be affected by a number of factors, including continued competitive market pricing, lower manufacturing volumes and efficiencies and fluctuations in component costs. During the remainder of fiscal 1999, the Company expects to face continued pressure on gross margins, primarily as a result of substantial price discounting by competitors seeking to acquire market share. See "Risk Factors."

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were \$10.2 million and \$17.4 million for the first quarters ended January 31, 1998 and 1999, respectively. During the first quarters 1998 and 1999, research and development expenses were 7.0% and 17.3% of revenue, respectively. The approximate \$7.2 million or 70.7% increase in research and development expenses in the first quarter 1999 compared to the first quarter 1998 was the result of increases in staffing levels, usage of prototype materials, and depreciation expense. The Company expects that its research and development expenditures will continue to increase during the remainder of fiscal year 1999 to support the continued development of MultiWave systems, the exploration and possible purchase of new or complementary technologies, and the pursuit of various cost reduction strategies. The Company expenses research and development costs as incurred.

SELLING AND MARKETING EXPENSES. Selling and marketing expenses were \$10.0 million and \$12.6 million for the first quarters ended January 31, 1998 and 1999, respectively. During the first quarters 1998 and 1999, selling and marketing expenses were 6.9% and 12.5% of revenue, respectively. The approximate \$2.6 million or 26.1% increase in selling and marketing expenses in the first quarter 1999 compared to the first quarter 1998 was primarily the result of increased staffing levels in the areas of sales, marketing, technical assistance and field support, and costs for customer demonstration systems, travel expenditures and rent expense. The Company anticipates that its selling and marketing expenses will increase during the remainder of fiscal year 1999 as additional personnel are hired and offices opened, particularly in support of international market development, to allow the Company to pursue new market opportunities.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses were \$3.8 million and \$4.3 million for the first quarters ended January 31, 1998 and 1999, respectively. During the first quarters 1998 and 1999, general and administrative expenses were 2.6% and 4.2% of revenue, respectively. The approximate \$0.5 million or 12.4% increase in general and administrative expenses from the first quarter 1998 compared to the first quarter 1999 was primarily the result of increased staffing levels and outside consulting services. The Company believes that its general and administrative expenses for the remainder of fiscal 1999 will moderately increase due to the expansion of the Company's administrative staff required to support its expanding operations.

million and \$0.4 million for the first quarters ended January 31, 1998 and 1999, respectively. The decrease in operating profit from first quarter fiscal 1998 to first quarter fiscal 1999 was due to increased competitive pricing pressures causing a reduction in gross profit margin and increased operating expenses from investments in operating infrastructure. If the Company is able to convert investments in sales and marketing and in operating infrastructure into significant revenue generation relationships and can improve on component costs and manufacturing efficiencies the Company believes that future operating profits can improve above the level experienced in the first quarter of fiscal 1999.

There is no assurance of such improvement, as there are material risks facing the Company's business. See "Risk Factors."

INTEREST AND OTHER INCOME (EXPENSE), NET. Interest income and other income (expense), net were \$3.8 million and \$3.1 million for the first quarters ended January 31, 1998 and 1999, respectively. The approximate \$0.7 million or 17.4% decrease in interest income and other income (expense), net was largely attributable to lower interest rates associated with invested cash balances.

PROVISION FOR INCOME TAXES. The Company's provision for income taxes were \$26.1 million and \$1.2 million for the first quarters ended January 31, 1998 and 1999, respectively. During the first quarters 1998 and 1999, the provision for income taxes were 39.7% and 34.5% of income before income taxes, respectively. The decline in the income tax rate in first quarter 1999 compared to first quarter 1998 was the result of a lower combined effective state income tax expenses, increased benefits derived from the Company's Foreign Sales Corporation, and an increase in expected tax credits derived from research and development activities.

LIQUIDITY AND CAPITAL RESOURCES

At January 31, 1999, the Company's principal source of liquidity was its cash and cash equivalents of \$194.7 million and its marketable debt securities of \$89.7 million, which when combined represent an increase of approximately \$41.0 million from the October 31, 1998 cash and cash equivalent and marketable debt securities combined balance. The Company's marketable debt securities have maturities no longer than six months.

Cash generated from operations was \$49.5 million for the first quarter ended January 31, 1999. This amount was principally attributable to net income, the non-cash charges of depreciation, amortization, provisions for inventory obsolescence and warranty, decreases in accounts receivable and inventory, and increases in accounts payable, accrued expenses and income tax payable.

Investment activities in the first quarter ended January 31, 1999 included the purchase of \$73.8 million worth of corporate marketable debt securities and \$11.4 million invested in capital expenditures. Of the amount invested in capital expenditures, \$9.3 million was used for additions to capital equipment and furniture and the remaining \$2.1 million was invested in leasehold improvements. The Company expects to use an additional \$35 million to \$40 million of capital during the remainder of fiscal 1999 for construction of leasehold improvements for its facilities and additional investments in capital equipment.

The Company believes that its existing cash balance and cash flows from future operations will be sufficient to meet the Company's capital requirements for at least the next 18 to 24 months.

YEAR 2000 READINESS DISCLOSURE

Many computer systems were not designed to handle any dates beyond the year 1999; accordingly, affected hardware and software will need to be modified prior to the year 2000 in order to remain functional. The Company's operations make use of a variety of computer equipment and software. If the computer equipment and software used in the operation of the Company and its products do not correctly recognize data information when the year changes to 2000, there could be an adverse impact on the Company's operations.

The Company has taken actions to understand the nature and extent of work required, if any, to make its systems, products and infrastructure Year 2000 compliant. Based on internal testing performed to date and completed by the Company, the Company currently believes and warrants to its customers that its products are Year 2000 compliant. However, since all customer situations cannot be anticipated, particularly those involving interaction of the Company's products with third party products, the Company may experience warranty and other claims as a result of the Year 2000 transition. The impact of customer claims, if broader than anticipated, could have a material adverse impact on the Company's results of operations or financial condition.

The Company has concluded a comprehensive inventory and evaluation of both information technology ("IT") or software systems and non-IT systems used to run its systems. Non-IT systems typically include embedded technology such as microcontrollers. Examples of the Company's Non-IT systems include certain equipment used for production, research, testing and measurement processes and calibration. The Company has begun

the process of upgrading or replacing those identified non-compliant systems and the process is 10% complete. Completion is expected during the third quarter of fiscal 1999. For the Year 2000 non-compliance systems

identified to date, the cost of remediation is not considered to be material to the Company's financial condition or operating results. However, if implementation of replacement systems is delayed, or if significant new noncompliance issues are identified, the Company's results of operations or financial condition may be materially adversely affected.

The Company changed its main financial, manufacturing and information system to a company-wide Year 2000 compliant enterprise resource planning ("ERP") computer-based system during the fourth quarter of fiscal 1998. The Company estimates that it has spent approximately \$4.0 million on its ERP implementation and estimates that it will likely spend \$100,000 to \$200,000 to address identified Year 2000 issues. The Company expects that it will use cash from operations for Year 2000 remediation and replacement costs. Approximately less than 2% of the information technology budget is expected to be used for remediation. No other information technology projects have been deferred due to the Year 2000 efforts. To date, the Company has not yet employed an independent verification and validation process to assure the reliability of its risk and cost estimates.

The Company has contacted its critical suppliers to determine that suppliers' operations and the products and services they provide are Year 2000 compliant. To date, the Company's optical suppliers have represented that they are year 2000 compliant or are in the process of becoming compliant by December 31, 1999. If these suppliers fail to adequately address the Year 2000 issue for the products they provide to the Company, this could have a material adverse impact on the Company's operations and financial results. Contingency plans will be developed if it appears the Company or its key suppliers will not be Year 2000 compliant, and such noncompliance is expected to have a material adverse impact on the Company's operations.

The risk to CIENA resulting from the failure of third parties in the public and private sector to attain Year 2000 readiness is the same as other firms in CIENA's industry or other business enterprises generally. The following are representative of the types of risks that could result in the event of one or more major failures of CIENA's information systems, factories or facilities to be Year 2000 ready, or similar major failures by one or more major third party suppliers to CIENA: (1) information systems -- could include interruptions or disruptions of business and transaction processing such as customer billing, payroll, accounts payable and other operating and information processes, until systems can be remedied or replaced; (2) factories and facilities -- could include interruptions or disruptions of manufacturing processes and facilities with delays in delivery of products, until non-compliant conditions or components can be remedied or replaced; and (3) major suppliers to CIENA -- could include interruptions or disruptions of the supply of raw materials, supplies and Year 2000 ready components which could cause interruptions or disruptions of manufacturing and delays in delivery of products, until the third party supplier remedied the problem or contingency measures were implemented. Risks of major failures of CIENA's principal products could include adverse functional impacts experienced by customers, the costs and resources for CIENA to remedy problems or replace products where CIENA is obligated or undertakes to take such action, and delays in delivery of new products.

RISK FACTORS

IMPACTS OF CHANGES IN CUSTOMER MIX. With the Company's equipment now widely deployed in the Sprint network, with MCIWorldCom resuming purchasing but at modest levels, and without the likelihood of another comparably sized long-distance service provider as a potential customer, the Company's near-term operating results are now highly dependent on successful sales efforts over a greater number of smaller opportunities. The Company believes the pace of bandwidth demand is strong enough to create a number of smaller opportunities sufficient to support revenue growth over the long-term. However, the smaller opportunities often represent new carriers working aggressively to establish scalable new capacity. These new carriers face a number of problems which the established carriers do not; specifically, they must attempt to balance the need to build their own customer base, acquire all necessary rights of way and interconnections necessary for saleable network service, and build out new capacity sufficient to meet anticipated needs, all while working within capital budget constraints or working to raise capital in volatile financial markets. These aspects of newer carriers tend to make them even less predictable as to either timing or volume of purchasing than the established carriers; in turn, this tends to exacerbate the problem of limited visibility which the Company has regularly struggled

with in conducting sales forecasting, materials and manufacturing planning, and in providing guidance to analysts as part of investor relations activities. See "Stock Price Volatility." While the broadening of the Company's customer base can temper this risk over time, the near-term dependence on more of these newer and comparatively smaller opportunities increases the likelihood of unanticipated changes in customer purchasing plans which could adversely impact the Company's results relative to investor expectations. Most of the Company's anticipated revenue over the next several quarters is comprised of less than \$25 million orders from each of several customers. Slips in timing of purchases, or changes in the amount of purchases at any one or more of these customers could have a material adverse effect on the Company's results of operations and relative to investor expectations. See "Stock Price Volatility."

DEPENDENCE ON SUPPLIERS. Suppliers in the specialized, high technology sector of the optical communications industry are generally not as plentiful or, in some case, as reliable, as suppliers in more mature industries. Moreover, as the demand for higher capacity equipment has accelerated, the performance specifications required of component vendors has substantially increased, but the number of vendors able to meet such specifications has generally not kept pace with this increase. The Company is dependent on a limited number of suppliers for key components of its MultiWave systems as well as equipment used to manufacture the MultiWave systems. The Company's highest capacity product platform, capable of 96-channel configurations, includes several higher capacity components for which reliable, high-volume suppliers are particularly limited. MultiWave systems in general, collectively utilize approximately 1,400 components, and certain key optical and electronic components are currently available only from sole sources. While alternative suppliers have been identified for certain key optical and electronic components, not all of those alternative sources have been qualified by the Company. The

Company has, to date, conducted most of its business with suppliers through the issuance of conventional purchase orders against the Company's forecasted requirements. The Company also pursues long-term supply agreements with some key suppliers, but a large majority of its business with vendors continues to be done without such agreements. The Company has from time to time experienced minor delays in the receipt of key components, and any future difficulty in obtaining sufficient and timely delivery of them could result in delays or reductions in product shipments which, in turn, could have a material adverse effect on the company's business, financial condition and results of operations. Uniphase Corporation and JDS FITEL, Inc., both of which are significant suppliers to the Company, recently announced a planned merger. The Company has enjoyed positive relationships with both companies, and believes the merger can be beneficial to the Company's interests as a customer. If, however, the merger and related integration activities or other factors were to result in delayed deliveries of key components from either of these sources, such delays could have a material adverse effect on the Company's near-term results of operations.

NEW PRODUCT DEVELOPMENT DELAYS. The Company's ability to anticipate changes in technology, industry standards, customer requirements and product offerings and to develop and introduce new and enhanced products in a timely fashion relative to customer expectations of increasingly short product development cycles, will be significant factors in the Company's ability to remain a market leader in the deployment of DWDM systems and in the optical communications market generally. The complexity of the technology involved in product development efforts in the optical transport field, including product customization efforts for individual customers, can result in unanticipated delays. The qualification and ramping up of new suppliers for new or customized products requires extensive planning and can result in unanticipated delays which affect the Company's ability to deliver such products in a timely fashion. See "Dependence on Suppliers." The software certification process for new telecom equipment used in Regional Bell Operating Companies, ("RBOC"), networks--a process traditionally conducted by Bellcore on behalf of the RBOCs--can also result in unanticipated delays, and has resulted in some delay in the commercial introduction of MultiWave Sentry and Firefly for the RBOC market. The failure to deliver new and improved products, or appropriately customized products, in a timely fashion relative to customer expectations (which can be influenced by competitors' announcements of competing products), would have a material adverse effect on the Company's competitive position and financial condition. See "Competition." The Company has made a general commitment to the commercial availability of MultiWave Metro within the next several months, as well as for 10 gigabit per second transmission capability in its MultiWave Sentry line of products in the second half of the year. Enhanced optical amplifiers necessary for the operation of a 96-channel configuration platform are also expected to be available in the second half of the year. The Company's execution on these commitments relative to customer expectations and commitments will likely have a material impact on the Company's near-term operating results, as well as on its ability to further solidify its position in the communications industry as a credible, long-term supplier of multiple products and successive next-generation solutions. The Company believes it will be successful in this effort, but there is no assurance of that, and there will likely be few objective "leading indicators" of the Company's success or failure, other than purchasing by its customers.

COMPETITION. Competition in the global telecommunications industry historically has been dominated by a small number of very large companies, each of which have greater financial, technical and marketing resources, greater manufacturing capacity, broader product lines and more extensive and established customer relationships with network operators than the Company. Nortel, Lucent, Alcatel, Ericsson, NEC, Pirelli, Siemens, Fujitsu, and Hitachi, most of which provide a broad complement of switches, fiberoptic transmission terminals and fiberoptic signal regenerators in addition to DWDM equipment, are examples of this type of company. Many of them have substantial economic interests in continuing sales of the legacy equipment which has dominated the historical network architecture designed for voice traffic; those interests are best served by containing the pace at which paradigm-shifting new technologies are adopted, such as direct transport of data-centric traffic via DWDM equipment. At the same time, these companies must participate in new technology markets or face potentially significant loss of account control and market share in the overall telecommunications equipment marketplace. New market entrants like CIENA, which appear to be achieving rapid and widespread market acceptance of new equipment, can represent a specific threat to these established companies. As a result, the Company expects and has observed aggressive competitive moves from many of these industry participants, which have to date included early announcement of

competing or alternative products, substantial and increasing price discounting, customer financing assistance, packaged, "one-stop-shopping" deals combining DWDM equipment with other network equipment and supplies, and other tactics. Early announcements of competing products can and does cause confusion and delay in customer purchasing decisions, particularly if the announcements are viewed as credible in terms of both the anticipated performance of the announced product, and the time within which it is expected to be available.

The Company has also observed an increase in the funding of new companies intending to develop new products for the rapidly evolving telecom industry. The business and product plans for these companies are not always publicly known, but they are recognized as having the potential for time-to-market advantages due to the narrow and exclusive focus of their efforts. Such new companies may provide additional competition as to the Company's existing product lines as well as potential future products.

There can be no assurance that large, established competitors as well as new startup competitors will not make early announcements of competing products in the future, with adverse impacts on customer purchasing decisions. Further, if new competing products are in fact developed, perform as advertised, and are manufacturable in volume quantities in the near future, the likelihood of significant orders for the Company's MultiWave systems may diminish. The timing of shipments by the Company and corresponding revenue, if delayed by reason of deferred deployment of MultiWave systems pending evaluation of a competitor's product, could and likely would cause substantial swings, and potentially material and adverse effects, on the Company's quarterly financial condition and results of operations.

While competition in general is broadly based on varying combinations of price, manufacturing capacity, timely delivery, system reliability, service commitment and installed customer base, as well as on the comprehensiveness of the system solution in meeting immediate network needs and foreseeable scalability requirements, the Company's customers are themselves under increasing competitive pressure to deliver bandwidth to their customers at the lowest possible cost. This pressure may result in pricing for DWDM systems becoming a more important factor in customer decisions, which may favor larger competitors which can spread the effect of price discounts in their DWDM product lines across an array of products and services, and a customer base, which are larger than the Company's.

The Company's customers generally prefer to have at least two sources for key network equipment such as optical transport systems, but the Company believes it has until recently been the only supplier of 16-channel, or greater than 16-channel, open-architecture DWDM systems. As competitors catch up with manufacturable DWDM systems which are realistic alternatives to those supplied by the Company, the Company's customers may reduce the portion of their DWDM purchases allocated to the Company. Sprint has, for several quarters, indicated it intends to establish a second vendor for DWDM equipment. Although the Company recently negotiated a contract with Sprint which conferred "preferred vendor" status on the Company through 1999, the timing of Sprint's selection of a second vendor, and the impact a selection might have on relative purchasing from the Company and the second vendor, are decisions which are not under the control of the Company. There can be no assurance that these decisions will not result in a reduction in future purchasing from the Company, which could in turn have a material adverse effect on the Company's financial condition and results of operations.

Intellectual property disputes may also be asserted as part of a competitive effort to reduce the Company's leadership position and limit its ability to achieve greater market share, even if the merits of specific disputes are doubtful. Some of the Company's competitors are also key suppliers of components for the Company's systems, and could harm the Company through delay, interruption or other failures to supply the Company with appropriate quality items.

While the Company will consider all appropriate means to position itself to compete successfully, including taking legal action where the tactics of competitors are believed to be unlawful, there can be no assurance that the Company will be able to compete successfully with its competitors or that aggressive competitive moves faced by the Company will not result in lost sales, significantly lower prices for the Company's products, additional decreases in gross profit margins, and otherwise have a material adverse effect on its business, financial condition and results of operations.

FLUCTUATION IN QUARTERLY AND ANNUAL RESULTS. The Company's revenue and operating results have varied and are likely to continue to vary significantly from quarter to quarter and from year to year as a result of a number of factors, including the size and timing of orders, product mix and shipments of systems. The timing of order placement, size of orders, satisfaction of contractual customer acceptance criteria, the adequacy of customer financing, as well as order delays or deferrals and shipment delays and deferrals, have also caused and may continue to cause material fluctuations in revenue. See "Competition" and "Impacts of

Changes in Customer Mix." Consolidation among the Company's customers and target customers, such as that involved in the WorldCom/MCI merger, and the distraction and/or reorganization attendant to such consolidation - which may continue well after consummation - may also lead to delay or deferral of purchasing decisions. The Company believes its present

limited visibility into MCIWorldcom's purchasing plan is in part a reflection of this phenomenon. Changes in customers' approaches to bandwidth deployment can also materially impact purchasing decisions. See "Anticipating Demand for Bandwidth."

The Company's expense levels in the future will be partially based on its expectations of long-term future revenue and as a result net income for any quarterly period in which material orders are shipped or delayed or not forthcoming could vary significantly. The Company's expense levels for the next few quarters to some extent reflect the substantial investment in financial, engineering, manufacturing and logistics support resources already incurred in order to position the Company to successfully serve potentially large commercial relationships. Over the near term, this investment of resources has been evident in a rise in the Company's manufacturing and general overhead and expense structure, with the result that the Company's near-term results of operations may be only modestly profitable or may involve operating losses, even if revenues sequentially increase. In general, quarter-to-quarter sequential revenue and operating results over the next 12 months are likely to fluctuate and therefore may not be reliable indicators of annual performance.

ANTICIPATING DEMAND FOR BANDWIDTH. The Company's systems enable high capacity transmission over long distance, and with the introduction of MultiWave Firefly and MultiWave Metro(TM), certain short-haul portions of, optical communications networks; however, the Company's customers and target customers determine how much capacity is required, when it will be deployed, and what equipment configurations will be used, if any. The Company has encountered a wide variety of customer views of how much capacity will be needed in what portions of the network and over what periods of time, as well as how to convert such capacity into revenue. Those views reflect the customers' differing competitive strategies and financial and marketing resources, and result in widely varying patterns and timing of evaluation, purchase and deployment of the Company's systems, other DWDM systems or other capacity solutions. Certain carriers $% \left(1\right) =\left(1\right) \left(1\right)$ believe the deployment of large-scale capacity quickly is a competitive advantage--i.e., they believe the accelerating demand for bandwidth will continue and the added capacity will be utilized quickly. This viewpoint leads to prompt and widespread deployment of high-channel count DWDM systems. Other carriers have adopted more of a wait-and-see approach, which dictates a more gradual channel-by-channel deployment of higher capacity systems. New carrier entrants sometimes try to combine these viewpoints, favoring rapid and widespread installation of the foundational elements of high capacity systems, while opting for pricing and other supply agreement features which allow for deferral of channel purchases until the need is demonstrated. These views are further influenced by the pace at which the higher bandwidth available over long distance routes is distributed or distributable over "the last mile" of the networks, as well as the willingness of carriers to aggressively lower their charges for services as a means of accelerating consumption of the higher bandwidth. All of these views are also subject to abrupt change, as competition and the evolving marketplace may demand. As an example of the impact of the evolving marketplace, during fiscal 1998 the Company shipped equipment to and recognized revenue from several new customers attempting to build out new networks--under circumstances where the Company had not even identified these customer opportunities as of a year prior to shipment.

Under these circumstances, for so long as the Company remains dependent on comparatively few customers, the Company will be vulnerable to significant quarterly fluctuations, and to difficulty in predicting the direction or magnitude of future demand for the Company's systems.

The Company believes growth in data communications and in commercial and consumer use of the Internet remains solid as a market driver of demand for bandwidth, which in turn fuels demand for DWDM systems and other high-bandwidth solutions. The Company also is confident that its products are well targeted toward the visible emerging chokepoints in the networks. The Company is less certain whether it will be able to accurately anticipate changes in direction or magnitude of near-term demand. Unanticipated reductions in demand would adversely affect the Company's profitability and, depending on the size of the gap between actual, reduced demand, and investor expectation of such demand, could result in further stock price volatility irrespective of the Company's overall competitive position and long-term prospects.

TECHNOLOGICAL CHANGE AND NEW PRODUCTS. The Company expects that new technologies will emerge, and existing technologies will rapidly evolve, as competition in the telecommunications industry increases and the need for higher and more cost efficient bandwidth expands. The

Company's ability to anticipate changes in technology, industry standards, customer requirements and product offerings and to develop and introduce new and enhanced products will be significant factors in the Company's ability to remain the leader in the deployment of open architecture DWDM systems and other high-capacity solutions. There is no assurance of the Company's ability to successfully do so. The market for telecommunications equipment is characterized by substantial capital

investment and diverse and competing technologies such as fiberoptic, cable, wireless and satellite technologies. The accelerating pace of deregulation in the telecommunications industry will likely intensify the competition for improved technology. Many of the Company's competitors have substantially greater financial, technical and marketing resources and manufacturing capacity with which to develop or acquire new technologies and generally to compete for market acceptance of their products. The Company has also observed an increase in the funding of new companies intending to develop new products for the rapidly evolving telecom industry. The business and product plans for these companies are not always publicly known, but they are recognized as having the potential for time-to-market advantages due to the narrow and exclusive focus of their efforts. Such new companies may provide additional competition as to the Company's existing product lines as well as potential future products. The introduction of new products embodying new technologies or the emergence of new industry standards could render the Company's existing products uncompetitive from a pricing standpoint, obsolete or unmarketable. Any of these outcomes would have a material adverse effect on the Company's business, financial condition and results of operations.

RECENT PRODUCT INTRODUCTION. The MultiWave 1600 has been operational and carrying live traffic for approximately two years; the MultiWave Sentry 1600 and MultiWave Sentry 4000 for less than a year; and the MultiWave Firefly has only recently been introduced into the field. The in-service reliability of the Company's equipment has to date substantially exceeded statistical standards predicted for equipment of this kind. However, the introduction of new fiberoptic systems with high technology content is likely to involve occasional problems as the technology and manufacturing methods mature, and the Company's experience has been consistent with this expectation. Further, the Company's history of installation activity indicates that the newness and high precision nature of DWDM equipment may require enhanced customer training and installation support from the Company. The Company is aware of instances domestically and internationally in which installation and activation of certain MultiWave systems have been delayed due to faulty components found in certain portions of these systems. The Company is aware of relatively few performance issues once the systems are installed and operational. However, if recurring or material reliability, quality or network monitoring problems should develop, a number of material and adverse effects could result, including manufacturing rework costs, high service and warranty expense, high levels of product returns, delays in collecting accounts receivable, reduced orders from existing customers and declining level of interest from potential customers. Although the Company maintains accruals for product warranties for expected amounts of rework costs, service and warranty expense, there can be no assurance that actual costs will not exceed these amounts. The pace at which the customer requires upgrades from 16 to 40 to higher channel count systems occurs (which in some cases can involve replacement of portions of the existing equipment) can further complicate the assessment of appropriate product warranty reserves. The Company expects there will be interruptions or delays from time to time in the activation of the systems and the addition of channels, particularly because the Company does not control all aspects of the installation and activation activities. The Company believes its record to date of problem identification, diagnosis and resolution has been good, but if significant interruptions or delays occur, or if their cause is not promptly identified, diagnosed and resolved, confidence in the MultiWave systems could be undermined. An undermining of confidence in the MultiWave systems would have a material adverse effect on the Company's customer relationships, business, financial condition and results of operations.

DEPENDENCE ON KEY PERSONNEL. The Company's success has always depended in large part upon its ability to attract and retain highly-skilled technical, managerial, sales and marketing personnel, particularly those skilled and experienced with optical communications equipment. The Company believes its heritage as an entrepreneurial startup has been an important factor in its success to date in attracting and retaining key personnel. However, competition for such personnel is intense and often increases when a company becomes party to a merger, as various recruiters look for key personnel interested in leaving. The terminated merger with Tellabs, the attendant publicity and media speculation regarding its outcome and impact on the Company, and the Company's near-term operating results, have intensified competitors' efforts to entice employees to leave the Company. Startup companies also compete for personnel with the promise of early equity participation. The Company and its employees are parties to agreements which limit the employee's ability to work for a competitor for a defined period of time following termination of employment. The Company expects its competitors

will respect these agreements and not interfere with them. However, there can be no assurance that the Company will be able to retain all of its key contributors or attract new personnel to add to or replace them. Failure to retain the Company's key personnel, or to attract new personnel likely would have a material adverse effect on the Company's business, financial condition and results of operations.

LEGAL PROCEEDINGS. See Part II, "Legal Proceedings" for disclosure concerning recent shareholder class action lawsuits filed against the Company and certain of its officers and directors. An amended complaint consolidating

the lawsuits was recently filed. The Company believes the lawsuit is without merit and is defending itself vigorously. However, because the lawsuit is at an early stage, it is not possible to predict the outcome at this time, and there is no assurance that the outcome would not have a material adverse effect on the Company's financial condition and results of operations.

STOCK PRICE VOLATILITY. The Company's Common Stock price has experienced substantial price volatility, and is likely to continue to do so. Such volatility can arise as a result of the activities of short sellers, risk arbitrageurs, and takeover speculators, and may have little relationship to the Company's financial results or prospects. Volatility can also arise as a result of any divergence between the Company's actual or anticipated financial results and published expectations of analysts and as a result of announcements by the Company, as occurred in the fiscal year just ended. The Company attempts to address this possible divergence through its public announcements and reports; however, the degree of specificity the Company can offer in such announcements, and the likelihood that any forward-looking statements made by the Company will prove correct in actual results, can and will vary, due primarily to the uncertainties associated with the actions of competitors, delays by component suppliers, the impacts of changes in the customer mix, long and unpredictable sales cycles and customer purchasing programs, a lack of visibility into its customers' deployment plans, and the lack of reliable data on which to anticipate core demand for high bandwidth transmission capacity. Divergence between the Company's actual or anticipated financial results and published expectations of stock analysts therefore can occur notwithstanding the Company's efforts to address those expectations through public announcements and reports. Such divergence will likely occur from time to time in the future, with resulting stock price volatility, irrespective of the Company's overall year to year performance or long-term prospects. See "Impact of Changes in Customer Mix;" and "Anticipating Demand for Bandwidth."

PART II. - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

CLASS ACTION LITIGATION

A class action complaint was filed on August 26, 1998 in U.S. District Court for the District of Maryland entitled Witkin et.al v. CIENA Corporation et. al (Case No. Y-98-2946). Several other complaints, substantially similar in content, have been filed. These cases were consolidated by court order on November 30, 1998. An amended, consolidated complaint was filed on February 16, 1999. The complaint alleges that CIENA and certain officers and directors violated certain provisions of the federal securities laws, including Section 10(b) and Rule 10b-5 under the Securities Exchange Act of 1934, by making false statements, failing to disclose material information and taking other actions intending to artificially inflate and maintain the market price of CIENA's common stock during the Class Period of May 21, 1998 to September 14, 1998, inclusive. The plaintiffs seek designation of the suit as a class action on behalf of all persons who purchased shares of CIENA's common stock during the Class Period and the awarding of compensatory damages in an amount to be determined at trial and attorneys' fees. The proceedings are at an early stage. No discovery has been taken, and no prediction can be made as to its outcome. The Company believes the suit is without merit and intends to defend itself vigorously.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibit Description

27.0 Financial Data Schedule (filed only electronically with the SEC)

Reports on Form 8-K: No reports on Form 8-K were filed during the period.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CIENA CORPORATION

Date: February 18, 1999 By: /s/ Patrick H. Nettles Patrick H. Nettles

President, Chief Executive Officer and Director

(Duly Authorized Officer)

Date: February 18, 1999 By: /s/ Joseph R. Chinnici -----

Joseph R. Chinnici

Senior Vice President, Finance and

Chief Financial Officer (Principal Financial Officer) 5

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE BALANCE SHEET, STATEMENT OF OPERATION AND STATEMENT OF CASH FLOWS INCLUDED IN THE COMPANY'S FORM 10-Q FOR THE PERIOD ENDING JANUARY 31, 1999, AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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